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# Does Trust Really Matter? A Quantitative Study of College Students' Trust and Use of News Media 

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# DOES TRUST REALLY MATTER? A QUANTITATIVE STUDY OF COLLEGE STUDENTS’ TRUST AND USE OF NEWS MEDIA 

 bySoo Hui Lee

## A THESIS

Presented to the Faculty of The Graduate College at the University of Nebraska In Partial Fulfillment of Requirements For the Degree of Master of Arts Major: Journalism and Mass Communications Under the Supervision of Professor Laurie Thomas Lee Lincoln, Nebraska

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# DOES TRUST REALLY MATTER? A QUANTITATIVE STUDY OF COLLEGE STUDENTS’ TRUST AND USE OF NEWS MEDIA 

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Media polls reveal that trust in news media has been on the decline in recent years and so is the consumption of news. This quantitative study reveals no significant correlation between overall trust and use of news media. It finds that college students have more trust in traditional news sources and view TV as their most important news source. Yet they are more likely to seek out a future news event from online news sources, despite having less trust in them. Results indicate that social media sources, such as Facebook and Twitter, are used as frequent sources for news and the correlations between trust and use of social media sources for news are generally stronger than those of other news sources. This study suggests that news outlet may seek to gain more users of this demographic not by (re-)gaining their trust but by diversifying their news content so that it is more easily accessible and consumable by college students.

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"Let us be grateful to people who make us happy; they are charming gardeners who make our souls blossom. " - Marcel Proust

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## INTRODUCTION

Trust is a broad concept with application across many disciplines and subject areas: social psychology (Couch \& Jones, 1997; Tsfati \& Cappella, 2005), organizational theory and strategy (Rousseau, Sitkin, Burt, \& Camerer, 1998), economics (Williamson, 1993), and politics (Fukuyama, 1995).

Since the 1990s, the concept of trust has led to growing interest especially in the field of social sciences (Earle \& Cvetkovich, 1995; Giddens, 1990; Hardin, 2002). Trust is considered an important basis for social order and the maintenance of harmonious social relationships so that human beings can function properly either individually or as a group (Lewis \& Weigert, 1985). Trust also enables people to make predictions and/or plan rationally about possible future events depending on the degree of trust they have in individual(s), institutions, political systems, or any other aspect of a society (Barber, 1983; Zucker, 1986). For instance, if we trust a doctor to be reliable and have certified qualifications, we will visit him or her whenever we are sick.

Consequently, if we lose trust in a doctor because of bad experience or poor treatment, we might go to a different physician whom we think can be trusted in the future.

Trust has become relevant to the field of communication with the media as an institution. Drawing from sociological research, the existence of trust is critical if the public is going to continue to embrace the media. It shows us how the news media are being perceived and used by their users (Kohring \& Matthes, 2007). Mistrust of news sources may lead to inattention and non-consumption (Lee, 2010). "If people do not trust what they see or hear in the traditional media or from online media sources, they are less likely to pay attention to it" (Johnson \& Kaye, 1998).

While trust has been viewed as an essential variable in media consumption, concerns have been made about the decline of trust in public sectors. Specifically, according to several polls, public trust in major American institutions has been on the decline since the 1970s (Cook \& Gronke, 2001; Holmes, 2009; Paxton, 2005; Smith, 2008). Much to the anxiety of media professionals, trust in the media remains lower than the public's trust in most other institutions (Cook \& Gronke, 2001).
"There is ample evidence to suggest that Americans at large no longer trust, if they ever did trust, the American media" (Cooper, 2008). A study by the Pew Research Center finds that trust in the media eroded from the late 1970s to the 1990s, then held steady for several years, and then was down again in 2009. To make matter worse, Figure 1 shows that trust just hit a new low in a 2010 Gallup poll with more than half of the people being surveyed (57\%) claiming they had little or no trust in the mass media to "report the news fully, accurately, and fairly" (Morales 2010).

FIGURE 1
TRUST AND CONFIDENCE IN MASS MEDIA, 1972 - 2010


Source: Gallup, 2010

Sociologists theorized that trust is future oriented. "A decision to trust involves assessing to what extent a party can be expected to fulfill a certain expectation in the future" (Vanacker \& Belmas, 2009). In other words, future consumption of the expected subject may be based in trust. For a trust relationship to work, one has to take an active role in giving trust, whereas the trusted side actively accepts that trust, acknowledges it, and addresses it if it is damaged. For example, in a media-user relationship, the user has to decide in which news source his or her trust resides, based on the expectation that the source will fulfill his or her needs in the future.

As explained earlier, when trust erodes, the consumption of news tends to follow suit. A similar trend regarding the use of most of the news sources (except for the Internet) was discovered along with the declining of public trust (Figure 2).

FIGURE 2
USE OF NEWS MEDIA, 1998 - 2008


Source: Gallup, 2010

While Lee's (2010) and Johnson and Kaye's (1998) studies show that the consumption of a news source could be a result of trust in the source itself and mistrust could turn users away, other research shows that there are only "moderate associations between news media trust and exposure" (Kiousis, 2001; Tsfati \& Cappella, 2005). In fact, one particular study by Tsfati and Capella (2005) finds that media users, especially young people, do not necessarily trust the news that they consume. For instance, while 18-29-year-olds express more trust in newspapers than older Americans, they read national newspapers the least (Cook \& Gronke, 2001). Given these contradictory findings, one might ponder what kind of association, if any, will be found between trust and use of news media as the number of new news sources, such as social networking sites and online-only news websites, grow in our society today?

In sum, this study examines the relationship between trust and use of news media among college students by asking, "What is the association between trust and use of news media for this particular demographic today?" Also, college students now have access to an increasing variety of news sources, both online and offline. What is the relationship between trust and use of emerging new media sources like Twitter? With trust reported to be declining, does low trust imply low consumption of the media as a whole, or does it vary according to news sources? These two questions dealing with trust and use of news media are addressed in this study.

## LITERATURE REVIEW

## Defining Trust

The topic of trust has been studied by scholars in various disciplines. Gambetta (1988) notes that "scholars tend to mention [trust] in the passing, to allude to it as a fundamental ingredient or lubricant, an unavoidable dimension of social interaction, only to move on to deal with less intractable matters." Psychologists find trust occurs between a trustor and a trustee (Mayer, Davis, \& Schoorman, 1995) that involves the notion of motivational relevance and predictability (Deutsch, 1958). Economists tend to view trust as partly a function of institutions and policies (Berggren \& Jordahl, 2005). Political scientists define political trust as a basic evaluation orientation toward the government (Hetherington, 1998), which has policy consequences across a wide range of policy issues (Rudolph \& Evans, 2005). Last but not least, sociologists see trust as a multidimensional construct (Barber, 1985) and a foundation for interpersonal relationships (Granovetter, 1985) and social institutions (Zucker, 1986). Zawojska (2001) summarizes the definition of trust used by scholars in different disciplines (Table 1).

TABLE 1
DEFINITION OF TRUST FROM DIFFERENT SCIENTIFIC PERSPECTIVES

| Authors | Perspectives/Descriptions |
| :--- | :--- |
| Rousseau et al. (1998) | Psychological <br> Trust as a psychological: (i) construct that individuals <br> experiences and prior socialization, (ii) state comprising |
| the intention to accept vulnerability based upon positive |  |
| expectations of the intentions or behavior of another. |  |


|  | components: expectation (outcome at the end of the <br> process), interpretation, suspension (the experiencing of <br> reality that provides "good reasons"). |
| :--- | :--- |
| Barber (1983) | Link of trust with expectations about the future. <br> Expectation: (i) of the persistence and performance" from <br> those we interact with in social relationships and systems, <br> (ii) that partners in interaction will carry out their fiduciary <br> obligations and responsibilities, that is, their duties in <br> certain situations to place others' interests before their own. |
| Garnovetter (1985); | Trust as an institutional phenomenon (individuals' trust in <br> institutions or trust between institutions) or socially <br> embedded properties of relationships among people. |
| Zucker (1986) | Trust combines good reason with faith; it goes beyond <br> cognitive reasoning, and is a matter of ontological security. |
| Giddens (1990, 1991) | The "real" trust is not induction but rather "faceless <br> commitment" to abstract systems upon which modern <br> institutions are based. Relation to risk: unlike trust, risk is <br> political and does not include faith since it is linked to |
| reflexivity, accountability, and responsibility rather than |  |
| ignorance. Trust as social capital. |  |

For the purpose of this study, we adhere to the sociological interpretation of trust as a multidimensional construct vital to the basic stability of social institutions including the media. Trust should be conceived as a "property of collective units" (Lewis \& Weigert, 1985) rather than of isolated individuals. In other words, trust in this case is applicable to the relations among people, not individually, in a social system. It exists when "members of that system act according to and are secure in the expected futures constituted by the presence of each other or their symbolic representations" (Barber, 1983). Based on the emphasis on social interactions, trust is the confidence people have in their expectations of what other people will do based on their previous interactions (Gefen, 2000). The importance of trust depends upon the nature and complexity of the interaction with other people. In other words, the greater the dependence upon other people and one's own vulnerability to their misconduct, the greater the need to trust.

While trust may be predetermined by past interactions, it can also be based on the expectation of how others will perform on future occasion. "To show trust is to anticipate the future. It is to behave as though the future were certain" (Luhmann, 1979). Both theories, whether on previous interactions or future expectations, share one commonality that trust refers to the actions of others instead of one's self. "Trust... is the correct expectations about the actions of other people that have a bearing on one's own choice of action when that action must be chosen before one can monitor the actions of those others" (Dasgupta, 2000). Trust is "only involved when the trusting expectation makes a difference to a decision" (Luhmann, 1979).

The point that trust depends on actions of others instead of the person who trusts makes it a relevant variable to be studied especially in the field of mass communications.

Journalists produce news and information for the public on a daily basis. In turn, media users trust and select the news based on their previous interactions or future expectations for the journalists or media organizations.

## Measuring Trust

Before the development of standardized and validated scales of trust, media scholars used a variety of methods adapted from other areas of research to measure trust.

The General Social Survey (GSS) and the World Values Survey (WVS) focus on measuring trust using surveys with the statement, "Generally speaking, would you say that most people can be trusted or that you can't be too careful in dealing with people?" This question measures a person's expectations of others' trustworthiness. However, this question has been criticized for measuring two different concepts, since the respondents were asked to choose between trust ("Would you say that most people can be trusted") and caution ("You can't be too careful in dealing with people"), rather than between trust and distrust or between cautious and incautious behavior (Naef \& Schupp, 2009).

Although the concepts of trust and caution seem difficult to discern, it is necessary to evaluate them separately. For example, when the two concepts are measured together, a study by Miller and Mitamura (2003) shows that Japanese students are more trusting than American students. However, when trust and caution are measured separately, it appears to be the other way around. These contradictory findings demonstrate the problems in the GSS and WVS question. Miller and Mitamura suggest future researchers to develop a new and more accurate measure of trust instead of relying exclusively on the GSS question format.

## Likert Scale of Trust

In spite of the GSS or WVS trust question, one way of measuring trust is with a Likert scale. Likert scale purports to measure direction (by "agree/disagree") and intensity (by "strongly" or otherwise). Words on the Likert scale can be converted to an interval scale that allows researchers to use the numbers to calculate numerical averages (McCall, 2001). An example of a Likert scale is illustrated below (Figure 3).

FIGURE 3
EXAMPLE OF A LIKERT SCALE


Source: Johns, 2010

Aside from the five-point scale originally developed by Rensis Likert (1932), more Likert-type scales, from two points up to eleven or even more, were later created and used by researchers in various disciplines (Gliem, 2003; Jacoby \& Matell, 1971; Russell \& Bobko, 1992). Lee and Turban (2001), for instance, measure the level of consumer trust in Internet shopping using a seven-point Likert scale that ranges from 1 ("strongly disagree") to 7 ("strongly agree"). Since it is a seven-point scale, a mean score of 3.5 indicates a neutral response, while a mean score of 1 represents an extremely negative response and a mean score of 7 an extremely positive response. A mean score higher than the neutral response (i.e. above 3.5) leads to the conclusion that respondents exhibit a high level of individual trust propensity, whereas lower mean score indicates lower overall trust level toward Internet shopping.

One of the concerns raised about the Likert scale is that "it involves some very dubious assumption about the possibility of translating attitudes into numbers" (Johns, 2010). While the meaning conveyed by points on the extreme ends of a scale is pretty self-explanatory (ex. agree/disagree or none/complete), respondents might interpret the points in between both ends differently. For instance, on a scale of 1 to 7 ("strongly agree" to "strongly disagree"), respondent A might "disagree" with a statement on the $5^{\text {th }}$ point while respondent $B$ disagrees on the $4^{\text {th }}$ point on the scale.

To overcome this problem, a scale with an odd number of points and with a neutral midpoint is used. "The midpoint is a useful means of deterring what might otherwise be a more or less random choice between agreement and disagreement" (Johns, 2010). Bearing in mind the solution of using an odd number and midpoint scale, the simplicity and versatility of the statistical measurement of people's attitudes and opinions using the Likert scale makes it particularly useful in quantitative studies.

## A Multidimensional Scale of Trust

By conceiving trust as a multidimensional construct, Naef and Schupp (2009) created a new measurement of trust using the German Socio-Economic Panel (SOEP). Respondents were given a list of items to rate about their level of trust that ranges from "no trust at all," "little trust," "quite a bit of trust," to "a lot of trust." A principal analysis over all the trust items in the study shows that trust is a multidimensional construct with three distinct components: trust in institutions, trust in strangers, and trust in known others (Table 2).

TABLE 2
DIMENSIONS OF TRUST

|  | Trust in <br> institutions | Trust in <br> strangers | Trust in <br> known others |
| :--- | ---: | ---: | ---: |
|  |  |  |  |
| How much trust do you have in... | $\mathbf{0 . 7 4 2}$ | 0.173 | -0.006 |
| ..parliament | $\mathbf{0 . 7 1 5}$ | 0.139 | 0.107 |
| _.public authorities | $\mathbf{0 . 6 8 6}$ | 0.163 | 0.004 |
| ..the European Union | $\mathbf{0 . 6 6 5}$ | 0.085 | 0.092 |
| ..courts | $\mathbf{0 . 5 8 1}$ | -0.003 | 0.033 |
| ..large companies | $\mathbf{0 . 4 6 0}$ | 0.218 | 0.193 |
| ..churches | $\mathbf{0 . 5 6 4}$ | 0.088 | 0.193 |
| ..schools and the educational system | $\mathbf{0 . 5 5 0}$ | 0.076 | 0.081 |
| ..press | $\mathbf{0 . 4 9 3}$ | 0.015 | 0.028 |
| ..labor unions | $\mathbf{0 . 5 8 4}$ | -0.015 | 0.273 |
| ..police | 0.070 | -0.051 | $\mathbf{0 . 6 4 7}$ |
| ..your own family | 0.115 | 0.165 | $\mathbf{0 . 7 1 6}$ |
| ..neighbors | 0.045 | 0.145 | $\mathbf{0 . 6 9 5}$ |
| ..friends | 0.183 | $\mathbf{0 . 6 3 6}$ | 0.091 |
| ...strangers |  |  |  |

Note: The bold numbers indicate the component to which each item belongs. Source: Naef \& Schupp, 2009

In addition to Naef and Schupp's multidimensional scale of trust, Gurviez and Korchia (2003) proposed a similar scale to measure brand trust in three dimensions: credibility, integrity and benevolence. The specification of trust as a construct made of various dimensions makes it possible for researchers to measure not only brand trust but also the consumer-brand relationship in general.

