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News in Social media

Social media: the newspaper of the future

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Abstract

This essay examines the relationship between social media use and online news consumption. The relationship and the mechanisms of online news consumption are further examined with political interest and social media use motivations. The study is conducted using survey data from the 2013 SOM-survey from the SOM-institute. The results show a positive relationship between social media use and online news consumption that cannot be explained by interest in traditional printed or broadcast news media or political interest. However, there is an interaction effect of political interest that strengthens the effect of social media use on online news consumption. The study also shows that people using social media more actively, with the motive to participate in discussions, share articles or express their opinions are more inclined to consume online news. The results give a deeper understanding to the mechanisms of online news consumption in the digital media environment and show that social media can contribute to news consumption. Scholars argue that there is an increasing polarization between news-seekers and news-avoiders and this study suggest that social media can help getting news avoiders exposed to online news. However, the positive effect of social media on online news consumption is stronger among the politically interested and those engaged in discussions, information sharing and express their opinions. It creates even more possibilities to engage in news for those being already in the game.

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Introduction

Due to developments in the media environment and an increasing amount of choice, scholars argue that media consumption has become both increasingly diversified and polarized. Technical development with cable TV, internet and the subsequent digitalization of a large part of the media has radically changed the mass media environment from low-choice to high-choice media environments. In this transformation to a high-choice environment, attention to news, political information and societal issues is feared to be challenged and outmaneuvered. In the analog low-choice media environment (when TV-supply was limited to a few channels), watching news was a given part of the evening activities (Prior 2007). It is argued the effect of the shift from a low-choice to a high-choice media environment is that people purposively avoid news or just don't get exposed to news to the same extent as before (Prior 2007), or that people actively or accidentally become isolated within "echo-chambers" of information and opinions, the selective exposure thesis (Sunstein 2007; Stroud 2008).

The argument from Prior (2007) is that the increasing amount of choices, and more choices of pure entertainment-oriented programming, makes it easier to avoid news and less probable to be accidentally exposed to news. When only a few options are available, the likelihood is higher that also those less interested in politics encounter news regularly and subsequently learn about politics. The development according to Prior (2007) is going towards a society where one part of the citizenry won't be exposed to news and political information at all. These are the so-called news avoiders. News consumption, political interest and political knowledge are closely linked and affect political participation and voting behavior. Political knowledge is also considered being important for correct voting (Oscarsson 2007). Total avoidance of news is therefore considered to be a democratic problem.

Sunstein (2007) suggests that the increasing number of media choices makes it easier to create customized media environments based on your own preferences. These are environments where you hear what you want to hear or read what you want to read. The possibility for people to customize their media environment creates filter bubbles of opinions. With the increasing amount and availability of political news there is, according to Stroud (2010), an increasing partisan selective exposure. Ideological confirmative news and opinion journalism are always available and people can easily select media that correlates with their political

predispositions. This development creates a social and political polarization that hollows out the respect between people and for people with different opinions.

The increasing amount of choice equates to an increasing competition for people's time. Webster (2014) argues that media companies competing for people's attention and these attentions are limited in regard to time. There are only a certain amount of people to reach and a limited numbers of hours on one day and there is more competition for people's attention now than ever before. The understanding of how audiences take shape has become increasingly important.

Social media is a relatively new player in the media environment. It has formed new habits and new ways of distributing information. The sources of information have also increased and it is easier than ever to produce your own products. This has spawned an interesting mix of mainstream and niched independent channels. Podcast radio and blogs are media channels used by both established mass media and by independent producers with niched interests, creating entertainment, news, and politically oriented material. In this new environment, the traditional news media have had a difficult time surviving and we have witnessed a massive decrease in printed newspaper reading (Wadbring 2013). However, the mechanisms and effects of social media should be discussed. In the perspective of Prior (2007) and the news-seeker and news-avoider thesis, social media can be seen as a competitor of the news media. People can choose to spend their time with social media, computer games or engaging in other entertainment-related activities instead of watching news, reading newspapers, listening to the news on the radio or engaging in political discussions. The exposure to political news which is desired in normative democratic theory is therefore threatened.

On the other hand, the mechanisms of social media might offer a contrasting force; getting people increasingly engaged in news. It is not only entertainment-oriented material circulating on social media; there are also news articles, political debates and other issues of public interest. With news media companies getting more interested in the mechanisms of social media and adapting to the development, social media might be a driver for news consumption. The intention of using a social media as Facebook and Twitter is not only to share your daily life and communicate with friends, it is also to keep up with what is happening on a larger scale (Newman et. al 2012). Choosing social media does not necessarily mean neglecting news. Social media also lets you connect with far away acquaintances, which suggests a more

diverse flow of information. Even a news-avoider could be exposed to news-related information through social media. In this study I will look closer at the relationship between social media use and news consumption using survey data from the SOM-institute about media habits and opinions among the Swedish population.

These theories treat the effects on individuals at a general level. However, social media is used with different purposes. Differing motivations or gratifications explain how and why you pay attention to different media, including social media (Quan Haase & Young 2010). To further explore the mechanisms of online news consumption, the motivations and gratifications of using social media will be examined in regard to how they affect online news consumption. Hopefully it will contribute to a more sophisticated understanding of the mechanisms of social media and news consumption in the digital age. However, the digital media environment is a moving target and technical developments and changing algorithms can also change the application of the media. Facebook, for example, is changing their algorithms in favor of news and have made deals with a number of important actors in the news industry (Cellan-Jones 2015). This study is made using survey data from a national survey conducted in 2013 and some factors have changed since then. However, the mechanisms of certain behaviors don't necessarily have to have changed and there are still general conclusions that can be drawn from this data.

Media development is a global issue and there are similar trends all over the world. However, this study is made in a Swedish context. Sweden is traditionally associated with a high level of newspaper circulation compared to other countries and with a strong public service media. In the Swedish democratic system, the news media is expected to be an important part of the democratic discussion. Newspaper circulation is now decreasing which raises questions about the state of democracy. Sweden is also characterized by a high level of internet use which is a prerequisite for involving all the citizens in the new media environment (Findahl 2014, Shehata & Wadbring 2012).

The purpose of this study is to examine the relationship between social media use and online news consumption. The mechanisms of the relationship are further examined through political interest. Finally, the relationship between social media and news consumption is examined through motivations to social media use. The research questions are:

***RQ1:** How does the use of social media affect online news consumption?*

***RQ2:** How does political interest affect the relationship between social media use and news consumption?*

***RQ 3:** How do different motives to use social media affect online news consumption?*

This study is based on online consumption of four traditional news media; morning paper, tabloid paper, TV- and radio news. The method for the analysis is OLS regression and the data is provided by the SOM-institute.

Background

News consumption and democracy

Consumption of news is of great interest for scholars in political science and media & communication research. A free press is a prerequisite for functioning democracy and news consumption is considered a prerequisite for citizens to contribute to, and to uphold, the democracy (Asp 2007; Strömbäck 2005). Consumption of news is tightly connected to political interest, knowledge & participation. A politically interested and enlightened citizen is more likely to vote and to participate in political discussions (Strömbäck & Shehata 2010). Therefore, the news media is one of the backbones of democracy and changes in the media environment always lead to discussions about how these changes affect the democratic society. The research on news consumption includes issues about how media affects individuals' opinions and behavior, motivations and preferences for media use and the implications for democracy and society.

The media, and particularly the news media, is fundamental in the democratic societies, as the media can be described as the link between politicians and the citizens. The citizens need the media to provide information about public policy issues; the progress, the shortcomings and the failures of the public administration and to provide differing opinions (Strömbäck 2005). In this perspective the media is considered a passive player, when in fact the media has an active role in the politics. However, there are different opinions to whether the media acts in

correlation with the interest of the citizen. Different scholars have different normative demands on the media. According to Asp (2007) the normative functions of the media is to inform the citizenry and to scrutinize those who govern, with the democratic purpose to contribute to free opinion formation. Strömbäck (2005) describes the relationship between democracy and the media as a social contract. Democracy needs media for the flow of information, for public discussion and for independently scrutinizing the power. The media on the other hand, needs democracy for the freedom of speech, freedom of information and the independence from the state. Another approach to the relationship between the citizen and the media is presented by Zaller (2003). He states that high demands on the news media and the citizens are unrealistic and he challenges the ideal of the highly enlightened citizen. He argues that the fear of a development towards a more soft news media environment is exaggerated. No one can be fully informed and have full attention to hard news; however the media should report on acute problems and keep the citizen updated on important issues. That's enough for a democracy to function. The entertainment media is, according to Zaller (2003), also incorporating political information to a greater extent, which makes the lines between hard and soft news blurred.

The media development raises new questions about the relationship between media and democracy. Social media is one new player in the transformation of the mass media and social media has become, and will continue to be, of great interest for social scientists dealing with democratic theory.

Definition of news

The term “news” is somewhat vague and all different news media have their own characteristics. The characteristics of news and journalism are also constantly changing. The press, radio and television make different evaluations on what to include in their concept of news and this chapter will discuss the nature of news. The first news media was the newspaper and the modern newspaper took form together with the industrial revolution in the 19th century and the subsequent rise and increasing wealth of the middle class. The early newspapers was characterized with short bulletins with official information, gathered and disseminated by news agencies. In Sweden, the press was tightly connected to the political parties but during the second half of the 20th century they started to become independent although they held on to their ideological orientation. The introduction of television and radio, controlled by a state monopoly, was followed by high demands on objectivity which was defined as truth, relevance, balance and neutral presentation. (Hadenius et al. 2011;

Westerståhl 1972) Later on, the news media developed from not only reporting on events and deliver messages from officials, to also creating their own material and analysis. The scrutinizing function of the media emerged and was an effect of the professionalization of journalism. Issues such as sports, entertainment, culture and feature journalism has gradually also been integrated to the concept of news (Hadenius et al. 2011). The concept of news is often divided into hard news and soft news. The soft news refers to information that is personally or merely entertaining while hard news refers to information about current public affairs and government topics (Knobloch-Westerwick 2015). The concept of news is made more complicated by the blurred lines between hard and soft news. Traditional news has, according to Zaller (2003), become softer and entertainment programs have started to involve content of public affairs. Traditional newspapers incorporate lifestyle features, sports and entertainment and at the same time talk shows and entertainment programs involve in political and public issues. Infotainment is another term referring to the blurred lines between information and entertainment where information with hard news characteristics is presented in an entertainment context (Knobloch-Westerwick 2015). However, there are still different characteristics among different news media that appeals to different target groups. There are public service TV and radio with a mission to provide the citizens with unbiased news and address public issues. Then there are private broadcasters with more entertainment profile. The same dynamics are found in the press where morning papers are more oriented towards hard news with a serious image and tabloid press more oriented towards entertainment and with populist image and sensational coverage of hard news (Weibull 2013). Another development is the framing of news developing towards a gamification of news where focus is on the political game and strategy rather than the issue (Aalberg et.al 2011).

With the internet and social media, a new type of journalism has evolved where people contribute and create own news, so-called citizen journalism. The technical development has made it easier for individuals to produce and distribute their own material and citizen journalism refers to citizens engaging in journalistic practices (Goode 2009). It includes blog writing, photo and video sharing and sharing eyewitness comments on current events. The concept is used not only by individuals taking the opportunity to create their own news, but also by the mass media to collect information for example letting people send in pictures from events not covered by the media's own staff, or report on reactions on twitter on current events. This development is an extension of the Jenkins (2008) concept of a convergence culture, a development where grass root and corporate media intersect which creates

unexpected synergies. The content is no longer connected to one platform, and the stories are not static. The passive audience developed into active users with control and then also to producers.

There are two problems with the concept of news and the measurement of attention to hard news. First of all, hard news are not isolated and measuring newspaper, radio or TV news consumption can be a blunt instrument for exposure to political news or political information, which often is the purpose when measuring news consumption in social sciences. The second problem is the changing media environment. The traditional news media are not the only ones providing news and political information. The changing structure of the mass media and the blurred lines between hard and soft news makes the term “news” complex. However, even though taking part of news may not guarantee full attention to political issues, attention to news still makes the citizen updated on societal issues. The attention to traditional news media, whether it is analog or digital, can also be an indicator of interest in public issues. This study is focused on traditional news media in an online context. It is made on the basis that the concept of news substantially refers to political and societal information with emphasis on hard news.

News consumption

Declining news consumption in traditional mass media such as printed newspapers and television news (Ksiazek et.al 2010) is a declining trend. This study is made in a Swedish context which is characterized by traditionally high newspaper circulation, a high degree of journalistic professionalism and a strong freedom of press, among other things. Together with a strong public service media, these characteristics are referred to as the corporatist model of media and politics by Hallin & Mancini (2004). In this system, the media has a responsibility to carry the public debate and be a common forum for deliberation (Shehata & Wadbring 2012). The decline in printed newspaper consumption is a concerning issue which is seen as a great threat to journalism and democracy (Ohlsson 2013).

Consumption of morning newspapers in Sweden has declined since the late 1980's. When measuring the high consumption, reading a morning paper at least 5 days per week, the peak was in the years 1989-1990 when 81% of the population regularly read the a newspaper. In 2012 the share was 47%, however, that is only measuring printed papers. When including online reading the share was 62 percent in 2012, a decline in 19 percent since the peak years

1989-1990. The development is similar when including occasional morning newspaper consumption. In 1987 the share of the population reading the paper at least once per week was 92 percent, which also includes the high consumers. The share has declined to 78 percent in 2012. (Wadbring 2013)

The development in the Swedish tabloid press is similar with a decline in print paper reading from the golden years in the early 1990's. In the early 1990's around 40 percent of the population read the printed version of the tabloids Aftonbladet or Expressen at least 3 times per week and the share in 2013 was less than 10 percent. However, the online versions of the papers have had success and the overall consumption, including both print and online versions, was 42 percent in 2013. (Jalakas & Wadbring 2014)

The consumption of TV and radio news has been steadier and there has been only a modest decline, if any at all. The daily consumption of national news in public service television has been fluctuating between 50 and 60 percent of the population from the middle of the 1980's to 2013. The most prominent news provider of the commercial television broadcasters, TV4, has also had a steady share of everyday viewers of news around 30 percent the last 15 years. The public service radio news consumption has been around 25-30 percent since the late 1980's. (Jalakas & Wadbring 2014)

The consumption of radio and television news seems constant and it is mostly the printed newspapers that have a hard time keeping their readers. However, the reading of online versions of the newspapers continues to grow and the transformation to a digital news media environment might engage other groups in society (Jalakas & Wadbring 2014). The social media is getting an increasing influence on the online news consumption (Hermida 2012, Holcomb et al. 2013) and it is interesting to explore this relationship further.

Social media

The phenomenon of social media has grown rapidly since its emergence in the early years of the new millennium. The social media is an umbrella term for internet-based applications that allows creation and exchange of user generated content (Kaplan & Haenlein 2010). There is no clear and accepted definition for which services can be named social media and the phenomenon is constantly evolving. Depending on the degree of social exchange, different applications can be argued being a social media. Wikipedia for example is, according to Kaplan & Haenlein (2010) part of the term social media, however the social exchange is limited. Kaplan & Haenlein (2010) sort different types of social media in two categories. The

first is Social presence/Media richness and indicates how socially and technically sophisticated the application is. On the lower end of this scale we find blogs and collaborative projects such as Wikipedia. They are text-oriented publications that aren't very technically advanced. On the other end of the scale we find virtual social worlds such as Second Life and virtual game world such as World of Warcraft. In the middle we find social network sites, e.g. Facebook or Twitter, and content communities e.g. Youtube. The second category is Self-presentation/ Self-disclosure. On the lower end of the scale they put collaborative projects, content communities and virtual game worlds. On the high end of the scale they put blogs, social networking sites and virtual social worlds. The term social media is often associated with the social networking sites which is sites or applications where users can create personal information profiles and connect with friends, colleagues or celebrities to communicate and share messages, pictures or information with each other. Blogs can have different purposes and can in some cases be considered a social networking site rather than collaborative project. In this essay, the term social media is limited to represent social networking sites as Facebook and Twitter.

Social media is getting more and more popular. In the US, Facebook is the most popular site and attracts 71% of the people who are online (Duggan et.al 2014) In Sweden 72% of the internet users with the age over 12 years use social media and 48% do it daily. 68% of the population use Facebook and 47% does it daily which makes it the biggest social networking site. The categories in the study of Findahl (2014) give a direction of which applications or types of applications are generally meant by social media; Facebook, interest communities, blogs, Instagram, Twitter. This excludes sites as Wikipedia and gaming.

Another indicator of the popularity of social media is the amount of time being spent on social media. In Sweden, the average amount of time spent on social media is 3.8 hours per week. Young people between 16 and 25 are most active spending in average 7.6 hours per week on social media. (Findahl 2014)

Theory and research questions

Introduction to theory

The digitalization of the media environment has led to new discussions about media effects, audience behavior and the effects that the digitalization has on society. The digital environment offers endless quantities of information and leaves the media user with countless choices. New channels, websites and social media compete with one another for the attention from the audience. Some are designed for the bigger audiences and some are specified to attract niches of people and opinions. In this chapter some prominent theories in political science are presented about what is going on in the new media environment and how it affects news consumption. Further, the role of social media will be discussed and how social media use is expected to affect news consumption. This study contains three research questions and they will be presented along the way as the theories are presented.