The main contribution of both studies is the establishment of trust as a formative construct made of multiple distinct dimensions. A multidimensional scale enables researchers to model and measure latent variables that are quite abstract, such as trust. It helps create a better understanding of the various aspects that an individual applies in the process of evaluating the trustworthiness of any proposed subject matter (Kohring \& Matthes, 2007).

## Trust in the Media

Trust is the key to understanding various human behaviors because it intervenes in almost every aspect of social life (Tsfati \& Capella, 2003). If a person trusts a politician to act and rule wisely, he or she will cast a vote for the politician. If a person trusts a physician to provide proper treatment for the well being of a patient, he or she will seek medical advice or help from that same physician again. Likewise, trust in the media matters because it makes a difference in which media people use and how much they use them.

Trust in the media might be based on a person's belief in the professionalism of journalistic practice (Liebes, 2000). Media professionals often argue that without audiences' trust, they may be less committed to the journalistic norms. The more they feel trusted, the stronger the identification of journalists with professional norms relating to trust, such as remaining neutral, getting the facts right, and telling both sides of the story (Newport \& Saad, 1998; Tsfati, 2004). With that being said, trust in the media not only acts as a lubricant that enhances the interactions with the users, it also helps maintain professionalism in journalists.

## Trust vs. Credibility

Research concerning trust in news media has emerged almost entirely under the label of media credibility. In fact, some media scholars even use the term "trust" while heavily drawing on media credibility research (Johnson \& Kaye, 2009; Kiousis, 2001). While credibility and trust are not entirely mutually exclusive, they should not be used interchangeably. Credibility refers to one of the expectations we have of news media to
be accurate and truthful in their reporting. It may be one of the most important expectations that people refer to when talking about media trust, but it is certainly not the only one. Trust is much wider than that. For example, media users may trust a news outlet to be credible, or they may trust a newspaper to get published on a daily basis and be a check on the government (Vanacker \& Belmas, 2009). "Journalists earn trust through the regular provision of information that is credible, and inextricable interconnection of roles, values, and content" (Hayes, Singer, \& Ceppos, 2007).

While communication scholars usually base their measurement of news media in terms of credibility instead of trust (Johnson \& Kaye, 1998; Roper 1985; Shaw, 1973), by focusing on the latter, one may study audiences' beliefs toward the news media in a broader scope, and also directly link the concept of trust in the field of media communication with the sociological theories of trust (Tsfati \& Cappella, 2003). These theories of trust seem to "offer a basis on which to derive relevant dimensions of trust in news media" (Kohring \& Matthes, 2007). Therefore, the study of trust in news media can be approached and explained using theories derived from the sociological assessment of trust.

## Theoretical Basis for Trust in News Media

Sociological theories of trust primarily refer to the specific selectivity of social actors, such as the news media. The societal functions of the news media include selecting and providing news and information to the public on a daily basis. Such information is then used to satisfy the public's need for orientation to the social environment and to adjust their expectations toward other social actors, like politicians,
from the information they receive. Trust in news media thus becomes an important condition for trust in other social actors.

However, it is impossible for journalists to provide all information that gratifies the need of all individuals. They have to select and filter the news beforehand based on the values and norms embraced by the news organization. This is why different news sources tend to provide different news content. The public can then choose to consume news from the source(s) they prefer. The theoretical basis for the concept of trust in news media is based on the term "selectivity." In other words, "trust in news media means trust in their specific selectivity rather than in objectivity or truth" (Kohring \& Matthes, 2007).

## A Multiple Factor Model of Trust

Trust exists when choices have to be made and selectivity becomes necessary (Kohring \& Matthes, 2007). The news media have a societal role of selecting and conveying news information about the happenings around the world to the public. It is the crucial source of information to the people by which they turn to the media to seek out news and information that might not be available elsewhere (Kohring \& Matthes, 2007). However, journalists cannot provide information about all events or issues that are happening so they have to be selective in terms of the news they present to the public.

Given this line of reasoning, Kohring and Matthes created a four-dimensional model of trust based on the theoretical basis for the analysis of trust - selectivity. They assume that "news media are continually aware of whether events of one specialized part of the differentiated society may potentially evoke consequences in other areas of society" (Kohring \& Matthes, 2007). Kohring and Matthes believe that when it comes to
trust in news media, people tend to base their assessment on four dimensions: trust in the selectivity of topics, trust in the selectivity of facts, trust in the accuracy of depictions, and trust in journalistic assessment (Figure 4).

FIGURE 4
A MULTIPLE FACTOR MODEL OF TRUST
Trust in the Selectivity of Topics
Recipients focus on topics and events that are relevant to them.

Trust in the Selectivity of Facts Recipients focus on the facts/background information pertaining to a selected topic.

## Multiple Factor Model of Trust

Trust in the Accuracy of Depictions Recipients base their trust in verifiable and approvable accuracy of depicted facts.

## Trust in Journalistic Assessment

 Recipients focus on the explicitly emphasized assessments, especially in commentary structure.Source: Kohring \& Matthes, 2007

This assessment of trust is the first validated scale in media trust research. It addresses the concept based on its theoretical basis in the sociological context using four dimensions of journalistic selectivity. By doing so, it manages to facilitate a reliable evaluation of trust and establish a valid depiction of judgments toward the media based on trust. The rationalization that trust in news media is based on the term "selectivity" has made it possible to compare trust values in different news sources (Kohring \& Matthes, 2007).

## Media Emergency: The Declining Public Trust

Media polls and research found that trust in the media is on the decline. Cook and Gronke (2001) compared the trends of confidences in the media and other institutions from 1970 to 2000 using a three-point confidence scale that ranges from -1 ("hardly any") to 1 ("a great deal"). While confidences in both media and other institutions declined over the years, confidence in the media was significantly lower than trust in other institutions, such as education, medicine, military, congress, the Supreme Court and organized religion (Figure 5).

FIGURE 5
MEDIA CONFIDENCE VS. CONFIDENCE IN OTHER INSTITUTIONS


Source: Cook \& Gronke, 2001

A 2010 Gallup poll reported a descending trend of trust in mass media for the fourth straight year. The percentage of Americans (57\%) saying they have little or no trust in the media is at a record high since the 1970s. While almost three quarters of
people (72\%) said they had a great deal or fair amount of trust in 1976, the number dropped to $43 \%$ in 2010 (Morales, 2010). A similar trend of trust was also found by the Pew Research Center (2009). A survey of 1,506 people revealed that trust in the American media declined to the lowest point in 2009. Only slightly over a quarter (29\%) of Americans said that news organizations get the facts straight, whereas the majority (63\%) said news stories are often inaccurate.

The subsequent decline in public trust in the media can put the future of news organizations at risk, including the journalists themselves, who strive to adhere to the professional norms while public trust toward the media keeps shrinking.

## Trust and Demographics

Previous research finds correlating relationships between trust and socioeconomic variables such as age, gender, income, education, nationality, and place of living (Alesina \& La Ferrara, 2002; Bellemare \& Kroeger, 2007). Cook and Gronke's (2001) study indicates that age, income and education all consistently predict confidence in the media in a negative relationship. Those who are older and more educated turn out to be the heaviest consumers of the news. Evidence from the study suggests that familiarity with the news product causes a lack of confidence with the product. This means that the more people use a source, the more skeptical they become toward that source. Therefore, trust is likely to decrease as well.

A more recent study by Gallup (2009) also demonstrates the differences between demographics and trust. More than half of women (51\%) surveyed indicate they have a great deal or fair amount of trust in the mass media, while only slightly more than a third of men (38\%) report the same. Furthermore, younger people ages 18 to 29 have the most
trust in media, followed by those who are 65 and above. Older adults (50- to 64-yearolds) have the least trust in media among all age groups. In terms of annual income, about half of those (49\%) who make less than $\$ 30,000$ a year claim they have a great deal of trust in the media, and only $40 \%$ of those with income more than $\$ 75,000$ a year say the same (Figure 6).

FIGURE 6
TRUST IN MASS MEDIA BY DEMOGRAPHICS


Note: Percentages indicate "great deal"/"fair amount" of trust in mass media. Source: Gallup, 2009

These findings are significant because they tell us about different levels of trust various demographics have for the media. Media professionals may use this information to help identify and target their audiences.

## College Students and News Media

Prior research reveals that a person's use of news media during college years may affect future political awareness, knowledge, and activity (Buckingham, 1997; Lee, 2006). It is during this period that the process of socialization in news media habit takes
place. Graduation from college signifies a dramatic and predictable change in the life cycle, including the formation of future media habits (Henke, 1985). "Anticipatory shifts in news consumption that correspond to life cycles changes might be expected to occur during college years" (Henke, 1985). A study by O'Keefe and Spetnagel (1973) finds that news consumption patterns among college students may predict their future use patterns.

## The Emergence of New Media and Social Networking Sites (SNS)

Over the past decade, the Internet has become an essential part of young people's lives for communicating purposes (Gemmill \& Peterson, 2006; Subrahmanyam \& Greenfield, 2008). For instance, they might go online to communicate socially, engage in work for classes, be entertained, or communicate professionally (Jones, 2002).

Social networking sites (SNS) become an online communication tool that "allows users to create a public or semi-public profile, create and view their own as well as other users' online social networks and interact with people in their networks" (Subrahmanyam et al., 2008). The Pew Internet Project (2011) finds that the number of those using social networking sites has nearly doubled since 2008 , with slightly more than half $(59 \%)$ of Internet users claiming they use at least one SNS (Rainie et al, 2011). Facebook, one of the social networking sites that initially focused on colleges and universities, has hit about 700 million monthly users in June 2011 (Lee, 2011). Twitter, on the other hand, trails Facebook as the second largest social network in the United States with about 300 million registered accounts as of May 2011 (Rowinski, 2011; Wauters, 2011).

While social networking sites are used primarily for social communication purposes, they are also used to get news and information. For instance, Kwak et al.
(2010) find that the majority (more than $85 \%$ ) of topics on Twitter analyzed in their study are headline news or somewhat news-related. Another study by the Pew Internet \& American Life Project reveals that one in five online adults used Twitter or a social networking site for political purposes during the 2010 midterm election (Smith, 2011).

The use of Internet and social networking sites has become a staple of college students' educational and social experiences. Therefore, it is important to study college students' new media habits because it might indicate about "what future online behavior may be like when the current cohort of students graduates and moves into the adult world and the workforce" (Jones, 2002).

## Where Do Young People Get Their News

There appears to be no preferred medium among young people when it comes to getting news and information from the media (Olander, 2003). A 2003 study by the Center for Information \& Research on Civic Learning \& Engagement (CIRCLE) finds that about a quarter of Americans between the ages of 15 and 25 used television (25.2\%), radio (22.9\%), or newspapers ( $21.5 \%$ ) to get news on a daily basis. Only $9.5 \%$ used the Internet every day for news.

Although no clear-cut preference is found, TV triumphed as the dominant source for news. In addition to a quarter of 15-to-25-year-olds who watched TV everyday, about half ( $46 \%$ ) of those surveyed watched TV news at least four days a week. Older Americans (26 and above) were more likely to turn to TV for daily news, with about $50 \%$ of them claiming they watch TV news everyday - almost twice the proportion of younger Americans.

Three years later, CIRCLE released a similar study with updated data regarding media use among young people (Marcelo, 2006). Instead of asking which source they go to for daily news, it asked the respondents about their preference for everyday news and information. In 2006, about half of young people (15-to-25-year-olds) said they prefer getting news from magazines rather than any other source on a regular basis. About half of the adults (26 and above), on the other hand, chose TV. Among all ages, the preferred consumption of daily news from radio and newspapers is down from 2002. While Internet was the least preferred medium for everyday news by respondents of all ages, the percentages of young people and adults who showed a preference for the Internet increased over the years (Figure 7).

FIGURE 7
EVERYDAY MEDIA USE BY AGE


Note: Respondents were coded as "everyday" for magazines if they reported reading a magazine at least one a week.
Source: Civic and Political Health of the National Survey (CIRCLE), 2002 and 2006.

A more recent study by the Pew Research Center (2009) reveals similar findings. The vast majority of Americans cite television as their source for both local (64\%) and national/international (71\%) news. Nearly three quarter (70\%) of people ages 18 to 29 acquire international news from TV. More people below 30 said they get local news from newspapers ( $39 \%$ ) than from the Internet ( $21 \%$ ). When it comes to national/international news, however, Internet surpasses newspapers as the most desired source. More than half of the respondents ( $64 \%$ ) choose Internet over less than a quarter ( $21 \%$ ) that select newspaper (Table 3).

TABLE 3
YOUNG PEOPLE'S SOURCES OF INTERNATIONAL AND LOCAL NEWS

| Total | $18-29$ | $30-49$ | $50-64$ | $65+$ |
| :--- | :--- | :--- | :--- | :--- |

Main Source for...

| National \& International News | \% | \% | \% | $\%$ | $\%$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Television | 71 | 70 | 62 | 77 | 81 |
| Internet | 42 | 64 | 54 | 29 | 10 |
| Newspapers | 33 | 21 | 26 | 37 | 55 |
| Radio | 21 | 18 | 28 | 19 | 15 |
| Local News |  |  |  |  |  |
| Television | 64 | 67 | 60 | 63 | 69 |
| Internet | 17 | 21 | 24 | 12 | 4 |
| Newspapers | 41 | 39 | 33 | 45 | 53 |
| Radio | 18 | 22 | 21 | 14 | 13 |
| N | 1506 | 183 | 420 | 478 | 399 |

Note: Figures add to more than $100 \%$ due to multiple responses.
Source: Pew Research, 2009

Aside from being the dominant source for national and local news, television also turns out to the first source that people turn to to learn about a particular news story in a national survey of 1298 respondents ages 18 and older (Patterson, 2007). About half (47\%) the respondents in the "young adults" category (defined as those ages 18 to 30)
claim they first see a news story on TV. About a sixth of young adults get it from the Internet (18\%) and radio (16\%) and only $4 \%$ cite newspapers as their first source for news. The study also finds that TV is by far the most relied upon medium for young adults. Newspapers, on the other hand, appear to be fading and have little appeal to younger Americans.

Interestingly, 18-29-year-olds express more trust in newspapers than TV despite relying heavily on the latter for news and information (Gallup, 2010). Almost half of the people in that age category claim to have a "great deal" or "quite a lot" of confidence ${ }^{1}$ in newspapers as opposed to about a quarter who said the same about confidence in TV (Table 4).

TABLE 4
AMERICANS' CONFIDENCE IN NEWSPAPERS AND TELEVISION NEWS
Newspapers Television News

| National adults | 25 | 22 |
| :--- | :--- | :--- |
| 18-to-29-year-olds | 49 | 24 |
| 30-to-49-year-olds | 16 | 16 |
| 50-to-64-year-olds | 22 | 23 |
| 65-year-olds and older | 24 | 25 |

Note: Numbers reported in \% "Great deal"/"quite a bit"
Source: Gallup Poll, 2010

[^1]
## Media Crisis: People Are Consuming News They Do Not Trust

While prior sociological research shows that trust parallels action toward the trusted source (Keele, 2007; Lewis \& Weigert, 1985; Sztompka, 1996), several media studies say otherwise.