A polarized audience

As an effect of the decline in newspaper consumption and the increase of media outlets there is a polarization going on between news-seekers and news-avoiders (Prior 2007; Ksiazek et al. 2010; Strömbäck et al. 2013; Shehata & Wadbring 2012). The increasing amount of media choices allow those who are less interested in politics and hard news to spend their time with other things, for example sports, entertainment, music or whatever interests them. Those who are interested in politics on the other hand have endless amounts of newspapers, political information and opinion journalism available through internet and news TV-channels. Shehata & Wadbring (2012) show that there is an increasing share of the population that doesn't pay attention to news at all. Their analysis is based on printed newspapers and television and radio news and shows the development from 1986 to 2011. The analysis shows that those not reading printed newspapers also avoids news radio or watch television news. The online news consumption is excluded which makes the numbers somewhat misleading. However, further analysis shows that those not reading printed newspapers to a greater extent read news online.

A parallel discussion regarding news consumption is about selective exposure (Sunstein 2007; Mutz & Martin 2001; Stroud 2010). The increasing amount of media choices makes it possible for individuals to choose media channels that confirm their political view and opinions. The discussion of selective exposure has been renewed with every major change in the media environment. The commercialization of TV, the subsequent increasing amount of channels and the political polarization of news TV between different broadcasting companies

raised questions about whether people got objective information and whether they would watch news at all, or keep to entertainment (Mutz & Martin 2001). The political polarization of news TV does however not apply to a Swedish context. The fear of selective exposure increased with the internet and some scholars feared that citizens would isolate themselves in “echo chambers” of opinions, for example only read blogs confirming their own opinions (Sunstein 2007). The attention to media was previously more a matter of availability and supply, but became more a matter of demand (Prior 2007). Social media has again put more fuel to the debate of selective exposure. The possibility to customize your information flow in social media through connecting to specific persons or organizations may help to skew the users’ view of the world.

The development with polarization between news-seekers and news-avoiders and selective exposure is also, according to Bennett & Iyengar (2008), a matter of class and they call this development stratification. They merge the word stratification, a society’s categorization of people into socioeconomic strata, based upon occupation, income, wealth, and social status, with fragmentation to create the word stratification. People from different socioeconomic classes have different preferences in media and have different patterns of consumption. Shehata (2012) shows for example that women have a stronger preference for entertainment oriented TV shows while men have a stronger preference for information shows. There are also differences depending on level of education. Those with higher education have less preference for entertainment shows and stronger preference for information shows.

However, the Internet and social media is not only met with skepticism, there has also been voices suggesting that internet and social media will renew public deliberation and participation, creating a new public sphere. The digital development offers a development of democracy as everyone is able to control their media environment and contribute to the public opinion through self-publication and social media. The Internet is also conceptualized as a marketplace of ideas, a place for open debate and freedom of speech and an improvement of the media environment in the light of normative demands of the media in democratic theory. (Castells 2008; Van Laer et al. 2010).

Social media and news

The social media has changed the way we receive information and the way information, political information and news is distributed (Newman 2012). In step with the growth of social media and the increasing number of users, there are an increasing amount of

organizations using social media to distribute information, including news organizations. The dissemination of articles and information through social media is a new way for them to attract new target groups. They adapt to the new environment to attract new users and to increase the traffic to their websites. (Newman 2012; Weeks & Holbert 2013)

The digital media development offers individuals varied and novel opportunities to receive and engage in news (Weeks & Holbert 2013). Facebook, for example, lets you connect with people, connect with organizations and news producers, share information and articles from different sites. Messing & Westwood (2013) argues that social endorsements are crucial when understanding individual's attention to news and selection of news source. They examine the importance of heuristic cues in a news context and argue that social endorsements are a more important factor in the choice of news than the label of the news source. The social media and the way we share links and give recommendations have become an important source for news and information for a growing number of individuals, especially younger individuals (Hermida et al. 2012). There are not only news organizations who distribute the news anymore, but also individuals disseminating articles through their networks. The social endorsement mechanisms of social media can help getting people exposed to and interested in news and create habits of news consumption.

One argument in the debate of news-seekers and news-avoiders is that people to a lesser extent are exposed to news accidentally or passively. TV watching at night, before cable TV and multiple choices, did include watching the news, partly as a consequence of the lack of alternatives. Newsreels at the cinema meant that people received news although the purpose of the visit was seeing a movie. Newspaper subscriptions in the family gave the family members the possibility to take a look in the paper, even if just in the passing (Prior 2007). The mechanisms of this passive way of receiving news can be transferred to a social media context. Friends or organizations sharing news can contribute to a passive exposure to news and be a trigger for people to continue to visit news websites.

The social media let you connect with vast amounts of people and keep you updated on events in their daily life. The social media network tends to be more heterogeneous than your daily life network which facilitates a more heterogeneous circulation of information (Barbera 2014). The strong ties in social networks tend to be homogeneous in terms of knowledge and opinions and the weak ties are providing more novel information and larger spectra of

opinions (Granovetter 1973). It is argued that internet and social media makes use of the strength of weak ties, i.e. contributes to a more heterogeneous flow of information (Boase 2006; Barbera 2014). Strong ties are family members or close friends while weak ties are for example other friends, acquaintances or colleagues. Brundidge (2010) also suggests that one characteristic of internet and social media are weakened and blurred boundaries between different communicative spaces. Sites are connected with each other through links and you can navigate through different information sources from the whole world through a couple of clicks on the computer. The geographical constraints do not exist and the economic constraints are limited.

The previous research on the effect of social media use on news consumption suggests a positive relationship. Hermida et. al (2012) shows that two fifths of the social media users receive news from people they follow on sites like Facebook and one fifth get news from news organizations and journalists they follow. Research from the U.S show that half of those using Facebook or Twitter receive news through those sites. 78% of the news users on Facebook mostly see news when visiting Facebook for other reasons (Matsa & Mitchell 2014), which means that social media contribute to passive exposure to news.

What is clear is that active attention to newspaper and broadcasted news as we knew it before is declining and that more individuals avoid the traditional mass media. However, as the news industry has become more digitally oriented, the social media has become an important factor in the mechanisms of news consumption (Hermida et al 2012; Holcomb 2014). This leads us to the first research question of this study:

***RQ1:** How does the use of social media affect online news consumption?*

Political interest

The new media environment and the increased amount of choices make audience preferences more important when explaining media use (Webster 2014). Individual level factors such as demographics, socioeconomic, and motivational factors have for a long time been in focus when analyzing attention to news media (Strömbäck & Shehata 2011). The research shows in general a positive relationship between news consumption and age, education, political interest, political knowledge and political participation. In a democratic society, political interest is one of the most important norms. It is an antecedent for knowledge, voting,

participation and attention to political information. It's hard, however, to draw a conclusion about the causal relationship between news consumption and political interest. Political interest can be a driving force for news consumption but news consumption can also lead to an increased interest in political policy issues (Strömbäck & Shehata 2011). There is evidence stating that there is both a causal and reciprocal relationships between news media exposure and political interest (Strömbäck & Shehata 2010). Knowing that political interest is an important factor for news consumption, it is included in the study to further explore the relationship between social media use and news consumption.

***RQ2:** How does political interest affect the relationship between social media use and news consumption?*

Motivations to use social media

The reason why people draw attention to media has been of interest for many researchers and is referred to as the uses & gratification theory. Berelson (1949) found that the purpose of reading newspapers often is to ease boredom, a need to read or for social purposes. Rubin and Perse (1987) found when examining television news that the purpose of watching television news is not only to be informed, but also for relaxation and to pass time. Lee (2013) suggests four major themes of types of motivations that drive news consumption: information-motivated, entertainment-motivated, opinion-motivated and social-motivated news consumption. This perspective is interesting in order to understand the mechanisms of media attention and news consumption.

The Uses & gratifications theory attempts to explain motivations for selecting different media channels and contents and the subsequent behavioral effects (Lee & Ma 2012). The perspective of U&G is that individual's selection of media outlet or channel is an active evaluation of the benefit of using it. The social and psychological needs of the individual drives her to a specific choice, the user is goal oriented. In news consumption research, the users are assumed to actively choose media in order to fulfill their needs, in comparison to media effect theories where the user is perceived as a passive player on whom mass media can exert direct influence. Knowing why people choose a media source can offer insight into how audiences use the media (Lee 2013). In the U&G perspective, individuals choose news sources according to their ability to satisfy the needs of the individuals, such as information-seeking, entertainment, social interaction and escapism (Lee & Ma 2012). Different media

channels are able to satisfy different needs and there is a variation in the results when examining different media.

When examining what kind of motivations that drives social media use, Quan-Haase & Young (2010) found six dimensions of drivers using factor extraction; pastime, affection, fashion, share problems, sociability, and social information. “Pastime” includes killing time, entertainment, relaxation and escapism. “Affection” includes showing gratitude to people, to help and to let people know that they are cared about. “Fashion” is a about the need of not looking old-fashioned and to look stylish. “Share problems” concerns the need of someone to talk to and “sociability” includes to make friends of the opposite sex and to meet new people.

To further explain the relationship between social media and news consumption, motivations to use social media is introduced into the study. The purpose or motive of the individual to use social media is expected to affect how the individual use the social media and their attention to different news media. The four different news media used in the study; morning newspaper, tabloid newspaper, TV and radio news, have different characteristics and attract different kinds of people. The introduction of motivational factors in the study contributes to a more complex understanding of social media’s effect on news consumption.

***RQ 3:** How do different motives to use social media affect online news consumption?*

Method and data

Method

To explore the relationship between social media use and online news consumption a multivariate OLS regression analysis is conducted. The method, compared to a bivariate correlation analysis, allows exploring the impact of multiple variables on one dependent variable. The OLS regressions are conducted in SPSS, a software for statistical analysis. The study follows the elaboration model of Aneshensel (2013). The main focus in the study is on the focal relationship and in this case there are several focal relationships as different news media are analyzed both together and separately. The dependent variables are online morning paper consumption, online tabloid paper consumption, online TV news consumption, online radio news consumption and a total online news consumption variable that includes all the news media. I use both an exclusionary and inclusive strategy to test and explain the

relationship. The exclusionary strategy is to bring control variables into the model to rule out redundancy and see if the relationship still holds. The control variables are age, education level, gender, printed newspaper consumption, and broadcast news consumption. Next step is the inclusive strategy to explain the mechanism of the focal relationship. Political interest is introduced as an intervening variable to explore if the correlation in the focal relationship actually is a consequence of political interest. I also explore if there is an interaction effect of political interest and social media. To answer the third research question four factors describing the motive to use social media are brought in to the model. The motive variables are constructed using factor extraction and the method is principal component analysis (PCA) with varimax rotation. These motivational factors are introduced as intervening variables to explain what kind of characteristics of the social media user that drives news consumption.

The OLS regression method does not prove the causality of the relationship (Aneshensel 2013), instead causality has to be argued with theory and observations. The causality of social media use and online news consumption is not obvious but a theoretical argumentation is presented in the theory chapter. However, news sites also offer the opportunity to share articles through Facebook and Twitter, which could encourage social media use.

Data

In order to conduct the study, survey data from the SOM-institute is used. The SOM-institute is an independent survey research organization at the University of Gothenburg conducting national and regional surveys on the topics society, opinion and media in Sweden. The institute has throughout the years become an influential producer of knowledge on the behaviors and attitudes of the Swedish population (Kullenberg 2012).

Using secondary data makes you lose control over the collection of data, the statistical sample, and therefore the validity of the data. The SOM-institute however, is managed by some of the most prominent researchers in Sweden with high demands on sampling and other methodological issues. One negative aspect of using secondary data is that you can't choose the questions yourself and instead have to rely on available data.

The data used for this study is from the survey conducted in 2013. The survey is based on five parallel surveys partly focusing on different subjects and was sent to a randomly generated selection of the Swedish population, a total of 17000 individuals from the age 15 to 85. The varying nature of the five different studies means that some of the questions only are sent to 3400 individuals. The response rate for the 2013 study is 53% and the response rates are lower amongst those less established in the community; young, singles and foreign citizens.

However, the responses in the survey equal the proportion of the Swedish population to a satisfactory level. (Vernersdotter 2014) Since the aim of the study is to explore the impact of social media on online news consumption, those never using internet is excluded in the statistical analysis. This excludes approximately 10% of the respondents in the dataset.

Included variables

The dependent variable in a regression analysis should be on an interval scale. That means the value of each step is equal to each other (Field 2013). In survey questions like those being used in the SOM-survey, the scale is actually on ordinal level scale but is treated as an interval level scale. A way to decrease the error of using this kind of data is to construct new variables by grouping variables together. The dependent variables are constructed using questions about news consumption through various platforms. All the variables in the study are recoded to a 0-1 scale. By recoding variables with various scale intervals to the same interval, their effect on the dependent variable can be compared. The operationalization of the variables is discussed in the following section.

Online news consumption

There are five dependent variables used in the study. Four different online news media are used as dependent variables and those are also put together as one variable capturing all online news consumption. The concept of news is somewhat diffuse as noted before, both regarding the nature of news and that news not is a product exclusively provided by traditional news organizations. The structure of the questions in the SOM-survey, however, follows the structure of the traditional mass media landscape. Although the news media has evolved a lot, the structure of the traditional mass media is still relevant in an online environment. The survey questions specifically ask for news consumption and the connotation of the word “news” leans, arguably, more towards hard news than soft news or infotainment. The dependent variables are constructed using the question F9 which is divided in to four parts with four different news media; morning newspaper, tabloid newspaper, TV-news and radio-news, and questions about the use of the various media through different platforms. For every media the following question is asked: “To what extent do you take part of news through following ways?” considering the use on computer, smartphone and tablet computer. There are also questions about printed paper use and analogue TV- and radio news consumption; however these are excluded since the study only applies to digital news consumption. The scale contains six steps: daily, 5-6 days/per week, 3-4 days per week, 1-2

days per week, less often, never. Every each variable includes use on computer, smartphone and tablet computer. The news consumption variables are not index variables in the sense that included variables in each constructed variable have to correlate. They are rather collecting the news consumption in the respective media and therefor no reliability test is conducted

Social media use

The focal independent variable is social media use and is operationalized by the question; “How often have you been using social media on internet? (e.g. Facebook, Twitter)”. It’s a seven step scale from 0 to 6; never, at some point during the last 12 months, at some point during the last 6 months, at some point every month, at some point every week, several times a week, daily. The fact that the question includes Facebook and Twitter as examples indicates that social network sites are the definition of social media in this survey, not including gaming or Wikipedia use. It also indicates for the respondents that so is the case. The levels of the scale can be discussed since many users are active several times a day; however, a more detailed data is not available from this dataset.

Demographic control variables

The demographic control variables included into the analysis are age, level of education and gender and they are expected to have some impact on the focal relationship. Age, level of education and gender are all connected to the social media use and various consumption of news (Findahl 2014; Bergström 2014; Mitchell et. al 2013)

The age of the respondents in the survey ranges from 16 to 85 years. The age variable operationalized with the question: “What year were you born?” and completed with selection data where answers were missing. The education level variable is operationalized with a four level scale constructed beforehand by the SOM-institute. The scale is; low, middle-low, middle-high, high. The gender variable is operationalized by a variable also constructed beforehand by the SOM-institute. It is based on the question “are you a man or woman”. The variable is completed with selection data where answers were missing.

Traditional news consumption

Two control variables for traditional news consumption are also used in the regression analysis. The printed press variable includes consumption of printed morning paper and tabloid paper consumption and the broadcast media variable includes traditional TV- and radio news consumption. These variables are included to rule out the effect of general news

interest. Studies show that people tend to consume both analogue and online news (Findahl 2014). The print paper consumption variable is represented by question F9aa and F9ba and the broadcast news consumption variable is represented by question F9ca and F9da. The question is: “To what extent do you take part of news through following ways?” The scale contains six steps: daily, 5-6 days/per week, 3-4 days per week, 1-2 days per week, less often, never. The scales are recoded to increase with increasing news consumption.

Political interest

Political interest is introduced as an intervening variable to explore if the attention to news media as an effect of social media use actually is a matter of political interest. Political interest is operationalized by the survey question: “How interested are you in general in politics?” with a four step scale reaching from *very interested* to not *at all interested*. The variable is recoded so that the scale is increasing with increasing interest. An interaction variable with social media use and political interest was also constructed to measure a potential interaction effect. The interaction variable is also coded to a 0-1 scale.

Motivational factors

To further explore the relationship between social media use and online news consumption, four motivational variables were constructed using the PCA factor extraction method. Question F22 in the survey contains 13 questions about the motives to use social media. One example is “I use social media to be entertained”. The scale have 5 steps and stretches from *I agree completely* to *I don't agree at all*. The factor extraction gave four dimensions that were used to create four variables.