Gallup's polling results on trust and use of new media find that use of the Internet is much lower than traditional news sources, and so is trust in the Internet (Newport \& Saad, 1998). But another poll published in 2010 on traditional media finds that young people ages 18 to 29 read newspapers the least and use television as their main source even though they claim to have more trust in newspapers than TV.

Why do people consume news they do not trust? One possible explanation for that is NFC, i.e. the need for cognition (Tsfati \& Cappella, 2005). NFC is defined as "a need to structure relevant situations in meaningful, integrated ways. It is a need to understand and make reasonable the experimental world" (Cohen, Scotland, \& Wolfe, 1955). It is "a tendency to engage in and enjoy thinking" (Cacioppo \& Petty, 1982).

People with NFC are motivated by a quest for comprehension and will feel frustrated when they are unable to understand. The more people enjoy deliberating and solving puzzles and the more they feel a need for cognition, the less the influence of mistrust of the media on their exposure to news as a source of information. The strong need for cognition may drive people to consume mainstream news despite their media skepticism. For example, people with high levels of NFC are relatively unaffected by their trust in the news media. People with lower levels of NFC, on the other hand, tend to have lower exposure to the mainstream news media.

While some research show a positive relationship between trust and use of news media, some suggest otherwise. These contradictory findings prompt the following question, "What kind of association will be found between trust and use of news media by college students today?" Therefore, the main objective of this study is to examine the relationship between trust and use of news media among college students today.

## RESEARCH QUESTIONS AND HYPOTHESES

As suggested in the literature reviewed, the nature of trust in our society is constantly changing. Trust in institutions has seen a steep decline over the last 40 years with less public trust in the government and various sectors, such as the criminal justice system, public schools, medical system, and the media. Trust in news media among college students is particularly important because it is during this phase of life that future news consumption behavior takes its shape. Therefore, the first research question to address is one that deals with trust and news media as a whole: (R1) What is the relationship between trust and use of news media among college students today?

Since previous research has found only a moderate association between trust and news media exposure, it seems plausible to hypothesize that:
(H1) There is a moderate association between overall trust and use of news media in general.

In spite of the declining trust in the media as a whole, there are now a wide variety of sources for news and information. Media scholars have previously studied the use of different news sources like newspapers, television, radio, and the Internet. Given the proliferation of additional news sources, it is worth examining the relationship between trust and use of each type of news source separately. Thus, the second research question asks, (R2) "How does overall trust correlate with the use of each news source?"

Media polls find that public trust in news media in general is sliding over the years and so is the use of traditional news sources. Trust in news media and use of these traditional news sources seem to move in the same direction. Therefore, this study
proposes a positive correlation between overall trust in news media in general and use of newspapers, television, and radio for news.
(H2) There is a positive correlation between overall trust in news media and use of newspapers.
(H3) There is a positive correlation between overall trust in news media and use of television.
(H4) There is a positive correlation between overall trust in news media and use of radio.

While trust in news media in general and use of traditional news sources are declining, the consumption of the Internet for news is increasing. Hence, the following hypotheses are made:
(H5) There is a negative correlation between overall trust in news media and use of online-only news websites.
(H6) There is a negative correlation between overall trust in news media and use of online newspaper websites.
(H7) There is a negative correlation between overall trust in news media and use of online radio/TV/cable websites.
(H8) There is a negative correlation between overall trust in news media and use of Twitter.
(H9) There is a negative correlation between overall trust in news media and use of Facebook.
(H10) There is a negative correlation between overall trust in news media and use of Internet blogs/weblogs.

## METHODOLOGY

This quantitative study was developed to find out college students' trust and use of the news media. To test the hypotheses and answer the research questions, a 10question survey (see Appendix 2) was used to gather information about the amount of time that college students spent getting news "yesterday" and in the "past week" and their trust in different kinds of news sources.

The survey included items designed to measure trust and use of the following news sources: newspapers, television, radio, online-only news websites, online newspaper websites, online radio/TV/cable websites, Twitter, Facebook, and Internet blogs/weblogs. Trust in news media as a whole and trust in specific news sources were measured using an 11-point Likert scale from 0 ("no trust at all") to 10 ("complete trust"). A larger number on the scale indicated more trust; a smaller number meant less trust.

Use of news media, on the other hand, was measured in two ways by asking questions about (1) the number of times spent in the "past week" and (2) the number of hours spent the day before the survey getting news from different news sources.

Since certain socioeconomic variables were shown to have an association with trust and/or use of news media (Bellemare \& Kroeger, 2007; Cook \& Gronke, 2001), respondents were asked to provide basic demographic information like age, gender, and major as well.

Table 5 shows the operational definitions of the key terms and phrases used in this study:

TABLE 5
OPERATIONAL DEFINITIONS OF TERMS AND PHRASES

| Term/ Phrase | Operational Definition |
| :--- | :--- |
| Trust | On a 0-to-10 point scale, 0 means no trust in news <br> media or a news source at all, while 10 means <br> complete trust in news media or a news source. <br> The bigger the number, the greater the amount of <br> trust, and vice versa. |
| Use of news media | 1. How often in the past week - the number of <br> times spent a week before the survey getting news <br> from the news media <br> 2. Time spent yesterday - minutes spent yesterday <br> (a day before the survey) getting news from the <br> news media |
| Online-only news website | Online news website that does not have a hardcopy <br> newspaper and radio/TV/cable station, e.g. AOL, |
|  | Huffington Post |
| Online newspaper website | Newspaper that a has hardcopy and an online <br> website, e.g. Daily Nebraskan, Omaha World |
|  | Herald, New York Times, USA Today |
| Online radio/TV/cable website | Radio/TV/cable station that has an online website, <br> e.g. 10/11, NPR, CNN, FOX News |

## Selection of Survey Respondents

This study surveyed students at a Midwestern university (University of NebraskaLincoln). To obtain a mix of majors, at least one class was selected from each academic college in the university. Classes were selected from: College of Agricultural Sciences and Natural Resources, College of Architecture, College of Arts and Sciences, College of Business Administration, College of Education and Human Sciences, College of

Engineering, College of Fine and Performing Arts, College of Journalism and Mass Communications, and College of Public Affairs and Community Services.

The number of students selected from each college was based on the size of the college itself. The larger the college, the larger number of students selected. The enrollment data by college was obtained from UNL's Fact Book 2009-2010 available on the university's website. ${ }^{2}$ The minimum number of students to survey from each college was determined by the proposed sample size of 600 and the college size proportionality criterion.

Then, a list of lecture classes on UNL campus was obtained from MyRed, the university's student information system portal. They were then categorized according to the colleges they belonged to. The sizes of the classes were recorded as well. Lab, studio, field trip, recitation, and independent study courses were excluded.

Next, all colleges were divided into two categories: A (four smaller sized colleges) and B (four larger sized colleges). Classes in Category A consisted of 50 or fewer students, while classes in Category B were those with more than 50 students. All selected classes would be both intro- (100- and 200-level) and upper- (300- and 400level) level, major and non-major classes. Once the list of classes was narrowed according to these criteria, the second class on the list for each college was selected. If the selected class size did not meet the minimum number required for that college, the fourth class on the list would be picked. A similar pattern (based on the interval of two) was used to choose an additional number of classes.

[^2]After classes were selected, professors were contacted via email to ask for permission to conduct the in-class survey. Of the 62 professors contacted, 18 granted permission. Then, a date and time were set up to present the survey to the students. An email reminder was sent to professors a day prior to the survey. Although it was made sure that at least one class from each academic college would be surveyed, the survey sample might be skewed toward a particular college depending on the class size of the professors who agreed to participate. For instance, about half of the respondents in this study were students from College of Education and Human Sciences and College of Engineering because the professors who granted permission in these academic colleges had larger sized classes.

## Survey Procedures

All students surveyed were those who enrolled at the university during the spring semester in 2011. The surveys were distributed at various times over a period from April 12 to 29 .

During the day of the survey, a brief introduction about the purpose of the survey was given by the professor before he or she left the classroom. It was required by the UNL Institutional Review Board that professors not be present during the administration of the survey so that students would not feel coerced into participating due to the presence of their professors. The students were then informed about the purpose of the survey, as well as their right to choose not to participate, and that they needed to be at least 19 years or older (age of majority in Nebraska). The survey was then handed out to every student in the class. Students were asked to return the survey to a designated place
(ex. a table at the front of the room) once they had completed it. The 10 -question survey (with subparts) took students about an average of 5 to 10 minutes to complete.

## Survey Respondents

Respondents in the study ranged in ages from 19 to 55 with more than half of which (58.1\%) were male. They were students selected from nine academic colleges over a variety of majors. Respondents who majored in more than one college (i.e. double majors) and those without a major were put in separate categories (Table 6).

TABLE 6 DEMOGRAPHIC CHARACTERISTICS

|  |  | Respondents |  |
| :--- | :--- | ---: | ---: |
|  |  | N | $\%$ |
| Gender | Female |  |  |
|  | Male | 205 | 42.0 |
|  | Total | 283 | 57.8 |
|  |  | 488 | 100.0 |
|  | 19 |  |  |
|  | 20 | 106 | 21.7 |
|  | 21 | 110 | 22.5 |
|  | 22 | 89 | 18.2 |
|  | 23 | 92 | 18.9 |
|  | 24 | 35 | 7.2 |
|  | 25 and above | 20 | 4.1 |
|  | Total | 36 | 7.2 |
|  |  | 488 | 100.0 |
|  | Agricultural Sciences \& Natural Resources | 70 | 14.4 |
|  | Architecture | 12 | 2.5 |
| Majorege/ | Arts \& Sciences | 44 | 9.0 |
|  | Business Administration | 42 | 8.6 |
|  | Education \& Human Sciences | 123 | 25.3 |
|  | Engineering | 107 | 22.0 |
|  | Fine \& Performing Arts | 16 | 3.3 |
|  | Journalism \& Mass Communications | 39 | 8.0 |
|  | Public Affairs \& Community Services | 4 | 0.8 |
|  | Double Majors | 25 | 5.0 |
|  | Undeclared | 5 | 1.0 |
|  | Total | 487 | 100.0 |

## Unusable Surveys

For surveys that contained questions (or part of a question) that were left unanswered or seemed invalid, only the responses pertaining to those questions were ignored - the remaining survey would still be used in this study.

Out of 490 surveys collected, one survey was completely discarded from the study. The only survey that was deemed unusable contained responses that suggested it to be an outlier. "An outlier is an observation in the data that differs noticeably from other observations" (Ismail, 2008). Removing an outlier is not usually recommended unless the data can be clearly shown to be erroneous or out of the ordinary (Friedman, Furberg, \& DeMets, 2010). The detection and removal of an outlier should be reported in the study (Walfish, 2006).

When looking at the frequencies table for the use of news media, some answers given by this respondent clearly appeared to be far off the rest of the data (if not impossible). It could be that this respondent was trying to use a significantly large number to indicate his or her frequent usage of the media. Nonetheless, one major concern was that the erroneous numbers would increase the overall mean, thus distorting the results in an ANOVA analysis (Osborne \& Overbay, 2004). To avoid such risk, this particular survey was removed from the study.

## Measuring Index for Trust and Use of News Media

To probe the research questions and hypotheses, respondents were asked to rate their trust on a scale of 0 to 10 for the news media in general and different news sources. Although media trust could be measured in different ways, a Likert scale has been
previously adopted and used in other media research to measure trust (Banning \& Sweetser, 2007; Kiousis, 2001; Lee \& Turban, 2001). This scale was used in this study because of its simplicity and versatility in measuring people's attitudes and opinions of trust (McCall, 2001).

The numerical responses to trust in news media were interpreted in two ways. These answers were used to produce correlations and an average of trust. Questions in the survey asked about respondents' trust in news media in general and trust in each news source separately. To obtain an overall trust score for media as a whole, responses to the question that asked about trust in news media in general were combined with responses to the question that asked about trust in each news source. The total was then divided by two to get an average score. The resulting number was used and reported as the overall trust score in news media in general throughout the study.

To measure news media use behavior, respondents were asked about the number of times they spent in the "past week" and the number of hours spent "yesterday" getting news from different news sources. Operational definitions and examples for some of the news sources were provided in the survey so that students' interpretation of those news sources was consistent with the ones defined by this study (Appendix 2). The data for time spent "yesterday" getting news from each news source was analyzed in minutes instead of hours because more than half of the answers given by the respondents were less than an hour. To ensure data consistency, all responses to this question were converted into minutes and reported that way throughout the study.

## Data Analysis

Data analysis was performed using SPSS (version 19, 2010 SPSS, Inc.). The findings of this study should not be generalized to the general population but applied only to college students who are 19 and above.

For both research questions and all the hypotheses, Pearson bivariate correlation was conducted to evaluate trust and the use of news media as a whole and separately. The significance levels were reported at $\mathrm{p}<.05$ and $\mathrm{p}<.01$. The same method was also used to find out the relationship between age and trust.

The analysis of variance (ANOVA) test, on the other hand, was used to compare the mean scores of trust and use of news media by age, gender, and college/major. This test is best used to answer the question, "Is there a significant difference between the mean values (or levels)?" (Speed \& Hocking, 1974). For this study, a 95\% confidence level ( $\mathrm{p}<.05$ ) was used for all ANOVA analyses.

## RESULTS

## I. General Findings on Trust and Use of News Media

## Average Overall Trust and Use of News Media in General

Tables 7 and 8 show the average overall trust and average usage of news media by the respondents. The average overall trust in news media in general on a 0 - to 10 -point scale was 5.8. Respondents spent an average of 2.1 times in the "past week" and an average of 16.2 minutes "yesterday" getting news from the news media.

TABLE 7
AVERAGE OVERALL TRUST IN NEWS MEDIA

|  | N | Mean | Std. <br> Deviation |
| :--- | :---: | :---: | :---: |
| Average Overall Trust in News Media <br> (On a 0-to10-Point Scale) | 490 | 5.77 | 1.602 |

TABLE 8
HOW OFTEN IN THE PAST WEEK AND TIME SPENT YESTERDAY GETTING NEWS FROM THE NEWS MEDIA

|  | N | Mean | Std. <br> Deviation |
| :--- | :---: | :---: | :---: |
| How Often (Average Number of Times) <br> in the Past Week Getting News from the <br> News Media | 488 | 2.14 | 8.822 |
| Time (Average Minutes) Spent Yesterday <br> Getting News from the News Media | 486 | 16.16 | 18.027 |

## Average Trust by News Sources

The average trust for each news source is shown in Figure 8. Respondents indicated they had the most trust in newspapers, followed by its online presence, an online newspaper website. Two other traditional news sources, television and radio, were the third and fourth most trusted news sources. Facebook, Internet blogs/weblogs, and Twitter, on the other hand, were the least trusted news sources (see Appendix A3 for descriptive data).

FIGURE 8
AVERAGE TRUST BY NEWS SOURCES


Average Use of News Media by Sources
Use of news media was measured in two ways. First, respondents were asked how often they get news from each news source in the "past week." The responses for each news source were added and divided by the number of respondents who answered the question to obtain an average number of times spent getting news from each source in the "past week." Of all nine sources included in the study, TV was most often accessed (3.0 times) in the "past week" for news. Facebook was the second most used news source with
an average of 2.4 times in the "past week." Respondents spent 2.2 times on average in the "past week" getting news from online-only news websites, followed by radio with 2.1 times. Newspapers was the least often used news source (1.6 times) compared to other traditional news sources. Respondents spent only one time on average in the "past week" using Twitter for news. Internet blogs/weblogs were the least accessed source.

Respondents might not necessarily get news from it in the "past week" (see Figure 9; descriptive data in Appendix A4).

FIGURE 9
HOW OFTEN (AVERAGE NUMBER OF TIMES) IN THE PAST WEEK GETTING NEWS FROM DIFFERENT NEWS SOURCES


Another way to measure use of news media was by asking the amount of time spent "yesterday" getting news from each source. Results in Figure 10 were reported in minutes. Respondents spent the most time ( 35.6 minutes) watching news on TV "yesterday." With an average of 33.6 minutes, Facebook was the second most used
source "yesterday" for news. In addition, respondents spent 20 minutes for news on radio and 17.2 minutes on online-only news websites. About 10 minutes were spent reading newspapers "yesterday," followed by Twitter with 8.2 minutes on average. Respondents spent the least amount of time (6.1 minutes) getting news from Internet blogs/weblogs "yesterday" (see Appendix A4 for descriptive data).

FIGURE 10
TIME (AVERAGE MINUTES) SPENT YESTERDAY GETTING NEWS FROM DIFFERENT NEWS SOURCES


## Most Important News Source

The first question in the survey asked respondents about their most important news source. Of 478 respondents who answered, a third of them (33.3\%) viewed TV as their most important source for news. About one sixth of them (16.7\%) chose online-only news websites, and about the same number of respondents (15.3\%) selected online newspaper websites. Newspapers were fourth on the list as the most important news
source, followed by online radio/TV/cable websites. Radio placed last of all three traditional news sources, with less than one tenth of respondents (7.1\%) saying it was their most important news source. Facebook, Internet blogs/weblogs, Twitter, and other news sources like Google/Yahoo news were the least important news sources for the respondents. Only 3 out of 478 respondents ( $0.8 \%$ ) said their most important news source was not from the media (see Figure 11; Appendix A5 for frequencies table).

FIGURE 11
MOST IMPORTANT NEWS SOURCE


Source for Last Major News Event
In addition to the most important news source, respondents were asked about where they first learned about the last major news event. As seen in Figure 12, more than one third of respondents ( $36.1 \%$ ) recalled learning news about the last major event from TV. Fifteen percent of the repondents got it from online-only news websites and about a
tenth (10.9\%) from Facebook. About the same number of respondents heard about the last major news events from radio (9.2\%) and non-media sources (7.0\%) like friends and family. Two social media sources, Twitter and Internet blogs/weblogs, were not the primary sources for the last major news event (see Appendix A5 for descriptive data).

FIGURE 12
SOURCE FOR LAST MAJOR NEWS EVENT


Source for Next Major News Event
When asked about where would they first go to the next time they want to get news about a major event that is happening, about one third of the respondents (32.3\%) indicated that they preferred online-only news websites. About the same number of respondents would go to an online newspaper website (23.0\%) and TV (22.2\%) for news when the next major event breaks. About one tenth of the respondents (9.5\%) preferred online radio/TV/cable websites for news about next major event, followed by $5.3 \%$ who chose newspapers. Radio was the last traditional source to seek news from for the next
major event. Respondents were least likely (0.4\%) to go to Internet blogs/weblogs to learn about the next major news event (see Figure 13; Appendix A5 for descriptive data).

FIGURE 13
SOURCE FOR NEXT MAJOR NEWS EVENT


## II. Addressing Research Questions and Hypotheses

The first research question dealt with the relationship between trust and use of news media in general by college students: (R1) What is the relationship between trust and use of news media among college students today? To answer this question, the following hypothesis was made:

H1: There is a moderate association between overall trust and the use of news media in general.

The Pearson bivariate correlation revealed no significant correlation between overall trust and how often (average number of times) in the "past week" and time spent (average minutes) "yesterday" getting news from the news media (Table 9).

\left.| TABLE 9 |  |  |  |
| :--- | :--- | ---: | ---: |
| CORRELATIONS BETWEEN OVERALL TRUST AND USE OF NEWS MEDIA |  |  |  |\(\right\left.] \begin{array}{rlr}Average number <br>

of times spent in <br>
the past week\end{array} \quad $$
\begin{array}{rl}\text { Average minutes } \\
\text { spent yesterday }\end{array}
$$\right]\)

However, when correlating only trust in news media in general (prior to combining it with trust in all news sources for an average trust score) and use of news media, only a slightly positive correlation was found ( $\mathrm{p}<.05$ ) between trust in news media in general and the average minutes spent "yesterday" getting news from the news media (Table 10).

TABLE 10
CORRELATIONS BETWEEN TRUST IN NEWS MEDIA IN GENERAL AND USE OF NEWS MEDIA

|  |  | Average number <br> of times spent in <br> the past week | Average minutes <br> spent yesterday |
| :--- | :--- | ---: | ---: |
| Trust in News | Pearson Correlation | .076 |  |
| Media in General | Sig. (2-Tailed) | .094 | $.103^{*}$ |
|  | N | 488 | .023 |
|  |  | 486 |  |

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

H1 was not supported when using the average overall trust score, but gained support when a slightly positive correlation was found between trust in news media in general and time spent "yesterday" getting news from the news media.

After looking at how overall trust correlated with use of news media in general, the second research question asked about the relationship between overall trust and use of a specific news source: (R2) How does overall trust correlate with the use of each news source?

## H2: There is a positive correlation between overall trust in news media and use of newspapers.

As shown in Tables 11 and 12, no significant correlation was found between overall trust and how often newspapers were read in the "past week" as well as time spent "yesterday" reading newspapers. Additionally, Table 13 shows no significant correlation between how often newspapers were read and trust in all types of news sources, including trust in newspapers. There was a slightly negative or almost no correlation ( $\mathrm{p}<.05$ ) between time spent "yesterday" reading newspapers and trust in TV. In other words, trust in TV went up when minutes spent "yesterday" reading newspapers decreased. Time spent "yesterday" reading newspapers also negatively correlated ( $\mathrm{p}<.01$ ), though slightly, with online-only news websites and online radio/TV/cable websites (Table 14).

Despite the negative correlations between time spent "yesterday" getting news from newspapers and trust in TV, online-only news websites, and online radio/TV/cable websites, H 2 was not supported because there was no significant correlation found between overall trust in news media and how often newspapers were read in the "past week" as well as time spent "yesterday" getting news from newspapers.

## For H2 to H10, please refer to Tables 11, 12, 13 and 14.

TABLE 11
CORRELATIONS BETWEEN OVERALL TRUST AND HOW OFTEN IN THE PAST WEEK GETTING NEWS FROM DIFFERENT NEWS SOURCES

|  | How Often in the Past Week Getting News from: | Newspapers | TV | Radio | Onlineonly news websites | Online newspaper websites | Online radio/TV/ cable websites | Twitter | Facebook | Internet blogs/ weblogs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Overall Trust in News Media | Pearson Correlation | -. 033 | . 041 | . 048 | . 060 | -. 002 | -. 072 | . 044 | . 058 | . 050 |
|  | Sig. (2-tailed) | . 462 | . 370 | . 291 | . 189 | . 971 | . 114 | . 331 | . 202 | . 275 |
|  | N | 488 | 487 | 487 | 487 | 487 | 486 | 485 | 484 | 487 |

[^3]TABLE 12
CORRELATIONS BETWEEN OVERALL TRUST AND TIME SPENT YESTERDAY GETTING NEWS FROM DIFFERENT NEWS SOURCES

|  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | Time Spent <br> Yesterday Getting <br> News from: | Newspapers |  | TV | FROM DIFFERENT NEWS SOURCES |

[^4]TABLE 13
CORRELATIONS BETWEEN TRUST AND HOW OFTEN IN THE PAST WEEK GETTING NEWS FROM DIFFERENT NEWS SOURCES

|  | Trust in: | Newspapers | TV | Radio | Onlineonly news websites | Online newspaper websites | $\begin{array}{r} \text { Online } \\ \text { radio/TV/ } \\ \text { cable } \\ \text { websites } \end{array}$ | Twitter | Facebook | Internet blogs/ weblogs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| How Often in the Past Week Getting News from: |  |  |  |  |  |  |  |  |  |  |
| Newspapers | Pearson Correlation | . 071 | -. 067 | . 009 | -. 057 | . 024 | -. 030 | -. 029 | -. 022 | -. 077 |
|  | Sig. (2-tailed) | . 117 | . 140 | . 842 | . 207 | . 604 | . 506 | . 521 | . 623 | . 094 |
|  | N | 487 | 486 | 482 | 486 | 483 | 479 | 480 | 487 | 480 |
| TV | Pearson Correlation | .097* | .159** | . 068 | . 049 | . 031 | . 014 | -. 026 | . 031 | -. 055 |
|  | Sig. (2-tailed) | . 033 | . 000 | . 135 | . 277 | . 502 | . 571 | . 571 | . 494 | . 233 |
|  | N | 486 | 485 | 481 | 485 | 482 | 479 | 479 | 486 | 479 |
| Radio | Pearson Correlation | . 046 | . 084 | .228** | . 000 | -. 012 | . 014 | -. 048 | -. 043 | -. 055 |
|  | Sig. (2-tailed) | . 307 | . 064 | . 000 | . 994 | . 787 | . 767 | . 290 | . 349 | . 228 |
|  | N | 486 | 485 | 481 | 485 | 482 | 478 | 479 | 486 | 479 |
| Online-only news websites | Pearson Correlation | . 011 | . 014 | . 014 | .230** | . 088 | . 053 | . 077 | . 053 | . 040 |
|  | Sig. (2-tailed) | . 808 | . 758 | . 761 | . 000 | . 053 | . 251 | . 091 | . 246 | . 380 |
|  | N | 486 | 485 | 481 | 485 | 482 | 478 | 479 | 486 | 479 |
| Online newspaper websites | Pearson Correlation | . 011 | -. 032 | . 008 | . 040 | .131** | . 001 | -. 027 | -. 018 | -. 012 |
|  | Sig. (2-tailed) | . 815 | . 485 | . 859 | . 384 | . 004 | . 978 | . 554 | . 695 | . 794 |
|  | N | 486 | 485 | 481 | 485 | 482 | 478 | 479 | 486 | 479 |
| Online radio/TV/ cable websites | Pearson Correlation | -. 030 | -. 064 | -. 066 | -. 041 | . 020 | .134** | . 078 | -.116* | -.104* |
|  | Sig. (2-tailed) | . 514 | . 159 | . 146 | . 367 | . 661 | . 003 | . 089 | . 011 | . 023 |
|  | N | 485 | 484 | 480 | 484 | 481 | 477 | 478 | 485 | 478 |
| Twitter | Pearson Correlation | . 037 | . 014 | . 082 | . 087 | .094* | . 036 | .213** | .063* | . 018 |
|  | Sig. (2-tailed) | . 420 | . 760 | . 075 | . 057 | . 041 | . 482 | . 000 | . 166 | . 693 |
|  | N | 484 | 483 | 479 | 483 | 480 | 476 | 477 | 484 | 477 |
| Facebook | Pearson Correlation | .097* | .121** | . 063 | . 073 | . 064 | .117* | .280** | .370** | .194** |
|  | Sig. (2-tailed) | . 032 | . 008 | . 171 | . 112 | . 162 | . 011 | . 000 | . 000 | . 000 |
|  | N | 483 | 482 | 478 | 482 | 479 | 475 | 476 | 483 | 476 |
| Internet blogs/ weblogs | Pearson Correlation | . 003 | -. 010 | . 007 | -. 004 | -. 049 | . 011 | . 089 | . 084 | .335** |
|  | Sig. (2-tailed) | . 952 | . 823 | . 883 | . 930 | . 282 | . 812 | . 051 | . 064 | . 000 |
|  | N | 486 | 485 | 481 | 485 | 482 | 478 | 479 | 486 | 479 |

[^5]TABLE 14
CORRELATIONS BETWEEN TRUST AND TIME SPENT YESTERDAY GETTING NEWS FROM DIFFERENT NEWS SOURCES

|  | Trust in: | Newspapers | TV | Radio | Onlineonly news websites | Online newspaper websites | Online radio/TV/ cable websites | Twitter | Facebook | Internet blogs/ weblogs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time Spent Yesterday Getting News from: |  |  |  |  |  |  |  |  |  |  |
| Newspapers | Pearson Correlation | -. 011 | -.110* | -. 042 | -.131** | -. 074 | -.128** | -. 043 | -. 049 | -. 049 |
|  | Sig. (2-tailed) | . 801 | . 016 | . 356 | . 004 | . 105 | . 005 | . 352 | . 286 | . 281 |
|  | N | 484 | 483 | 478 | 483 | 481 | 475 | 478 | 484 | 477 |
| TV | Pearson Correlation | -. 031 | . 037 | -. 049 | -. 083 | -. 069 | -. 054 | -. 035 | . 035 | -. 037 |
|  | Sig. (2-tailed) | . 496 | . 414 | . 288 | . 071 | . 130 | . 242 | . 447 | . 446 | . 426 |
|  | N | 480 | 470 | 474 | 479 | 477 | 471 | 474 | 480 | 473 |
| Radio | Pearson Correlation | -. 012 | . 027 | .128** | -. 061 | -. 057 | . 006 | -. 052 | -. 037 | -. 015 |
|  | Sig. (2-tailed) | . 800 | . 555 | . 005 | . 181 | . 212 | . 895 | . 257 | . 417 | . 739 |
|  | N | 483 | 482 | 477 | 482 | 480 | 474 | 477 | 483 | 476 |
| Online-only news websites | Pearson Correlation | -. 020 | -. 022 | -. 041 | .146** | . 019 | -. 013 | . 045 | . 025 | . 079 |
|  | Sig. (2-tailed) | . 668 | . 624 | . 370 | . 001 | . 674 | . 774 | . 332 | . 587 | . 084 |
|  | N | 483 | 482 | 477 | 482 | 480 | 474 | 477 | 483 | 476 |
| Online newspaper websites | Pearson Correlation | . 031 | -. 006 | . 011 | . 018 | .093* | . 018 | . 030 | . 045 | . 050 |
|  | Sig. (2-tailed) | . 495 | . 899 | . 810 | . 701 | . 043 | . 701 | . 515 | . 322 | . 281 |
|  | N | 482 | 481 | 476 | 481 | 479 | 473 | 476 | 482 | 475 |
| Online radio/TV/ cable websites | Pearson Correlation | -. 041 | -. 032 | -. 059 | -. 035 | -. 011 | . 082 | -. 064 | -. 072 | -. 073 |
|  | Sig. (2-tailed) | . 370 | . 480 | . 197 | . 446 | . 807 | . 073 | . 160 | . 115 | . 112 |
|  | N | 483 | 482 | 477 | 482 | 480 | 474 | 477 | 483 | 476 |
| Twitter | Pearson Correlation | .128** | .107* | . 006 | .121* | .102* | .155** | .271** | .175** | .095* |
|  | Sig. (2-tailed) | . 005 | . 018 | . 891 | . 008 | . 026 | . 001 | . 000 | . 000 | . 038 |
|  | N | 483 | 482 | 477 | 482 | 480 | 474 | 477 | 483 | 476 |
| Facebook | Pearson Correlation | .099* | .107* | . 000 | . 042 | . 001 | . 076 | .206** | .316** | .219** |
|  | Sig. (2-tailed) | . 031 | . 020 | . 995 | . 362 | . 978 | . 101 | . 000 | . 000 | . 000 |
|  | N | 479 | 478 | 473 | 478 | 476 | 470 | 473 | 479 | 472 |
| Internet blogs/ weblogs | Pearson Correlation | . 014 | -. 011 | -. 041 | . 063 | -. 006 | . 074 | . 040 | . 046 | .227** |
|  | Sig. (2-tailed) | . 755 | . 813 | . 370 | . 168 | . 903 | . 109 | . 387 | . 318 | . 000 |
|  | N | 484 | 483 | 478 | 483 | 481 | 475 | 478 | 484 | 477 |

[^6]
## H3: There is a positive correlation between overall trust in news media and use of television.