The four factors are named; M1= active participation, M2= passive entertainment, M3= information seeking and M4= Active social communication. The variables are also recoded to a 0-1 scale. The factor extraction with all variables is attached in the appendix.

Diagnosics

To evaluate the quality of the study some regression diagnostics are made. This evaluation proceeds from the criteria of the BLUE test (Best Linear Unbiased Estimates) with four criterions; no measurement errors, no specification errors, not to high multicollinearity between independent variables, error term well behaved. The first criterion is about measurement errors in the variables included which includes questions about validity and reliability. The case of validity is discussed in the part where the variables are specified. Since

I use secondary data it is hard to know if there are any random measurement errors that could occur in the collection of data. However, the SOM-institute conducting the survey is a prominent actor in social science research and puts a lot of effort in reliability. The second criterion is about specification errors, which means that all relevant independent variables should be included and all irrelevant independent variables should be excluded. In this study I'm restricted to the existing variables from the survey data. The most relevant sociodemographic variables are included. The income variable is not considered relevant as a lot of online news is free of charge and online news consumption is not a consequence of the economic status of the individual. Income is also a blunt instrument to measure wealth as for example young individuals who are economically supported by their parents. Political knowledge and participation have earlier been discussed as connected to news consumption. These variables are not represented in the survey and therefore not possible to include. However, political interest is the variable that can be considered a driving factor of these three while political knowledge and participation can be considered consequential factors.

There should be a linear relationship between the dependent variable and the independent variable and when checking for linearity, all the independent variables have a linear relationship with the dependent variable. The age variable show a slight increase in R^2 when checking for a quadratic relationship, however it is a minor change.

When checking for multicollinearity between the independent variables, the tolerance values were stretching from 0.573 to 0.904 which is satisfactory and over the required tolerance level of 0.2. Further, the error term should be well behaved i.e. there should be no heteroscedasticity which seems not to be the case. Since the regression is conducted with survey data, there is no risk for extreme outliers in the variables that affect the coefficients.

Results

The results of the regression analysis are presented here. With each of the three research questions a new table is presented where new variables are introduced.

RQ1: *How does the use of social media affects online news consumption?*

The first research question treats the relationship between social media use and online news consumption. This relationship is tested with multiple regressions and presented in table 1. The first model shows that social media have a positive and significant effect on online news

consumption in general. When the control variables are introduced, the relationship is weakened but is still significant. The focal relationship holds in all of the models but the effect of social media is strongest on online morning paper consumption and online tabloid newspaper consumption. The relationship is weaker for TV and radio consumption but still a significant relationship.

All the control variables have significant effects on news consumption in model 2. Age shows a negative effect which means that the older you are, the less probable you are to pay attention to news online. Education has a positive effect which means that higher educated people pay more attention to online news. Gender has a positive effect and in this case it means that men pay more attention to online news.

The traditional media consumption variables do not really weaken the focal relationship. Printed newspaper consumption has somewhat surprisingly no effect at all on the online news consumption. The broadcast news consumption variable has significant positive effect on all the different news media. The inclusion of these variables makes the coefficients for the age variable increase a lot, which means age becomes a more important factor for online news consumption when traditional news media is controlled for.

When comparing the separate analyses for the different news media there are some differences. The control variables all have significant effects on the dependent variables with two exceptions; education which has no significant effect on online tabloid consumption and printed press consumption which has no effect on any of the news media. The age variable has the strongest effect of the control variables. Comparing the effect on the different dependent variables, age has the strongest effect on online tabloid consumption, followed by online morning paper consumption. Education has the strongest effect on online morning paper consumption and lower effect on online TV- and radio consumption while the effect is absent on online tabloid consumption. Also gender has the strongest effect on online morning paper consumption followed by tabloid, TV and radio.

The adjusted R^2 value shows the explained variance of the dependent variable with a scale from 0 to 1. The closer to 1 R^2 is, the better the independent variables explain the variance in the dependent variable. The first model has an R^2 value of 0.139 which means that social media explains 13.9% of the variation on online news consumption. When all the control variables are included, the value increases to 22.6% explanation of the variance. When comparing the different media separately, we can see that the R^2 in the models for online

morning and tabloid paper consumption are higher than for online TV and radio. This means that the online newspaper variables are better explained with these independent variables.

Table 1 Social media use and news consumption.

	All online news			Online morning newspaper			Online tabloid newspaper		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
Social media	0.154*** (0.010)	0.111*** (0.012)	0.107*** (0.012)	0.208*** (0.015)	0.151*** (0.017)	0.148*** (0.017)	0.199*** (0.014)	0.146*** (0.017)	0.145*** (0.017)
Age		-0.130*** (0.021)	-0.229*** (0.024)		-0.167*** (0.031)	-0.278*** (0.036)		-0.199*** (0.030)	-0.343*** (0.035)
Education level		0.063*** (0.013)	0.059*** (0.013)		0.132*** (0.019)	0.123*** (0.019)		0.033 (0.019)	0.027 (0.019)
Gender		0.072*** (0.099)	0.069*** (0.009)		0.104*** (0.013)	0.101*** (0.013)		0.083*** (0.013)	0.080*** (0.013)
Printed press			0.021 (0.020)			0.012 (0.029)			0.054 (0.029)
Broadcast media			0.129*** (0.019)			0.147*** (0.028)			0.176*** (0.027)
Intercept	0.112*** (0.007)	0.130* (0.018)	0.085* (0.019)	0.170*** (0.010)	0.161*** (0.026)	0.116*** (0.029)	0.147*** (0.010)	0.216*** (0.026)	0.145*** (0.026)
Adj. R ²	0.139	0.203	0.226	0.120	0.195	0.206	0.115	0.164	0.192
N	1533	1496	1432	1498	1498	1434	1501	1501	1435

	Online TV news			Online radio news		
	Model 10	Model 11	Model 12	Model 13	Model 14	Model 15
Social media	0.115*** (0.011)	0.095*** (0.014)	0.086*** (0.014)	0.074*** (0.009)	0.049*** (0.009)	0.049*** (0.011)
Age		-0.073** (0.025)	-0.150*** (0.029)		-0.078*** (0.020)	-0.145*** (0.023)
Education level		0.051*** (0.015)	0.046** (0.015)		0.038** (0.012)	0.041*** (0.012)
Gender		0.067*** (0.010)	0.064*** (0.011)		0.034*** (0.008)	0.033*** (0.008)
Printed press			0.006 (0.023)			0.012 (0.019)
Broadcast media			0.102*** (0.022)			0.091*** (0.018)
Intercept	0.083*** (0.008)	0.070*** (0.021)	0.043 (0.021)	0.054*** (0.006)	0.069*** (0.017)	0.033 (0.018)
Adj. R ²	0.064	0.099	0.104	0.042	0.068	0.089
N	1500	1500	1434	1500	1500	1434

*** p≤.001, **p≤.01, *p≤.05

Source: SOM survey 2013

OLS regression with various dependent variables. The dependent variables are based on question F9; "To what extent do you take part of news through following ways?"; Through computer, through smartphone, through tablet computer. Scale from "never" to "every day". Social media use is based on question F19e: "How often have you been using social media on internet? (e.g. Facebook, Twitter)" Scale from "never" to "daily". Age includes people from 16 to 85 years. Education is based on question 154: "What level of education have you acquired? Four groups are constructed: Low, medium low, medium high, high. Gender is

a dummy variable with woman as omitted reference category. Printed press is based on question F9aa and F9ba: "To what extent do you take part of news through following ways? regarding morning paper and tabloid paper consumption. Scale from "never" to "every day". Broadcast media is based on questions F9ca and F9da: "To what extent do you take part of news through following ways? regarding broadcast TV- and radio news consumption. Scale from "never" to "every day".

RQ2: *How does political interest affect the relationship between social media use and news consumption?*

The introduction of political interest in table 2 does not have any notable effect on the focal relationships, i.e. the social media's effect on the various forms of news consumptions. The coefficients for social media are pretty much the same as in table 1 and the introduction of the political interest variable has not changed the coefficients to any greater extent. However, the political interest has a significant effect on all the dependent variables meaning that it has an effect on online news consumption. When all control variables are introduced, political interest loses its significance on online tabloid consumption. Reading online tabloid news is thus not driven by political interest which is partly the explanation for the other media. When comparing the political interest variable with the control variables, political interest has more effect than education on all dependent variables except online tabloid consumption where there are no significant results. The effect of gender is similar and age has still strongest effect, also compared to political interest. The interaction variable is testing if political interest and social media use jointly affects the online news consumption i.e. the more politically interested you are, the more effect will social media use have on online news consumption. As we can see in table 2, there are significant interaction effects on all the dependent variables except for online tabloid consumption. The strongest interaction effect is found on online TV news consumption.