Tables 11 and 12 show that there was no significant correlation between overall trust in news media and how often television was watched for news in the "past week" as well as time spent getting news from it "yesterday." However, as seen in Table 13, a small, but positive correlation was found between how often TV news was watched in the "past week" and trust in TV ( $\mathrm{p}<.01$ ). Trust in newspapers also increased when TV was watched more often for news in the "past week" ( $\mathrm{p}<.05$ ), though only very slightly. The amount of time spent "yesterday" getting news from TV did not significantly correlate with trust in any news source (Table 14).

Since there was no significant correlation found between overall trust in news media and how often in the "past week" and time spent "yesterday" getting news from TV, H3 was not supported.

## H4: There is a positive correlation between overall trust in news media and use of radio.

As seen in Tables 11 and 12, overall trust in news media did not correlate with the use of radio. Even though there were small, but positive, correlations between trust in radio and how often radio was used for news in the "past week" as well as time spent getting news from it "yesterday" (Tables 13 and 14), H4 was not supported because overall trust in news media did not correlate with use of radio.

## H5: There is a negative correlation between overall trust in news media and use of online-only news websites.

There was no significant correlation found between overall trust in news media and use of online-only news websites (Tables 11 and 12). However, Tables 13 and 14
shows that when trust in online-only news websites increased, both the number of times spent in the "past week" ( $\mathrm{p}<.01$ ) and minutes spent "yesterday" ( $\mathrm{p}<.01$ ) getting news from online-only news websites increased as well.

While there was a positive correlation found between use of online-only news websites and trust in online-only news websites, there was no significant correlation between overall trust in news media and use of online-only news websites. Hence, H5 was not supported.

H6: There is a negative correlation between overall trust in news media and use of online newspaper websites.

Overall trust in news media did not correlate with how often in the "past week" and time spent "yesterday" getting news from online newspaper websites (Tables 11 and 12). Table 13 shows a slightly positive correlation between how often in the "past week" online newspaper websites was accessed for news and trust in that news source ( $\mathrm{p}<.01$ ). There was almost no correlation between trust in online newspaper websites and time spent "yesterday" getting news from them ( $\mathrm{p}<.05$ ) (Table 14).

H6 was not supported because there was no significant correlation found between overall trust in news media and use of online newspaper websites.

H7: There is a negative correlation between overall trust in news media and use of online radio/TV/cable websites.

Tables 11 and 12 show no significant correlation between overall trust in news media and the number of times spent in the "past week" and minutes spent "yesterday" getting news from online radio/TV/cable websites. However, when online radio/TV/cable
websites were used more often in the "past week" for news, trust towards the source increased ( $\mathrm{p}<.01$ ). Negative, but fairly weak, correlations were found between how often online radio/TV/cable websites were used for news in the "past week" and trust ( $\mathrm{p}<.05$ ) in Facebook and Internet blogs/weblogs. In other words, when the number of times spent in the "past week" getting news from online radio/TV/cable websites increased, trust in Facebook and Internet blogs/weblogs went down (Table 13). Table 14 shows no significant correlation between minutes spent "yesterday" getting news from online radio/TV/cable websites and trust in any other type of news source.

No significant correlation was found between overall trust in news media and use of online radio/TV/cable websites. Thus, H7 was not supported.

## H8: There is a negative correlation between overall trust in news media and use of Twitter.

Table 11 shows that overall trust in news media did not correlate with how often in the "past week" getting news from Twitter. However, as shown in Table 12, a slightly positive correlation was found between overall trust in news media and time spent "yesterday" getting news from Twitter ( $\mathrm{p}<.01$ ). When Twitter was accessed more often in the "past week" for news, trust ( $\mathrm{p}<.05$ ) in Twitter, online newspaper websites and Facebook increased as well (Table 13). Trust in all news sources but radio increased when more time was spent getting news from Twitter "yesterday" (Table 14).

A small, but positive correlation was found between overall trust in news media and time spent "yesterday" getting news from Twitter. However, H8 was not supported because it hypothesized a negative correlation.

H9: There is a negative correlation between overall trust in news media and use of Facebook.

Overall trust in news media did not correlate with how often Facebook was used in the "past week" for news (Table 11). Table 12 shows a slightly positive correlation between overall trust in news media and time spent "yesterday" getting news from Facebook ( $\mathrm{p}<.01$ ). The more respondents used Facebook in the "past week" for news, the more trust (p<.01) they had in Facebook, TV, Twitter, and Internet blogs/weblogs (Table 13). In terms of time spent "yesterday" getting news from Facebook, Table 14 shows that trust in the social media sources like Facebook, Twitter, and Internet blogs/weblogs increased when time spent getting news on Facebook "yesterday" increased ( $\mathrm{p}<.01$ ).

H9 was not supported because a slightly positive instead of a negative correlation was found between overall trust in news media and time spent "yesterday" getting news from Facebook.

## H10: There is a negative correlation between overall trust in news media and use of Internet blogs/weblogs.

Tables 11 and 12 show no significant correlation between overall trust in news media and use of Internet blogs/weblogs for news. However, there was a slightly positive correlation between the number of times spent in the "past week" getting news from Internet blogs/weblogs and trust in that source ( $\mathrm{p}<.01$ ) (Table 13). Respondents also reported to have more trust in Internet blogs/weblogs as they spent more time getting news from it "yesterday" ( $\mathrm{p}<.01$ ) (Table 14).

H10 was not supported because there was no significant correlation between overall trust in news media and use of Internet blogs/weblogs.

## III. Demographics Findings

Demographics data was collected from the survey to find out if there is any statistically significant difference among trust, use of news media and demographic variables like age, gender, and academic major or college.

## Age and Trust

The respondents in this study were college students whose ages ranged from 19 to 55. Pearson bivariate correlation revealed a slightly negative correlation between age and overall trust in news media ( $\mathrm{p}<.01$ ) (Table 15). In other words, older respondents tend to have less trust in news media in general than younger respondents.

Furthermore, age correlated negatively with trust in all news sources except radio. No significant correlation was found between age and trust in radio. This means that younger respondents tend to have more trust than older respondents in all news sources other than radio.

Table 16 shows that older respondents were more likely to read newspapers and get news from online radio/TV/cable websites more often in the "past week" and "yesterday" ( $\mathrm{p}<.01$ ). They also likely to acquire news from Twitter "yesterday" more often than younger respondents ( $\mathrm{p}<.05$ ). On the contrary, younger respondents were likely to spend more time getting news from Facebook "yesterday" than older respondents ( $\mathrm{p}<.05$ ).

TABLE 15
CORRELATIONS BETWEEN AGE AND OVERALL TRUST IN NEWS MEDIA AND DIFFERENT NEWS SOURCES

|  | Trust in: | News media in general | Newspapers | TV | Radio | Onlineonly news websites | Online newspaper websites | Online radio/TV/ cable websites | Twitter | Facebook | Internet blogs/ weblogs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Pearson Correlation | -.198** | -.193** | -. 125 ** | -. 019 | -.143** | -.140** | -.114* | -.183** | -.192** | -.118** |
|  | Sig. (2-tailed) | . 000 | . 000 | . 000 | . 675 | . 002 | . 002 | . 013 | . 000 | . 000 | . 009 |
|  | N | 489 | 487 | 486 | 482 | 486 | 483 | 479 | 482 | 487 | 481 |

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).

TABLE 16
CORRELATIONS BETWEEN AGE AND USE OF DIFFERENT NEWS SOURCES

|  | How Often in the Past Week Getting News from: | Newspapers | TV | Radio | Onlineonly news websites | Online newspaper websites | Online radio/TV/ cable websites | Twitter | Facebook | Internet blogs/ weblogs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Pearson Correlation | .133** | . 049 | -. 017 | . 023 | . 058 | .217** | -. 040 | -. 050 | -. 018 |
|  | Sig. (2-tailed) | . 003 | . 277 | . 706 | . 619 | . 199 | . 000 | 376 | . 275 | . 696 |
|  | N | 486 | 485 | 485 | 485 | 485 | 484 | 483 | 482 | 485 |
|  | Time Spent Yesterday Getting News from: | Newspapers | TV | Radio | Onlineonly news websites | Online newspaper websites | Online radio/TV/ cable websites | Twitter | Facebook | Internet blogs/ weblogs |
| Age | Pearson Correlation | .187** | . 075 | . 016 | . 005 | . 058 | .169** | .101* | -.113* | -. 029 |
|  | Sig. (2-tailed) | . 000 | . 099 | . 721 | . 915 | . 202 | . 000 | . 026 | . 013 | . 520 |
|  | N | 484 | 480 | 483 | 483 | 482 | 483 | 483 | 479 | 484 |

[^7]Gender, Trust and Use of News Media
An ANOVA test was performed to see if gender is a significant variable in its relationship with trust and/or use of news media. Table 17 shows a significant difference between gender and overall trust in news media ( $\mathrm{p}<.05$ ). Female respondents had a higher average score for trust in news media (6.0) than male respondents (5.6) (Figure 14; Appendix A6 for descriptive data).

TABLE 17
ANOVA BY GENDER: OVERALL TRUST IN NEWS MEDIA

|  |  | Sum of <br> Squares | df | Mean <br> Square | F | Sig. |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Overall Trust in | Between Groups | 20.748 | 1 | 20.748 | 8.195 | .004 |
| News Media | Within Groups | 1233.075 | 487 | 2.532 |  |  |
|  | Total | 1253.823 | 488 |  |  |  |

FIGURE 14
AVERAGE OVERALL TRUST IN NEWS MEDIA BY GENDER


A closer look at various forms of news sources revealed statistical differences between gender and trust in some of the news sources. Figure 15 shows that on average, female respondents had more trust in TV, online newspaper websites, online radio/TV/cable websites, Twitter, and Facebook than male respondents. The significance level for these news sources was at $\mathrm{p}<.05$ (see Table 18; descriptive data in Appendix A7).

FIGURE 15
AVERAGE TRUST IN DIFFERENT NEWS SOURCES BY GENDER


TABLE 18
ANOVA BY GENDER: AVERAGE TRUST IN DIFFERENT NEWS SOURCES

|  |  | Sum of <br> Squares | df | Mean <br> Square | F | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Average Trust in: |  |  |  |  |  |  |
| Newspapers | Between Groups Within Groups Total | $\begin{array}{r} 6.101 \\ 1659.175 \\ 1665.277 \end{array}$ | $\begin{array}{r} 1 \\ 486 \\ 487 \end{array}$ | $\begin{aligned} & 6.101 \\ & 3.414 \end{aligned}$ | 1.787 | . 182 |
| TV | Between Groups Within Groups Total | $\begin{array}{r} 59.165 \\ 2151.845 \\ 2211.010 \end{array}$ | $\begin{array}{r} 1 \\ 485 \\ 486 \end{array}$ | $\begin{array}{r} 59.165 \\ 4.437 \end{array}$ | 13.335 | . 000 |
| Radio | Between Groups Within Groups Total | $\begin{array}{r} .012 \\ 2011.050 \\ 2011.062 \end{array}$ | $\begin{array}{r} 1 \\ 480 \\ 481 \end{array}$ | $\begin{array}{r} .012 \\ 4.190 \end{array}$ | . 003 | . 957 |
| Online-only news websites | Between Groups Within Groups Total | $\begin{array}{r} 12.201 \\ 2352.641 \\ 2364.842 \end{array}$ | $\begin{array}{r} 1 \\ 485 \\ 486 \end{array}$ | $\begin{array}{r} 12.201 \\ 4.851 \end{array}$ | 2.515 | . 113 |
| Online newspaper websites | Between Groups Within Groups Total | $\begin{array}{r} 45.903 \\ 2079.458 \\ 2125.362 \end{array}$ | $\begin{array}{r} 1 \\ 482 \\ 483 \end{array}$ | $\begin{array}{r} 45.903 \\ 4.314 \end{array}$ | 10.640 | . 001 |
| Online radio/TV/ cable websites | Between Groups Within Groups Total | $\begin{array}{r} 20.172 \\ 2213.677 \\ 2233.850 \end{array}$ | $\begin{array}{r} 1 \\ 477 \\ 478 \end{array}$ | $\begin{array}{r} 20.172 \\ 4.641 \end{array}$ | 4.347 | . 038 |
| Twitter | Between Groups Within Groups Total | $\begin{array}{r} 29.644 \\ 3078.887 \\ 3108.531 \end{array}$ | $\begin{array}{r} 1 \\ 480 \\ 481 \end{array}$ | $\begin{array}{r} 29.644 \\ 6.414 \end{array}$ | 4.622 | . 032 |
| Facebook | Between Groups Within Groups Total | $\begin{array}{r} 25.824 \\ 2663.682 \\ 2689.506 \end{array}$ | $\begin{array}{r} 1 \\ 486 \\ 487 \end{array}$ | $\begin{array}{r} 25.824 \\ 5.481 \end{array}$ | 4.712 | . 030 |
| Internet blogs/ weblogs | Between Groups Within Groups Total | $\begin{array}{r} .011 \\ 2821.199 \\ 2821.210 \end{array}$ | $\begin{array}{r} 1 \\ 479 \\ 480 \end{array}$ | $\begin{array}{r} .011 \\ 5.890 \end{array}$ | . 002 | . 965 |

Although no significant difference was found between genders in terms of the average number of times spent in the "past week" getting news from the news media, the average minutes spent getting news from the news media "yesterday" by both genders turned out to be significantly different ( $\mathrm{p}<.05$ ) (Table 19).

Figure 16 shows that male respondents spent more time "yesterday" getting news from the news media than female respondents (see Appendix A8 for descriptive data).

TABLE 19
ANOVA BY GENDER: HOW OFTEN IN THE PAST WEEK AND TIME SPENT YESTERDAY GETTING NEWS FROM THE NEWS MEDIA

|  |  | Sum of <br> Squares | df | Mean <br> Square | F | Sig. |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |
| How Often (Average | Between Groups | 95.133 | 1 | 95.133 | 1.218 | .270 |
| Number of Times) in <br> the Past Week | Within Groups | 37801.926 | 484 | 78.103 |  |  |
|  | Total | 37897.059 | 485 |  |  |  |
| Time (Average | Between Groups | 1845.704 | 1 | 1845.704 | 5.721 | .017 |
| Minutes) Spent <br> Yesterday | Within Groups | 155497.708 | 482 | 322.609 |  |  |

FIGURE 16
TIME SPENT YESTERDAY GETTING NEWS FROM THE NEWS MEDIA BY GENDER


While male respondents tend to spend more time "yesterday" getting news from the news media in general, it turned out that female respondents were heavier users of some of the news sources. For instance, they used Facebook for news more often in the "past week" and spent more time "yesterday" getting news from Facebook and Twitter than male respondents. Male respondents, on the other hand, sought news more often in the "past week" from TV, online newspaper websites and online radio/TV/cable websites. They also spent more time "yesterday" getting news from newspapers, TV, online-only news websites, online newspaper websites, and online radio/TV/cable websites. (See Figures 17 and 18; Tables 20 and 21; and Appendix A9 for descriptive data.)