The explained variance in model 1, table 2 is 15.1% which is a small increase from 13.9% in model 1, table 1. The introduction of the political interest variable thus contributes somewhat to the explained variance of the dependent variable.

Table 2 Social media use, news consumption and political interest.

	All online news			Online morning newspaper			Online tabloid newspaper		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
	Social media	0.153*** (0.010)	0.102*** (0.012)	0.048* (0.022)	0.212*** (0.014)	0.138** (0.017)	0.065* (0.033)	0.203*** (0.014)	0.142*** (0.017)
Age		-0.245*** (0.024)	-0.243*** (0.024)		-0.303*** (0.036)	-0.301*** (0.036)		-0.352*** (0.036)	-0.351*** (0.036)
Education level		0.049*** (0.013)	0.050*** (0.013)		0.103*** (0.020)	0.104*** (0.020)		0.024 (0.020)	0.024 (0.020)
Gender		0.063*** (0.009)	0.062*** (0.009)		0.088*** (0.013)	0.087*** (0.013)		0.078*** (0.013)	0.077*** (0.013)
Printed press		0.020 (0.020)	0.007 (0.026)		0.007 (0.029)	0.006 (0.029)		0.055 (0.029)	0.054 (0.029)
Broadcast media		0.125*** (0.019)	0.125*** (0.019)		0.138*** (0.028)	0.138*** (0.028)		0.179*** (0.028)	0.179*** (0.028)
Political interest	0.083*** (0.017)	0.062*** (0.017)	0.007 (0.026)	0.158*** (0.024)	0.123*** (0.026)	0.049 (0.038)	0.053* (0.024)	0.023 (0.025)	-0.019 (0.038)
Pol. Int. X Soc. Med.			0.100** (0.035)			0.135** (0.052)			0.077 (0.052)
Intercept	0.067*** (0.057)	0.073*** (0.020)	0.102*** (0.021)	0.082*** (0.017)	0.093** (0.030)	0.132*** (0.033)	0.116*** (0.017)	0.140*** (0.029)	0.163*** (0.033)
Adj. R ²	0,151	0.232	0.236	0,145	0.215	0.219	0,120	0.191	0,192
N	1511	1414	1414	1513	1416	1416	1516	1417	1417

	Online TV news			Online radio news		
	Model 10	Model 11	Model 12	Model 13	Model 14	Model 15
	Social media	0.120*** (0.011)	0.081*** (0.014)	0.017 (0.026)	0.078*** (0.009)	0.046*** (0.011)
Age		-0.165*** (0.029)	-0.163*** (0.029)		-0.156*** (0.023)	-0.154*** (0.023)
Education level		0.036** (0.016)	0.037* (0.016)		0.036** (0.013)	0.036** (0.013)
Gender		0.057*** (0.011)	0.056*** (0.011)		0.029*** (0.009)	0.029*** (0.009)
Printed press		0.006 (0.023)	0.005 (0.023)		0.012 (0.019)	0.012 (0.090)
Broadcast media		0.095*** (0.022)	0.095*** (0.022)		0.090*** (0.018)	0.090*** (0.018)
Political interest	0.082*** (0.019)	0.063** (0.020)	-0.001 (0.031)	0.046** (0.015)	0.039* (0.016)	0.000 (0.025)
Pol. Int. X Soc. Med.			0.117** (0.042)			0.071* (0.034)
Intercept	0.037** (0.057)	0.032 (0.024)	0.066* (0.027)	0.028** (0.011)	0.024 (0.019)	0,045* (0,021)
Adj. R ²	0.078	0.109	0.113	0.050	0.093	0,095
N	1515	1416	1416	1515	1416	1416

*** p≤.001, **p≤.01, *p≤.05
Source: SOM survey 2013

OLS regression with various dependent variables. The dependent variables are based on question F9; "To what extent do you take part of news through following ways?"; Through computer, through smartphone, through tablet computer. Scale from "never" to "every day". Social media use is based on question F19e: "How often have you been using social media on internet? (e.g. Facebook, Twitter)" Scale from "never" to "daily". Age includes people from 16 to 85 years. Education is based on question 154: "What level of education have you acquired? Four groups are constructed: Low, medium low, medium high, high. Gender is a dummy variable with woman as omitted reference category. Printed press is based on question F9aa and F9ba: "To what extent do you take part of news through following ways? regarding morning paper and tabloid paper consumption. Scale from "never" to "every day". Broadcast media is based on questions F9ca and F9da: "To what extent do you take part of news through following ways? regarding broadcast TV- and radio news consumption. Scale from "never" to "every day". Political interest is based on question F34: "How interested are you in politics?" Scale from "not at all interested" to very interested". Interaction variable (Pol.Int X Soc.Med) is constructed with question F19e and F34, social media use and political interest.

RQ 3: How do different motives to use social media affect online news consumption?

The motivational factors are introduced in table 3. They are motives for social media use and in this table they are tested if they also affect the news consumption. The only motive that has a significant effect on news consumption through all the news media is the active participant, motive 1. This result indicates that those who use social media to express themselves, share information or take part in discussions also tend to take part of online news. The strongest effect of the first motive is on online morning paper consumption followed by online TV consumption and online radio consumption. The second motive, the entertainment motive, has a significant effect on online tabloid consumption. This means that those who attend social media with the motive to be entertained, to relax, and to pass time, tend to take part of online tabloid news to a greater extent than other people. The third motive, the information seeking motive, has a significant effect on online TV news consumption which means that those who attend to social media for the purpose of information seeking and to learn new things take part of online television more than others.

When introducing the motivational factors, the number of valid cases decreased with approximately 50% which makes it harder to get significant results. It is the individuals who don't use social media at all who disappear from the model and therefore the focal relationship also changes. An additional regression with this selection is made to test the changes in the focal relationship before and after the introduction of the motivational variables. The focal relationship is a lot weakened but has still a significant relation. It means that there is a weak but still a unique effect of social media on online news consumption that cannot be explained by motivational factors.

Table 3 Social media use, news consumption and motives to use social media

	Dependent variables News consumption									
	All online news		Online morning newspaper		Online tabloid newspaper		Online TV news		Online radio news	
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Social media	0.101*** (0.027)	0.069* (0.027)	0.171*** (0.041)	0.131** (0.042)	0.136*** (0.041)	0.109** (0.042)	0.050 (0.033)	0.011 (0.035)	0.046 (0.026)	0.023 (0.027)
Age		-0.136*** (0.034)		-0.156** (0.053)		-0.201*** (0.052)		-0.082 (0.043)		-0.108** (0.034)
Education level		0.038 (0.020)		0.094** (0.030)		-0.034 (0.030)		0.045 (0.025)		0.047* (0.020)
Gender		0.069*** (0.013)		0.096*** (0.020)		0.102*** (0.020)		0.056*** (0.016)		0.022 (0.013)
Political interest		0.060** (0.024)		0.122*** (0.037)		0.023 (0.036)		0.052 (0.030)		0.042 (0.024)
Printed press		0.025 (0.028)		0.014 (0.044)		0.082 (0.043)		-0.003 (0.035)		0.006 (0.028)
Broadcast media		0.128*** (0.025)		0.141 (0.038)		0.180*** (0.038)		0.096** (0.031)		0.095*** (0.025)
Motives										
M1	0.190*** (0.031)	0.156*** (0.031)	0.244*** (0.047)	0.182*** (0.048)	0.150*** (0.047)	0.107* (0.047)	0.210*** (0.039)	0.190*** (0.039)	0.154*** (0.030)	0.144*** (0.031)
M2	0.007 (0.027)	0.045 (0.027)	0.016 (0.041)	0.062 (0.041)	0.095** (0.040)	0.117** (0.041)	-0.047 (0.033)	0.006 (0.034)	-0.036 (0.026)	-0.005 (0.027)
M3	0.047 (0.025)	0.047 (0.024)	0.027 (0.038)	0.032 (0.038)	0.015 (0.038)	0.024 (0.037)	0.105*** (0.031)	0.089*** (0.031)	0.043 (0.024)	0.043 (0.024)
M4	-0.009 (0.026)	0.012 (0.025)	-0.025 (0.039)	0.004 (0.039)	-0.009 (0.039)	0.049 (0.039)	0.001 (0.032)	0.010 (0.032)	-0.007 (0.025)	-0.017 (0.025)
Intercept	0.068** (0.023)	-0.052 (0.036)	0.111** (0.036)	-0.080 (0.055)	0.096** (0.035)	-0.024 (0.055)	0.038 (0.029)	-0.061 (0.045)	0.028 (0.023)	-0.042 (0.036)
Adj. R ²	0.133	0.202	0.098	0.154	0.075	0.153	0.105	0.127	0.068	0.103
N	811	762	812	763	813	764	813	764	812	763

*** p≤.001, **p≤.01, *p≤.05

Source: SOM survey 2013

OLS regression with various dependent variables. The dependent variables are based on question F9; "To what extent do you take part of news through following ways?"; Through computer, through smartphone, through tablet computer. Scale from "never" to "every day". Social media use is based on question F19e: "How often have you been using social media on internet? (e.g. Facebook, Twitter)" Scale from "never" to "daily". Age includes people from 16 to 85 years. Education is based on question 154: "What level of education have you acquired? Four groups are constructed: Low, medium low, medium high, high. Gender is a dummy variable with woman as omitted reference category. Political interest is based on question F34: "How interested are you in politics?" Scale from "not at all interested" to very interested". Printed press is based on question F9aa and F9ba: "To what extent do you take part of news through following ways? regarding morning paper and tabloid paper consumption. Scale from "never" to "every day". Broadcast media is based on questions F9ca and F9da: "To what extent do you take part of news through following ways? regarding broadcast TV- and radio news consumption. Scale from "never" to "every day". Motives are constructed through PCA factor extraction and indicate motives to use social media. M1= active participation, M2=passive entertainment, M3= information seeking, M4= active social communication.