FIGURE 17
HOW OFTEN IN THE PAST WEEK GETTING NEWS FROM DIFFERENT NEWS SOURCES BY GENDER


FIGURE 18
TIME SPENT YESTERDAY GETTING NEWS FROM DIFFERENT NEWS SOURCES BY GENDER


TABLE 20
ANOVA BY GENDER: HOW OFTEN IN THE PAST WEEK GETTING NEWS FROM DIFFERENT NEWS SOURCES

|  |  | Sum of Squares | df | Mean Square | F | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| How Often (Average Number of Times) in the Past Week Getting News From: |  |  |  |  |  |  |
| Newspapers | Between Groups Within Groups Total | $\begin{array}{r} 11.684 \\ 1558.720 \\ 1570.404 \end{array}$ | $\begin{array}{r} 1 \\ 483 \\ 484 \end{array}$ | $\begin{array}{r} 11.684 \\ 3.227 \end{array}$ | 3.620 | . 058 |
| TV | Between Groups Within Groups Total | $\begin{array}{r} 46.723 \\ 3121.244 \\ 3167.967 \end{array}$ | $\begin{array}{r} 1 \\ 482 \\ 483 \end{array}$ | $\begin{array}{r} 46.723 \\ 6.476 \end{array}$ | 7.215 | . 007 |
| Radio | Between Groups Within Groups Total | $\begin{array}{r} .413 \\ 2576.603 \\ 2577.017 \end{array}$ | $\begin{array}{r} 1 \\ 482 \\ 483 \end{array}$ | $\begin{array}{r} .413 \\ 5.346 \end{array}$ | . 007 | . 781 |
| Online-only news websites | Between Groups Within Groups Total | $\begin{array}{r} 26.667 \\ 3432.678 \\ 3459.345 \end{array}$ | $\begin{array}{r} 1 \\ 482 \\ 483 \end{array}$ | $\begin{array}{r} 26.667 \\ 7.122 \end{array}$ | 3.744 | . 054 |
| Online newspaper websites | Between Groups Within Groups Total | $\begin{array}{r} 40.022 \\ 2780.960 \\ 2820.981 \end{array}$ | $\begin{array}{r} 1 \\ 482 \\ 483 \end{array}$ | $\begin{array}{r} 40.022 \\ 5.770 \end{array}$ | 6.937 | . 009 |
| Online radio/TV/ cable websites | Between Groups Within Groups Total | $\begin{array}{r} 36.778 \\ 2177.189 \\ 2213.967 \end{array}$ | $\begin{array}{r} 1 \\ 481 \\ 482 \end{array}$ | $\begin{array}{r} 36.778 \\ 4.526 \end{array}$ | 8.125 | . 005 |
| Twitter | Between Groups Within Groups Total | $\begin{array}{r} 2.614 \\ 11739.311 \\ 11741.925 \end{array}$ | $\begin{array}{r} 1 \\ 480 \\ 481 \end{array}$ | $\begin{array}{r} 2.614 \\ 24.457 \end{array}$ | . 107 | . 744 |
| Facebook | Between Groups Within Groups Total | $\begin{array}{r} 38.988 \\ 3652.018 \\ 3691.006 \end{array}$ | $\begin{array}{r} 1 \\ 479 \\ 480 \end{array}$ | $\begin{array}{r} 39.988 \\ 7.624 \end{array}$ | 5.114 | . 024 |
| Internet blogs/ weblogs | Between Groups Within Groups Total | $\begin{array}{r} 1.972 \\ 1358.249 \\ 1360.221 \end{array}$ | $\begin{array}{r} 1 \\ 482 \\ 483 \end{array}$ | $\begin{aligned} & 1.972 \\ & 2.818 \end{aligned}$ | . 700 | . 403 |

TABLE 21
ANOVA BY GENDER: TIME SPENT YESTERDAY GETTING NEWS FROM DIFFERENT NEWS SOURCES

|  |  | Sum of <br> Squares | df | Mean <br> Square | F | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time (Average Minutes) |  |  |  |  |  |  |
| Spent Yesterday Getting |  |  |  |  |  |  |
| Newspapers | Between Groups | 4503.380 | 1 | 4503.380 | 11.640 | . 001 |
|  | Within Groups | 186085.805 | 481 | 386.894 |  |  |
|  | Total | 190599.184 | 482 |  |  |  |
| TV | Between Groups | 41027.755 | 1 | 41027.755 | 14.059 | . 000 |
|  | Within Groups | 1391975.343 | 477 | 2918.187 |  |  |
|  | Total | 1433003.098 | 478 |  |  |  |
| Radio | Between Groups | 6780.672 | 1 | 6780.672 | 2.903 | . 089 |
|  | Within Groups | 1121255.950 | 480 | 2335.950 |  |  |
|  | Total | 1128036.622 | 481 |  |  |  |
| Online-only news websites | Between Groups | 9661.142 | 1 | 9661.142 | 6.599 | . 011 |
|  | Within Groups | 702636.866 | 480 | 1464.035 |  |  |
|  | Total | 712398.008 | 481 |  |  |  |
| Online newspaper websites | Between Groups | 3260.157 | 1 | 3260.157 | 6.663 | . 010 |
|  | Within Groups | 234365.976 | 479 | 489.282 |  |  |
|  | Total | 237626.133 | 480 |  |  |  |
| Online radio/TV/ cable websites | Between Groups | 5204.511 | 1 | 5204.511 | 8.504 | . 004 |
|  | Within Groups | 293764.659 | 480 | 612.010 |  |  |
|  | Total | 298969.170 | 481 |  |  |  |
| Twitter | Between Groups | 4437.425 | 1 | 4437.425 | 4.446 | . 036 |
|  | Within Groups | 479108.584 | 480 | 998.143 |  |  |
|  | Total | 483546.008 | 481 |  |  |  |
| Facebook | Between Groups | 22688.059 | 1 | 22688.059 | 4.750 | . 030 |
|  | Within Groups | 2273485.985 | 476 | 4776.231 |  |  |
|  | Total | 2296174.044 | 477 |  |  |  |
| Internet blogs/ weblogs | Between Groups | 337.448 | 1 | 337.448 | . 601 | . 439 |
|  | Within Groups | 270087.819 | 481 | 561.513 |  |  |
|  | Total | 270425.267 | 482 |  |  |  |

## College/Major and Trust

The ANOVA analysis revealed a significant difference ( $\mathrm{p}<.05$ ) in average overall trust in news media among different academic colleges or majors (Table 22).

Students majoring in Fine \& Performing Arts trusted news media to the greatest extent ( 6.3 out of 10 ), followed by those in Journalism and Mass Communications with an average score of 6.2. Respondents in Public Affairs and Community Services as well as Education and Human Sciences shared the same average trust of 6.0. Undeclared students had the least amount of trust for news media in general (3.9) (see Figure 19; Appendix A10 for descriptive data).

TABLE 22
ANOVA BY COLLEGE/MAJOR: OVERALL TRUST IN NEWS MEDIA

|  |  | Sum of <br> Squares | df | Mean <br> Square | F | Sig. |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |
| Overall Trust in | Between Groups | 57.961 | 10 | 5.796 | 2.315 | .012 |
| News Media | Within Groups | 1194.466 | 477 | 2.504 |  |  |
|  | Total | 1252.427 | 487 |  |  |  |

FIGURE 19
AVERAGE OVERALL TRUST IN NEWS MEDIA BY COLLEGE/MAJOR


## DISCUSSION

This study was conducted to find out the relationship between college students' trust and use of news media. As the news landscape changes and more media choices are made available, trust and news consumption patterns are changing for adults and younger Americans alike (Kiousis, 2001; Tsfati \& Cappella, 2005). The key findings in this study did not attempt to seek and demonstrate these evolving patterns; they examined trust and use of news media in a way to better understand the association between the variables. This study also aimed to learn more about college students' media use behavior and their preference for news sources. Lastly, it addressed some interesting findings regarding the demographic characteristics of college students in terms of trust and use of news sources.

## College Students' Preference for News

Although use of all news sources except Internet fluctuates over the past few years (Pew Research, 2011) (see Figure 20), television still dominates as the most important news source among college students. The fact that TV is the main source for news and information was supported in this study.

Newspapers and radio, on the other hand, fell behind TV as the most important news source and sources college students said they would go to for the next major news event. This finding is not particularly surprising because newspapers seem to have a lack of visual appeal to young audiences, and newscasts on most radio stations are secondary to music and other content (Patterson, 2007).

When asked about the source for the next major event, two of the online sources -online-only news websites and online newspaper websites - were chosen by more than half of the respondents ( $55.3 \%$ ). Besides, online-only news websites trailed only TV as the major news source. Such findings mark the emergence of the digital media as the most important news source for college students (Morales, 2008; Pew Research, 2011).

FIGURE 20
PERCENTAGE CHANGE IN AUDIENCE, 2009-2010


Source: Nielsen Media Research, Pew Research Center for the People \& Press, Audit Bureau of Circulations, 2011.

## College Students' Use of News Media

Corresponding to being the most important news source, TV was also the news source that college students claimed they spent most of their time getting news from "yesterday" and in the "past week." On the other hand, despite being one of the least preferred sources for the next major news event, the respondents spent more time getting news from Facebook than any other news source except TV. The average amount of time spent getting news from Facebook and TV "yesterday" and in the "past week" was about
the same. News consumption has become more mobile. As of January 2011, the percentage of Americans reported owning some kind of electronic tablet nearly doubled over a four-month period (Pew Research, 2011). Even though Facebook was not considered the most important news source for the majority of college students, the convenience of accessing Facebook anywhere at any time using a portable laptop, ereader, or even a mobile device increases the possibility of using it for news and information. This might also help explain the reason why Facebook turned out to be the third source for the last news major event among college students.

In addition to Facebook, respondents also spent more time getting news from online-only news websites than the average amount of time spent getting news from all news sources combined. The digital media, along with the acceleration of mobile technology, seek to provide news that serves immediate needs - breaking news alert, weather, and traffic. With almost half of all Americans (47\%) now getting some form of local news on a mobile device (Pew Research, 2011), it is clear why students spent more time than average getting news from these two online sources.

In sum, with TV being the most important news source, it helps explain why it was also being used to the greatest extent by the respondents. The use of Facebook for news, on the contrary, turned out to be ahead of all other news sources except for TV, regardless of being one of the least trusted sources. The Internet is a versatile medium that satisfies many of the interests and needs met by older media (Patterson, 2007). For example, Facebook seeks to provide both news and entertainment that gratify various needs of college students. Better still, the access to such information via Facebook is made available on a single platform (e.g. a mobile device or portable laptop) that is used
extensively by college students (Dutton \& Shepherd, 2006). Besides, it is possible that when students are browsing Facebook for non-news purposes (e.g. getting updates from friends and family and playing games), they inadvertently come across and pause to read news that are posted on the website. Hence there was heavier usage of Facebook for news compared to other news sources despite its lower preference as the most important news source and source for the next major news event.

## College Students' Trust in News Media

## Average Overall Trust in News Media in General

The average overall trust in news media was measured by adding (1) the means of trust in news media as a whole and (2) trust in all news sources combined, then divided by two. Instead of just relying on the question "How much trust do you have for the media in general?" this was a more accurate method to calculate the average overall trust in news media. The result showed that respondents had an average of 5.8 trust score on a 0 -to-10-point scale.

Prior to combining the means of both measurements of trust, the average trust in news media in general was 6.3 , whereas the average trust when all news sources were combined was 5.3 (Figure 21). The $t$-test analysis showed a significant difference between the two ( $\mathrm{p}<.01$ ) (Table 23).

TABLE 23
ONE-SAMPLE T-TEST: AVERAGE TRUST IN NEWS MEDIA

|  |  |  |  | Test Value =0 |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | Mean | Std. <br> Deviation | t | df | Sig. (2-tailed) |
|  |  |  |  |  |  |  |
| Average Trust in: |  |  |  |  |  |  |
| News Media in General | 486 | 6.27 | 1.847 | 76.056 | 485 | .000 |
| All News Sources | 490 | 5.29 | 1.592 | 73.545 | 489 | .000 |

FIGURE 21
AVERAGE TRUST IN NEWS MEDIA


On average, trust in news media in general was higher than trust in the combination of all types of news sources. One possible explanation for higher trust in news media in general is the way trust questions were asked in the survey. When asked about trust in news media in general, respondents might answer it based on the news source they spent the most time using, or one that they thought was their most important source of news, whereas the question about trust in different news sources allowed respondents to rate their trust for each source with more scrutiny.

Vanacker and Belmas' (2009) model suggests that trust exists on a continuum that ranges from shallow to deep trust. Deep trust is trust in which the scope is broad, the stake is high, is based on shared norms, and is constitutive to the relationship. Shallow trust, on the contrary, is narrow in scope, instrumental and has lower stakes. Though the nature of trust can vary greatly, it is argued that trust could be gained more easily if consumers trust the media system as a whole (Table 24).

TABLE 24
A SUGGESTED MODEL FOR NEWS MEDIA TRUST


Source: Vanacker \& Belmas, 2009

According to Vanacker and Belmas (2009), an individual can trust different news organizations, specific news media or individual journalists to varying degrees, between shallow and deep trust. While trust in news media is gained more easily when viewed as an institution, lesser trust is gained when news media are broken down into specific mediums, such as newspapers, TV, radio, and the Internet. The table suggests that lower trust means lower expectations, narrower scope, and fewer shared norms between the media and consumers. Local TV stations, FOX News, even the Internet, for example, provide news content in an attempt to conform to the values and norms of a specific audience segment. However, those who find these values embraced by these news sources in contradiction to theirs might end up trusting them less (Newport \& Saad, 1998; Vanacker \& Belmas, 2009). Thus, less trust was reported when asked about news sources separately than as a whole.

The fairly neutral midpoint points of trust in news media in general (6.3) and trust when all news sources combined (5.3) on the Likert scale indicated that respondents neither trust nor distrust the news media. However since the number leaned slightly toward the greater end of the scale, it showed that respondents might have slightly some trust in the news media in general. This finding is significant because by having trust in news media, college students might be motivated to consume news from the media that may affect their future political awareness, knowledge, and activity to act accordingly in a democratic society (Buckingham, 1997; Kohring \& Matthes, 2007; Lee, 2006).

## Average Trust in Different News Sources

When rated separately, respondents showed varying degrees of trust toward each news source. In this study, newspapers appeared to be the most trusted news source (7.2 out of 10), followed by its online presence, online newspaper websites (6.7). Newspaper has previously been found to be the most credible source in certain circumstances (Flanagin \& Metzger, 2000). Besides, Melican and Dixon (2008) find that media consumers differentiate among different types of online news: Internet non-traditional media outlets like the Drudge Report is less credible than online traditional media outlets such as CNN.com or the New York Times website. They also suggest that trust in traditional media organizations may carry over to their online presences.

Trust in the remaining traditional news sources - TV and radio - was relatively higher than for the rest of the online news sources, a finding similar to the research that finds that traditional media are judged more credible than the Internet (Pew Research,
1996). Trust in social media sources, such as Facebook, Internet blogs/weblogs, and Twitter, were the lowest among all other news sources.

According to Vanacker and Belmas (2009), there is a distinction between social (trust placed in individual) and institutional (trust with the institution) trust. Mainstream media enjoy higher levels of trust since they are more likely to be associated with being an institution and have traditionally relied on the broad-scope trust that exists in the profession. For example, by and large people will trust what they read in a newspaper regardless of who writes the story. Social networking sites, such as Facebook, blogs, and Twitter, are usually managed and operated by individuals with an account. Concerns have been raised regarding the privacy and believability of the information obtained from these sites (Dutton \& Shepherd, 2006). Since social networking sites do not necessarily enjoy the institutional trust that many mainstream news media organizations do (Vanacker \& Belmas, 2009), the amount of trust people have for these sources is considerably lower and shallower.

## Linking Trust and Use of News Media

## Correlation between Overall Trust and Use of the News Media

As college students seek out news and information, trust in news media comes into play by influencing their selection and exposure to specific media sources (Tsfati \& Cappella, 2005). However, researchers investigating the correlation between trust in news organizations and news media exposure have found only a moderate, though significant, association between the two variables (Kiousis, 2001; Rimmer \& Weaver, 1987). This study found no significant correlation between the average overall trust and use of news
media. Only a slightly positive relationship existed between trust in news media in general and time spent "yesterday" getting news from them. In other words, when there was more trust in news media in general, more time was spent getting news from the news media in a typical day. The first research question (R1) and hypothesis (H1) that predicted a moderate relationship between overall trust and use of news media was only slightly supported.

## Correlations between Use of a Specific Source and Overall Trust in News Media

When it comes to overall trust and use of a specific source, slightly positive correlations were found only in Twitter and Facebook. The amount of time spent "yesterday" getting news from Twitter and Facebook increased along with trust in news media as a whole. While media scholars have yet to extend their scope of research to social media like Twitter, Facebook and Internet blogs/weblogs, one possible explanation for this finding may be that when a source is seen as the most important news source, it is used more frequently.

Trust in news media in general, on the other hand, varied depending on the respondents' opinion of which was their most important news source. For example, those who claimed Twitter and Facebook as the most important news sources also had the highest amount of trust in news media in general (Figure 22; ANOVA and descriptive data in Appendix 11). Being the most important source implies that it is regularly used for news and information. When a respondent viewed Twitter or Facebook as the most important source, he or she was likely to use it more often for news. Consequently, the overall trust in news media in general increased.

FIGURE 22
TRUST IN NEWS MEDIA IN GENERAL BY MOST IMPORTANT NEWS SOURCE


A Pew Research Center study released in 2011 found that more than half $(60 \%)$ of Internet users used at least one social networking site (Larsen, 2011). While about half of Internet users (46\%) thought that "most people can be trusted," Facebook users in particular, were $43 \%$ more trusting than other Internet users. It is possible that they trust what they see or read on the site because they trust their friends or family who post the information on their news feed. ${ }^{3}$ This might be one of the reasons why users of social media sources like Facebook and Twitter were more trustful of the news media in general than users of other news sources.

[^8]
## Correlations between Use and Trust in a Specific News Source

Prior research on channel credibility shows that an increase in news media use is usually accompanied by enhanced credibility ratings for whatever channels are being scrutinized (Cobbey, 1980; Greenberg, 1966; Shaw, 1973; Whitney, 1986). In other words, "trust leads to a higher likelihood of cooperative engagement and mistrust to a lower likelihood" (Tsfati, 2010). This study, however, was not designed to investigate a cause-and-effect relationship between trust and use of news media. It could only be used to demonstrate a possible correlation. This study revealed only a slightly positive correlation between trust and time spent "yesterday" getting news from all news sources except for newspapers, TV, and its online presence, online radio/TV/cable websites. There was only mild or almost no linkage found between trust and use of online newspaper websites. All the statistically significant correlations between trust and use of news sources turned out to be fairly weak. These data confirmed the findings of previous research that news media use is only marginally connected with trust (Kiousis, 2001; Rimmer \& Weaver, 1987).

Although only a slight correlation was found between trust and use of news sources, including the Internet (Kiousis, 2001), the correlations between trust and use of social media sources (e.g. Twitter, Facebook, or Internet blogs/weblogs) for news were generally stronger than those of other news sources. This finding supported Dutton and Shepherd's (2006) idea that Internet users (or more specifically in this study, users of social media) are generally more trustful of the Internet itself.

On the other hand, while the increasing use of a particular news source is often times accompanied by an increase in trust in that news source, people do not always feel
that their most preferred or used source is the most credible (Gallup, 2010; Westley \& Severin, 1964). Despite being the most trusted news source, there was no linkage between newspaper readership and trust in newspapers. It was the only news source that showed no significant correlation between trust and how often a source was used in the "past week" for news.

Correlations between Use of a Specific News Source and Trust in Other News Sources
While Tsfati's (2010) study shows that trust can be associated with a higher likelihood of cooperative engagement with the trusted medium (some of our findings above support this observation), trust can also be linked to a higher likelihood of using sources other than the one being trusted and vice versa. For example, when more TV news was watched in the "past week," trust in TV and newspapers increased. Correspondingly, newspaper readership in the "past week" increased as TV was watched more frequently for news. When a specific source was used more often, trust in other news sources, not just one that was used frequently, was likely to increase as well. Also, when a particular source was used more often "yesterday" and in the "past week" for news, use in another source(s) was likely to increase as well (Tables 25 and 26). In other words, college students who use a particular source more often also tend to use another source(s) more often. But if they do not use a news source, they tend not to use other sources for news as well.

TABLE 25
CORRELATIONS OF HOW OFTEN IN THE PAST WEEK GETTING NEWS FROM DIFFERENT NEWS SOURCES

|  | How Often in the Past Week Getting News from: | TV | Radio | Onlineonly news websites | Online newspaper websites | Online radio/TV/ cable websites | Twitter | Facebook | Internet blogs/ weblogs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| How Often in the Past Week Getting News from: |  |  |  |  |  |  |  |  |  |
| Newspapers | Pearson Correlation | .282** | .016* | -. 015 | .202** | .184** | .140** | . 042 | . 026 |
|  | Sig. (2-tailed) | . 000 | . 019 | . 723 | . 000 | . 000 | . 002 | . 360 | . 573 |
|  | N | 486 | 486 | 486 | 486 | 485 | 484 | 483 | 486 |
| TV | Pearson Correlation |  | .269** | . 000 | .157** | .169** | .101* | .187** | . 026 |
|  | Sig. (2-tailed) |  | . 000 | . 997 | . 001 | . 000 | . 026 | . 000 | . 568 |
|  | N |  | 485 | 485 | 484 | 484 | 483 | 482 | 485 |
| Radio | Pearson Correlation |  |  | . 041 | .149** | . 072 | . 082 | .202** | -. 052 |
|  | Sig. (2-tailed) |  |  | . 369 | . 001 | . 114 | . 070 | . 000 | . 252 |
|  | N |  |  | 485 | 485 | 485 | 484 | 483 | 485 |
| Online-only news websites | Pearson Correlation |  |  |  | .213** | . 050 | .170** | . 023 | . 086 |
|  | Sig. (2-tailed) |  |  |  | . 000 | . 270 | . 000 | . 620 | . 658 |
|  | N |  |  |  | 485 | 484 | 483 | 482 | 485 |
| Online newspaper websites | Pearson Correlation |  |  |  |  | .242** | .185** | .183** | .104* |
|  | Sig. (2-tailed) |  |  |  |  | . 000 | . 000 | . 000 | . 022 |
|  | N |  |  |  |  | 484 | 483 | 482 | 485 |
| Online radio/TV/ cable websites | Pearson Correlation |  |  |  |  |  | .181** | -. 070 | . 051 |
|  | Sig. (2-tailed) |  |  |  |  |  | . 000 | . 126 | . 263 |
|  | N |  |  |  |  |  | 483 | 482 | 484 |
| Twitter | Pearson Correlation |  |  |  |  |  |  | .097* | . 031 |
|  | Sig. (2-tailed) |  |  |  |  |  |  | . 034 | . 492 |
|  | N |  |  |  |  |  |  | 483 | 483 |
| Facebook | Pearson Correlation |  |  |  |  |  |  |  | .209** |
|  | Sig. (2-tailed) |  |  |  |  |  |  |  | . 000 |
|  | N |  |  |  |  |  |  |  | 482 |

[^9]TABLE 26
CORRELATIONS OF TIME SPENT YESTERDAY GETTING NEWS FROM DIFFERENT NEWS SOURCES

|  | Time Spent Yesterday Getting News from: | TV | Radio | Onlineonly news websites | Online newspaper websites | Online radio/TV/ cable websites | Twitter | Facebook | Internet blogs/ weblogs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time Spent Yesterday Getting News from: |  |  |  |  |  |  |  |  |  |
| Newspapers | Pearson Correlation | .346** | .094* | . 018 | .119** | .090* | . 010 | . 062 | -. 026 |
|  | Sig. (2-tailed) | . 000 | . 039 | . 694 | . 009 | . 048 | . 820 | . 178 | . 573 |
|  | N | 481 | 484 | 484 | 483 | 484 | 484 | 480 | 485 |
| TV | Pearson Correlation |  | .172** | . 042 | .155** | .269** | . 078 | .205** | . 016 |
|  | Sig. (2-tailed) |  | . 000 | . 355 | . 001 | . 000 | . 087 | . 000 | . 730 |
|  | N |  | 480 | 481 | 481 | 481 | 481 | 479 | 481 |
| Radio | Pearson Correlation |  |  | -. 015 | -. 019 | . 014 | -. 035 | .129** | -. 045 |
|  | Sig. (2-tailed) |  |  | . 739 | . 680 | . 757 | . 437 | . 005 | . 322 |
|  | N |  |  | 483 | 482 | 483 | 483 | 479 | 484 |
| Online-only news websites | Pearson Correlation |  |  |  | .161** | . 056 | . 042 | .090* | .093* |
|  | Sig. (2-tailed) |  |  |  | . 000 | . 221 | . 353 | . 050 | . 041 |
|  | N |  |  |  | 483 | 484 | 483 | 479 | 484 |
| Online newspaper websites | Pearson Correlation |  |  |  |  | .315** | . 011 | .205** | .092* |
|  | Sig. (2-tailed) |  |  |  |  | . 000 | . 809 | . 000 | . 044 |
|  | N |  |  |  |  | 483 | 482 | 479 | 483 |
| Online radio/TV/ cable websites | Pearson Correlation |  |  |  |  |  | . 032 | . 032 | . 059 |
|  | Sig. (2-tailed) |  |  |  |  |  | . 488 | . 484 | . 192 |
|  | N |  |  |  |  |  | 483 | 479 | 484 |
| Twitter | Pearson Correlation |  |  |  |  |  |  | .332** | .293** |
|  | Sig. (2-tailed) |  |  |  |  |  |  | . 000 | . 000 |
|  | N |  |  |  |  |  |  | 480 | 484 |
| Facebook | Pearson Correlation |  |  |  |  |  |  |  | .387** |
|  | Sig. (2-tailed) |  |  |  |  |  |  |  | . 000 |
|  | N |  |  |  |  |  |  |  | 480 |

[^10]Another finding showed that newspaper readership negatively correlated with trust in TV, online-only news websites and online radio/TV/cable websites. One possible reason may be that the exposure to mainstream news sources and trust in online news sources tends to go in opposite direction (Tsfati, 2010). When more time was spent reading newspapers "yesterday," respondents tend to have less trust in online-only news websites and online radio/TV/cable websites.

An alternative explanation might be the various needs that interact to influence trust and news media exposure. Respondents who read newspapers might be those who are willing to read lengthier articles without many visuals. They may be skeptical toward news reports on online-only news websites and online radio/TV/cable websites that are meant to be seen or consumed succinctly by using less complex sentences and brief stories. Hence this amounts to lower trust in these news sources as newspaper readership increases.

This part of the discussion only attempts to elucidate and reinforce the point regarding the association between use and trust in a specific source other than the one being used. Therefore, it would not be sufficient to justify the reason why this is happening, since some of the findings seem to be contradictory using the same line of reasoning.

## Trust and Use of News Media by Demographics

Media scholars noted in prior research that certain demographic variables, such as age, gender, and education, mediate people's trust in news sources (Abel \& Wirth, 1977; Gunther, 1992).

## Trust and Use of News Media by Age

Age has been used in various studies of trust and use of news media (Cook \& Gronke, 2001; Morales, 2008). Newspapers have little appeal to younger people. Older respondents tend to read newspapers more often "yesterday" as well as in the "past week" than younger respondents. Patterson's (2007) study later reveals that older adults are more likely to read quite a few of stories in newspapers while young adults tend to just skim through news stories (Table 27). This could be the reason why older respondents spent more time reading newspapers than younger respondents given such different reading behaviors by these two demographics.

Aside from newspapers, older students were also more likely than younger students to get news from online radio/TV/cable websites "yesterday" and in the "past week." Older adults tend to watch more news than those who are younger (Morales, 2008). They are also heavier users of traditional news sources compared to younger people (Marcelo, 2007). While college students might not be able to gain regular access to a television set on campus like they would at home (Patterson, 2007), they turn to its online presence, online radio/TV/cable websites like CNN.com, NPR, and local TV websites, as an alternative to news on TV.

TABLE 27
DEPTH OF EXPOSURE TO NEWS SOURCES BY AGE

|  | Young Adults | Older Adults |
| :--- | :---: | :---: |
| Newspaper's News Pages |  |  |
| Read quite a few stories | $32 \%$ | $47 \%$ |
| Just skim stories | $66 \%$ | $49 \%$ |
| Both/ Don't know | $2 \%$ | $4 \%$ |
|  | $100 \%$ | $100 \%$ |
| National TV Newscasts |  |  |
| Watch most or all of newscast | $37 \%$ | $57 \%$ |
| Watch for a short while \& switch | $60 \%$ | $38 \%$ |
| Both/ Don't know | $3 \%$ | $5 \%$ |
|  | $100 \%$ | $100 \%$ |
| Local TV Newscast |  |  |
| Watch most or all of newscast | $43 \%$ | $64 \%$ |
| Watch for a short while \& switch | $54 \%$ | $30 \%$ |
| Both/ Don't know | $3 \%$ | $6 \%$ |
|  | $100 \%$ | $100 \%$ |
| Radio News |  |  |
| Turned on radio to hear news | $22 \%$ | $31 \%$ |
| Just happens to come on when | $72 \%$ | $65 \%$ |
| listening to something else | $6 \%$ | $4 \%$ |
| Both/ Don't know | $100 \%$ | $100 \%$ |
|  |  |  |
| Internet-based News | $46 \%$ | $55 \%$ |
| Seek out the news | $48 \%$ | $100 \%$ |
| Just happen to come across it |  |  |
| Both/ Don't know |  |  |

Note: Table only includes respondents from the study who said they made use of a particular news medium.
Source: Patterson, 2007

In addition, people who spent more time getting news from Facebook "yesterday" were those who were younger. Dwyer, Hitze, and Passerini (2007) find in their research that the average age of Facebook subjects is 20.36. The ages of the respondents in this study ranged from 19 to 55, about half of which (44.2\%) were 19- and 20-year-olds. Therefore, it is not surprising that younger respondents spent more time accessing Facebook for news "yesterday" than those who were older.