Discussion

The development in the media environment has given new structures of media consumption. The newspaper reading has partly moved from printed paper to online reading, so has TV watching and radio listening. At the same time, social media has revolutionized the structures of how we receive, consume and share information and news.

When examining the first research question we can conclude that social media use has a significant effect on online news consumption, even when we control for age, level of education, gender and traditional news media use. The result does not show whether the news being consumed are distributed through social media, only that the more people use social media, the more they will attend to online news. However, previous research shows that people receive news from social media sites such as Facebook which suggests a causal relationship. As described before, social endorsements are an important explanation for news consumption. In this perspective, the sharing of news articles among friends and followers through social media such as Facebook and Twitter may enhance the news exposure and consumption. The exposure of news shared by “weak ties” also makes for an exposure of various news sources, which speaks against the theory of selective exposure. The inclusion of weak ties in individual’s social media networks means that users can get influenced by people outside their immediate social sphere. In that sense, the social media can help overcome possible social constraints connected to news consumption, the stratification (Bennett and Iyengar 2008) of media consumption.

Facebook is the most popular and widespread social media where news is regularly disseminated (Holcomb et al. 2013), and counteract the mechanisms of news-avoiding. Even if people don’t regularly read newspaper or watch TV-news, they get exposed to some news and get notified on the most important events in society, a satisfying level of news consumption from the view of Zaller (2003). The positive effects of social media are however only a matter for those using social media and there are still a lot of people not using it at all. An interesting follow up could be to examine the social media avoiders and their media habits and news consumption. Social media use has stronger effect on morning paper and tabloid paper use compared to TV-and radio news use. This result suggests that written news are better suited to be spread and received on social media than video or audio news although videos are frequently used on Facebook and Youtube. However, watching short videos with

news or political information distributed on YouTube and Facebook may not be captured by the survey question of online TV consumption.

To further explore social media's relation to news consumption, political interest was introduced into the model. Political interest doesn't affect the focal relationship which means social media have a unique effect on news consumption that cannot be explained by political interest. Political interest has, as previous research shows, a positive effect on news consumption and the strongest effect is found on online morning paper consumption. The strong effect of political interest on online morning paper consumption and the absent effect on online tabloid paper consumption indicate the differences in the media where tabloid papers are more entertainment oriented.

The significant interaction effect of social media and political interest is interesting and shows that if you are politically interested, the effect of social media on news consumption is bigger than if you are not politically interested. That result somewhat confirms the theory about news-seeking and news avoiders. Social media can be a channel where politically interested news-seekers can find more news and information that interests them. At the same time, the least politically interested don't use social media to the same extent to expose themselves to news. The results show that political interest, as previous research shows, is an important factor of news consumption. However, as concluded before, there is still a unique effect of social media on news consumption even when letting political interest intervene.

In the third table different motives to use social media is included. They show the characteristics of the user and the main reason why he or she use social media. These results give us a deeper understanding of the social media user and the relationship with news consumption. The result shows that motive 1, the active participator motive, have significant effect on all the news consumption variables. These individuals are motivated to use social media to express opinions, ask for or give advice, share information and participate in discussions. These characteristics can symbolize a person that is involved in society and participate in the public debate. The results show that a person with these characteristics is more inclined to read, watch or listen to news. The strongest effect of this motive is on online morning paper and TV news consumption. A possible explanation is the serious image of the morning paper compared to the tabloid. The high effect on TV news consumption is harder to explain but the answer may be found in the nature of the medium and it's functionality in the online environment. It's assumable that watching a video news clip requires a little more

motivation and dedication than reading a short text. Motive 3, the info seeking motive, shows a significant effect only on online TV news consumption, also suggesting that it requires some dedication to pay attention to online TV news. The second motive, the passive entertainment motive shows only a significant effect on online tabloid consumption. This indicates that those individuals who use social media to be entertained, to relax, see what others do and to pass time to a greater extent read online tabloid papers. Even though those kinds of papers are more characterized by entertainment content and a sensationalist approach, they also contain a great deal of hard news, political information and opinion journalism. It is possible that the online tabloid readers driven by an entertainment motive also are exposed to the hard news. It is somewhat surprising that the information-seeking motive don't show a stronger effect on news consumption. The explanation might be that the information-seeking and learning dimensions of this variable correlate more with special interests and avocations rather than political information and news. All in all, being an active and engaged person on social media is important characteristics to explain online news consumption. However, people who seek entertainment and relaxation are not totally isolated from news which to some extent speaks against the news-avoiding thesis.

Conclusion

This study has explored the relationship between social media use and online news consumption. In conformity with previous research, social media have a significant effect on news consumption. The mechanisms of the relationship are further explored with political interest and motivational factors. The relationship between social media use and online news consumption cannot be explained by political interest which indicates that social media itself can be a driving factor. However the results show that political interest together with social media use creates an interaction effect that encourage online news consumption. A more determinant factor is however the character of the social media user and the motives to use social media. Those who are using social media in an active way, participating in discussions, sharing articles or express their opinions are more inclined to take part of online news.

This study shows that social media can be a contributing factor to news consumption with potential to engage also the news-avoiders to some extent. However, the influence of social media use has stronger effect on news consumption among those who are politically interested and use social media to participate in discussions, share articles or express their opinions.

References

- Aalberg, T., Strömbäck, J. & de Vreese, C. H. (2011) The framing of politics as strategy and game: A review of concepts, operationalizations and key findings. *Journalism* 13(2) 162–178
- Aneshensel, C. (2013) *Theory-Based Data Analysis for the Social Sciences*. London: Sage Publications Ltd
- Barbera, P. (2014) *How Social Media Reduces Mass Political Polarization. Evidence from Germany, Spain, and the U.S.* Working Paper, New York University
- Bennett, W. L., & Iyengar, S. (2008). A new era of minimal effects? The changing foundations of political communication. *Journal of Communication*, 58, 707–731.
- Berelson, B. (1949). “What Missing the Newspaper Means.” In *Communications Research*, edited by Paul F. Lazarsfeld and Frank M. Stanton, 111–29. New York: Harper & Brothers.
- Bergström, A. (2014) *Nationellt och lokalt i tryck och digitalt i Annika Bergström & Jonas Ohlsson (red) Brytningstider*. Göteborgs universitet: SOM-institutet.
- Brundidge, J. (2010) Encountering “Difference” in the Contemporary Public Sphere: The Contribution of the Internet to the Heterogeneity of Political Discussion Networks. *Journal of Communication* 60, 680–700
- Castells, M. (2008) *The New Public Sphere: Global Civil Society, Communication Networks, and Global Governance*. *Annals of the American Academy of Political and Social Science*, Vol. 616, *Public Diplomacy in a Changing World*, pp. 78-93
- Cellan-Jones, R. (2015) Facebook tightens its grip on news. *bbc.com*
<http://www.bbc.com/news/technology-32707014> (Retrieved 2015-05-13)
- Duggan, M., Ellison, N.B., Lampe, C., Lenhart, A., & Madden, M. (2014) “Social Media Update 2014,” Pew Research Center, January 2015. Available at:
<http://www.pewinternet.org/2015/01/09/social-media-update-2014/>

Findahl, O. (2014) Svenskarna och Internet 2014. .se stiftelsen för internetinfrastruktur.

Glynn, C. J., Huge, M. E., Hoffman, L. H. (2012) All the news that's fit to post: A profile of news use on social networking sites. *Computers in Human Behavior* 28: 113–119

Goode, L. (2009) Social news, citizen journalism and democracy. *New media & society* Vol 11(8): 1–19

Granovetter, M. S. (1973). The strength of weak ties. *American Journal of Sociology*, 6, 1360–1380.

Hadenius, S., Weibull, L. & Wadbring, I. (2011) *Massmedier. Press, radio och tv i den digitala tidsåldern*. Stockholm: Ekerlids förlag

Hermida, A., Fletcher, F., Korell, D., & Logan, D. (2012). Share, like, recommend. *Journalism Studies*, 13(5), 815-824.

Holcomb, J., Gottfried, J., Mitchell, A., Schillinger, J. (2013) News use across social media platforms. Pew Research Center. Available at <http://www.journalism.org/2013/11/14/news-use-across-social-media-platforms/>

Jalakas, A. & Wadbring, I. (2014) Ska man gråta om papperstidningen försvinner? i Annika Bergström & Henrik Oscarsson (red) *Mittfåra & marginal*. Göteborgs universitet: SOM-institutet.

Kaplan, A. M. & Haenlein, M. (2010) Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons* 53, 59—68

Knobloch-Westerwick, S. (2015) *Choice and reference in media use. Advances in selective exposure theory and research*. New York: Routledge

Ksiazek T. B., Malthouse E. C. & Webster J. G. (2010) News-seekers and Avoiders: Exploring Patterns of Total News Consumption Across Media and the Relationship to Civic Participation, *Journal of Broadcasting & Electronic Media*, 54:4, 551-568,

Kullenberg, C. (2012) *The Quantification of Society. A Study of a Swedish Research Institute and Survey-based Social Science*. Göteborgs universitet

Lee, A. M. (2013) News Audiences Revisited: Theorizing the Link Between Audience Motivations and News Consumption, *Journal of Broadcasting & Electronic Media*, 57:3, 300-317,

Lee, C. S & Ma, L. (2012) News sharing in social media: The effect of gratifications and prior experience, *Computers in Human Behavior* 28: 331–339

Mitchell, A. & Page, D. (2013) Twitter news consumers. Young, mobile and educated. Pew research center. Available at: <http://www.journalism.org/2013/11/04/twitter-news-consumers-young-mobile-and-educated/>

Messing, S.& Westwood S. J. (2014) Selective Exposure in the Age of Social Media: Endorsements Trump Partisan Source Affiliation When Selecting News Online, *Communication Research* Vol. 41(8) 1042–1063

Mutz, D., & Young, L. (2011). Communication and public opinion. *Public Opinion Quarterly*, 75(5), 1018–1044.

Mutz, D. C., & Martin, P. S. (2001). Facilitating communication across lines of difference: The role of mass media. *American Political Science Review*, 95(1), 97–114.

Newman, N., Dutton, W. H., Blank, G. (2012) Social Media in the Changing Ecology of News: The Fourth and Fifth Estates in Britain. *International Journal of Internet Science* 7 (1): 6–22

Ohlsson, J. (2013) Tidningen och demokratin i Annika Bergström & Jonas Ohlsson (red) En region för alla? Medborgare, människor och medier i Västsverige. Göteborgs universitet: SOM-institutet

Prior, M. (2007) Post-broadcast democracy: How media choice increases inequality in political involvement and polarizes elections. New York: Cambridge University Press.

Quan-Haase, A. & Young, A. L (2010) Uses and Gratifications of Social Media: A Comparison of Facebook and Instant Messaging. *Bulletin of Science, Technology & Society* 30(5) 350–361

Rubin, Alan M., and Elizabeth M. Perse. 1987. "Audience Activity and Television News Gratifications." *Communication Research* 14 (1): 58.

Shehata, A (2012) Programpreferenser och den svenska tv-nyhetspubliken i Lennart Weibull, Henrik Oscarsson & Annika Bergström (red) I framtidens skugga. Göteborgs universitet: SOM-institutet.

Stroud, N. J. (2008). Media use and political predispositions: Revisiting the concept of selective exposure. *Political Behavior*, 30(3), 341–366.

Stroud, N. J. (2010) Polarization and partisan selective exposure. *Journal of Communication*, 60(3), 556-576.

Strömbäck, J. (2005) In Search of a Standard: four models of democracy and their normative implications for journalism, *Journalism Studies*, 6:3, 331-345

Strömbäck, J. & Shehata, A. (2010) Media malais or a virtuous circle? Exploring the causal relationships between news media exposure, political news attention and political interest, *European journal of political research* 49: 575-597

Strömbäck, J. & Shehata, A. (2011) A matter of context: A comparative study of media environments and news consumption gaps in Europé, *Political communication*, 28:1, 110-134.

Strömbäck, J., Shehata, A., Djerf-Pierre, M. (2013) The Dynamics of Political Interest and News Media Consumption: A Longitudinal Perspective. *International Journal of Public Opinion Research* Vol. 25 No. 4

Sunstein, C. (2007) *Republic.com 2.0*. Princeton, NJ: Princeton University Press

Van Laer, J. & Van Aelst, P. (2010) Internet and social movement action repertoires, *Information, Communication & Society*, 13:8, 1146-1171,

Vernersdotter, F (2014) Den nationella SOM-undersökningen 2013 i Annika Bergström & Henrik Oscarsson (red) *Mittfåra & marginal*. Göteborgs universitet: SOM-institutet.

Wadbring, I. (2013) *Mätta morgontidningar* i Lennart Weibull, Henrik Oscarsson & Annika Bergström (red) *Vägskal*. Göteborgs universitet: SOM-institutet.

Webster J. G. (2014) *The marketplace of attention. How audiences take shape in a digital age*. Cambridge Massachusetts: MIT Press

Weeks, B. E. & Holbert, R. L. (2013) Predicting Dissemination of News Content in Social Media: A Focus on Reception, Friending, and Partisanship, *Journalism & Mass Communication Quarterly*. 90(2) 212–232

Weibull, L. (2013) *Medieförtroende* i Lennart Weibull, Henrik Oscarsson & Annika Bergström (red) *Vägskal*. Göteborgs universitet: SOM-institutet.

Westerståhl, J. (1972): *Objektiv nyhetsförmedling*. Göteborg: Akademiförlaget

Zaller, J. (2003) A New Standard of News Quality: Burglar Alarms for the Monitorial Citizen. *Political Communication*, 20:109–130,

Appendix

Factor extraction

Rotated Component Matrix ^a					
	Component	1	2	3	4
F.22B Använder sociala medier för att: underhålla och roa mig		,039	,819	,299	,117
F.22C Använder sociala medier för att: koppla av		,120	,713	,356	,056
F.22D Använder sociala medier för att: se vad andra har för sig		,209	,733	-,041	,333
F.22E Använder sociala medier för att: fördriva tiden		,179	,792	-,094	,060
F.22F Använder sociala medier för att: uttrycka mina åsikter		,803	,201	,079	,158
F.22G Använder sociala medier för att: hålla kontakt med vänner eller familj		,130	,125	,094	,885
F.22H Använder sociala medier för att: enkelt kommunicera med människor		,240	,237	,172	,801
F.22I Använder sociala medier för att: få information		,155	,130	,826	,207
F.22J Använder sociala medier för att: fråga om råd eller ge råd till andra		,586	,068	,561	,148
F.22K Använder sociala medier för att: lära mig intressanta saker		,346	,128	,826	,022
F.22L Använder sociala medier för att: lära känna nya människor		,677	,179	,295	,026
F.22M Använder sociala medier för att: dela information		,763	,090	,264	,235
F.22N Använder sociala medier för att: delta i diskussioner		,877	,103	,099	,111
Extraction Method:					

Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 6 iterations.

Motivational factors.

Motive 1 (Active participation)

- F.22F Använder sociala medier för att uttrycka mina åsikter
- F.22J Använder sociala medier för att fråga om råd eller ge råd till andra
- F.22L Använder sociala medier för att lära känna nya människor
- F.22M Använder sociala medier för att dela information
- F.22N Använder sociala medier för att delta i diskussioner

Motive 2 (Passive entertainment)

- F.22B Använder sociala medier för att underhålla och roa mig
- F.22C Använder sociala medier för att koppla av
- F.22D Använder sociala medier för att se vad andra har för sig
- F.22E Använder sociala medier för att fördriva tiden

Motive 3 (Informations seeking)

- F.22I Använder sociala medier för att få information
- F.22K Använder sociala medier för att lära mig intressanta saker

Motive 4 (Active social communication)

- F.22G Använder sociala medier för att hålla kontakt med vänner och familj
- F.22H Använder sociala medier för att enkelt kommunicera med människor