While there was a propensity for older respondents to use more newspapers and online radio/TV/cable websites "yesterday" and in the "past week" for news, they had less trust in these sources than younger college students. In fact, older respondents had lower trust in all news sources (except for radio where no significant correlation was found) than those who were younger. They were also less likely to trust news media as a whole. Familiarity with a news source as a result of repeated exposure breeds a lack of trust in that particular source and the media as an institution (Cook \& Gronke, 2001). When older respondents used more newspapers and online radio/TV/cable websites for news, their skepticism toward these sources might increase. This might then lead to a decrease of trust in both sources. Also, when their trust in news media as a whole declined, it is possible that trust for components (i.e. news sources) in the media system decreased as well.

## Trust and Use of News Media by Gender

Surveys have found and exhibited patterns of use that differ between men and women (Bennett \& Bennett, 1989; Bimber, 2000; Davis \& Owen, 1998). In this study, significant differences between genders in terms of the usage of news media were seen more in online news sources. "Gender differences in Internet access and usage are important because the groups that have lower usage rates risk being excluded from job and educational opportunities as well as losing political influence as the Internet becomes increasingly important to how people live and work" (Ono \& Zavodny, 2002). Female respondents in this study used social media sources (e.g. Facebook and Twitter) for news more often "yesterday" and in the "past week," while male respondents were more likely
to get news from TV, online newspaper websites, and online radio/TV/cable websites. Though a recent study on gender difference in daily media use shows that 15 - to 25-yearold males are heavier users of most of the media sources (e.g. newspaper, magazine, TV, and radio), Internet users are more likely to be females (Marcelo, 2007). On the contrary, studies conducted specifically on the Internet usage patterns between genders indicate that women remain less frequent and less intense users of the Internet compared to men (Clemente, 1998; Ono \& Zavodny, 2002; Pitkow \& Kehoe, 1997).

Compared to females, male respondents in this study were more likely to spend more time "yesterday" reading a newspaper. Similar findings were demonstrated by the National Opinion Research Center (1996) in which about $45 \%$ of men and $40 \%$ of women reported reading a newspaper daily, a moderate but statistically significant gap. While women were found in previous research to be more likely than men to watch a TV news special or documentary (Bennett \& Bennet, 1989; Stanley \& Niemi, 1998), it appeared to be the other way around for both college genders in this study.

Female respondents had more trust in the news media in general than male respondents. They also had more trusts in all news sources (e.g. TV, online newspaper websites, online radio/TV/cable websites, Twitter, and Facebook) that showed a significance difference between genders. Interestingly, it was male students who consumed more news overall than female students.

On a side note, while the ANOVA analysis showed a significant difference between the average trust and use of some of the news sources, it did not indicate whether trust correlated with the use of a specific news source based on gender characteristics. In other words, it only allowed us to compare the means of the variables
(Stockburger, 1996), not to establish a significant relationship between trust and use of a news media by both genders.

## Trust and Use of News Media by College/Major

While previous studies have found correlations between trust and demographic variables such as age, trust, income, and education (Bellemare \& Kroeger, 2007; Bimber, 2000; Cook \& Gronke, 2001), there is hardly any that focuses specifically on academic majors. Therefore, this study did not seek to explain every trust pattern across colleges/majors but only pointed out some interesting findings that might prompt interest in this particular area of research.

ANOVA analysis showed significance difference in trust in news media as a whole across academic colleges ( $\mathrm{p}<.05$ ). Respondents in the Fine \& Performing Arts College had the most trust in news media in general, while undeclared students (who were still deciding or did not have a major at the time of the survey) had the least.

TABLE 28
MOST AND LEAST TRUST IN NEWS SOURCES BY COLLEGE/MAJOR

|  | Most Trust | Least Trust |
| :--- | :--- | :--- |
| Newspapers | Public Affairs \& Community Services | Undeclared |
| TV | Education \& Human Sciences | Undeclared |
| Radio | Fine \& Performing Arts | Undeclared |
| Online-only news websites | Fine \& Performing Arts | Undeclared |
| Online newspaper websites | Fine \& Performing Arts | Undeclared |
| Online radio/TV/ cable websites | Fine \& Performing Arts | Undeclared |
| Twitter | Journalism \& Mass Communications | Undeclared |
| Facebook | Journalism \& Mass Communications | Undeclared |
| Internet blogs/ weblogs | Fine \& Performing Arts | Undeclared |

Table 28 shows that when broken down to specific sources, students without a major had the least amount of trust in all nine news sources. On the other hand, students in the Fine \& Performing Arts scored highest in trusts for radio, online-only news websites, online newspaper websites, online radio/TV/cable websites, and Internet blogs/weblogs. Students in the Public Affairs and Community Services had most trust in newspapers. One possible explanation is that these students trusted newspaper as a source for accurate and thorough local, national, and international news that were of particular interest to them. TV was most trusted by students in the Education and Human Sciences College, and Twitter and Facebook by Journalism students. The increasing emphasis in the development of social media and mobile technology (Hermida, 2010; Kavoori \& Arceneaux, 2006) might contribute to higher trust in Twitter and Facebook among Journalism students (see Appendix 12 for ANOVA table).

In sum, future research can consider looking into the reason why such differences in trust exist among academic colleges or majors and whether this demographic variable is also significantly related to the use of news media among college students.

## Limitations

One of the limitations of this study was the method used in measuring trust. While the meaning associated with numbers on both ends of the 11-point scale was given $(0=$ "no trust"; $10=$ "complete trust"), the remaining numbers within the spectrum were weighted separately by the respondents themselves. For example, some of them might assign the $7^{\text {th }}$ point on the scale as "a lot of trust" while some might think 9 equals to "a lot of trust."

In addition, as mentioned in the literature reviewed, a multiple factor model of trust developed by Kohring and Matthes (2007) could be used to measure trust in news media based on various criteria. By just asking the question "How much trust do you have for the media in general?" this study failed to validate or refute the theory that trust in news media, like the sociological interpretation of the concept, is multidimensional.

This study was also limited by the fact that there was a lack of emphasis on the word "news" in the survey. It should be bolded and capitalized so the respondents could be more aware that they were supposed to be responding to their use of media sources strictly for news, and not entertainment, gaming, shopping, or any other purposes. It is possible that due to this lack of emphasis the respondents answered not only the use of media sources for the acquisition of news but for all kinds of different gratifications as well. The definition of "news" is constantly changing with the emergence of newer media sources that blur the line between news and entertainment (Gans, 2004; Pew Research, 1998). Therefore, a clearer and up-to-date definition of "news" should also be provided in the survey.

## Future Research

Future research can seek to investigate whether stronger correlation will be found between trust and use of other categories of news like magazines or more specifically, both local and national news organizations, such as FOX News, CNN.com, NPR, and USA Today (Kiousis, 2001). Will any differences be distinguished if respondents were asked to give their opinions on local versus national news instead of news media as a whole?

Furthermore, researchers can consider measuring trust using a more standardized and validated scale, such as the multiple factor model of trust developed by Kohring and Matthes (2007), to obtain a better evaluation and comprehensive depiction of judgments regarding trust.

Last but not least, this study can also be extended to people nationwide of all ages. It is interesting to study trust and news media behavior of older adults who are not in college. More socio-economic variables like income, education, and place of living can also be used in a broader-scoped study to find out if they have any significant association with trust and use of news media.

## CONCLUSION

This study was conducted to examine the relationship between trust and use of
news media among college students. Here are some of the key findings from the study:

- The association between overall trust and use of news media is weaker than predicted. While a moderate association between overall trust and use of news media was hypothesized, there was almost no correlation found between the two. This finding raised a question of whether trust should seen as a predictor for media use behavior as suggested in some prior research.
- Traditional news sources are generally more trusted than online news sources. Newspapers were found to be the news source most trusted by college students, despite their low consumption. College students also claimed to have more trust in online mainstream sources than online nonmainstream sources.
- Television remains the most important and most regularly used news source for college students. College students are not abandoning TV for new media. In fact, they not only were willing to spend more time using it on a regular basis, but they also tend to trust it more than other news sources. This is good news to the traditional mainstream media because " $80 \%$ of new media links are to legacy newspapers and broadcast networks, making it clear that traditional news sources remain the backbone of the media" (Pew Research, 2010).
- College students are more likely to seek out a future news event from online news sources. More than half of the respondents said they would get news for the next major event from an online news source. The amount of time they spent on one of the online sources, Facebook, was about the same as what they spent on TV.
- Social media sources are used as frequent sources for news. The correlations between trust and use of social media sources for news are stronger than those of other news sources. Even though social media sources like Facebook and Twitter were the least trusted sources, those who use them for news were likely to be more trustful of social media sources themselves.
- Older respondents have less trust in news media as a whole as well as in some news sources. Although older college students were more likely to mistrust news media, this was not reflected in their use of some of the
news sources. For instance, they spent more time using newspapers despite having less trust in them.
- Men tend to be heavier users of the news media, but they also have less trust than women. Even though men consumed more news than women overall, the differences were more obvious in online news sources. Women spent more time using social media sources like Facebook, while men spent theirs on the majority of other online news sources.

The results of this study show that trust might not be a strong variable for the use of news media among college students after all. Although these students still use a source for news and information despite their skepticism, news consumption among the younger audience remains low or worse, is dropping over the years. Therefore, news outlets, both online and offline, should perhaps seek to gain more users of this demographic not by (re-)gaining their trust but by diversifying their news content or by making them more easily accessible and consumable by college students.

This study also has an important implication for the traditional news industry. Specifically, it is worth investing in the development of news on television given its popularity among college students.

Online news media, on the other hand, might put more efforts into producing quality news products or ones that are similar to those found in newspapers or TV. Though college students might not use these sources as often as some of the traditional ones, it is demonstrated in the study that they are still likely to use online sources as an alternative to traditional news sources. This study also shows the emergence of social media, such as Facebook and Twitter, as a frequent source for news. Therefore, both online and traditional news outlets might consider using these platforms as a way to reach out to a wider audience and drive traffic back to the traditional news outlets.

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## Appendix A1: IRB Approval Letter

## Nebraska <br> Lincoln

## INFORMED CONSENT FORM <br> *You may keep this form by tearing off this page from the survey.

My name is Soo Hui Lee and I am a graduate student in Journalism and Mass Communications at the University of Nebraska-Lincoln campus. I am writing a research thesis on how much trust college students have for the media they are using.

The findings will be presented as a summary of what college students think of trust and the use of media by filling out the survey. If you are interested in the results of the study, I can arrange to send it to you. Just send me an email at leesoohui@hotmail.com with your name and mailing address.

This is an anonymous survey. You will not be asked to provide your name. Your personal information will not be saved or used in any way. There are no known risks involved in participating in this study. The benefit of participating in the survey is that you may learn more about the relationship between college students' trust and their use of different kinds of media. However, your participation is completely voluntary. You are free to decide not to participate or to withdraw at any time without adversely affecting your relationship with me, your professor, or the University of Nebraska-Lincoln.

You must be 19 years of age or older to participate in the study. By taking this survey, you are acknowledging that you are at least 19 years old. If you are under 19, you are not eligible to take the survey. You can turn in the blank survey with the rest of your classmates to the directed spot by the end of the survey period.

This anonymous survey will only take you about $10-15$ minutes to complete. When you have completed the survey, please leave the survey on the table at the front of the room.

If you have any questions, you can contact me at 402-613-4301 or my thesis adviser Dr. Laurie Thomas Lee at 402-472-0595. If you have any further questions, you may contact the UNL Institutional Review Board at 402-472-6965.

Thank you so much for your time.

## Appendix A2: Survey Questionnaire

This survey consists of questions of trust for the media and how you use them to get news. Your participation in this survey will be completely anonymous. You are not required to provide your name. You must be 19 years of age or older to participate in this study. If you're under 19, you are ineligible to take the survey. You may return the blank survey by turning it in with your classmates by the end of the survey period. There are no known risks involved in participating in the survey. Your participation is completely voluntary. You are free to decide not to participate or to withdraw at any time without adversely affecting your relationship with me, your professor, or the University of Nebraska-Lincoln. I appreciate your taking time to answer these questions. Completing the questionnaire should take about 10-15 minutes. By completing this survey you are giving your consent for the University of Nebraska-Lincoln and me to use this information in my Master's Thesis and possible future research.

1. Which of the following is your most important news source? Choose one.
a. Newspaper
b. Television
c. Radio
d. Online-ONLY news website
(i.e. online news website that does NOT have a hardcopy newspaper AND radio/TV/cable station, e.g. MSN, AOL, Huffington Post)
e. Online newspaper website
(i.e. paper that has a hardcopy AND an online website, e.g. Daily Nebraskan, Omaha World Herald, New York Times, Wall Street Journal)
f. Online radio/TV/cable website
(i.e. radio/TV/cable station that has an online website, e.g. CNN, 10/11, FOX News, WOWT, NPR, KFOR)
g. Twitter
h. Facebook
i. Internet blogs or weblogs
j. Other media source (Please specify):
k. My most important news source is not from the media (Please specify source):
2. Based on the last major news event you can recall, did you FIRST learn it from (choose one):
a. Newspaper
b. Television
c. Radio
d. Online-ONLY news website
e. Online newspaper website
f. Online radio/TV/cable website
g. Twitter
h. Facebook
i. Internet blogs or weblogs
j. Other media source (Please specify):
k. I do not first learn about a major news event from the media (Please specify source):
3. The next time that you want to get news about a major event that is happening - where will you FIRST go to get that news? Choose one.
a. Newspaper
b. Television
c. Radio
d. Online-ONLY news website
e. Online newspaper website
f. Online radio/TV/cable website
g. Twitter
h. Facebook
i. Internet blogs or weblogs
j. Other media source (Please specify):
k. I do not first get news about a major event from the media (Please specify source):
4. In general, how much trust do you have in the media in general - such as newspapers, television, radio, and the Internet - when it comes to getting news you want? Base your answer on a scale of 0 to 10 , with 0 meaning no trust at all, whereas 10 meaning complete trust. In other words, the bigger the number, the more trust you have. CIRCLE a number.

| No Trust |  |  |  |  |  |  |  |  |  | te |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

5. In the boxes below, we would like you to tell us on average, how often you get news from EACH of the following media in the past WEEK?
Just enter a number. For example, none at all $=0$; once a week $=1$; twice a week $=2$; and so forth.

| Medium | Times used for News in |
| :--- | :---: |
| Newspaper |  |
| Television |  |
| Radio |  |
| Online-only news website |  |
| Online newspaper website |  |
| Online radio/TV/cable website |  |
| Twitter |  |
| Facebook |  |
| Internet blogs or weblogs |  |

6. In the boxes below, we would like you to estimate the number of hours you spent YESTERDAY getting news from EACH of the following media.
Just enter the number of hour(s) and/or minute(s) (not a range). For example, 15 minutes $=0 \mathrm{hr}$ : $15 \mathrm{~min} ; 2$ hours $=2 \mathrm{hr}: 0 \mathrm{~min} ;$ no time at all $=0 \mathrm{hr}: 0 \mathrm{~min}$.

| Medium | News Hours <br> YESTERDAY |  |
| :---: | :---: | :---: |
| Newspaper | hr: | min |
| Television | hr : | min |
| Radio | hr: | min |
| Online-only news website | hr: | min |
| Online newspaper website | hr: | min |
| Online radio/TV/cable website | hr : | min |
| Twitter | hr: | min |
| Facebook | hr : | min |
| Internet blogs or weblogs | hr: | min |

7. In general, how much trust do you have in EACH medium when it comes to getting news you want? Base your answer on a scale of 0 to 10 , with 0 meaning no trust at all, whereas 10 meaning complete trust. In other words, the bigger the number, the more trust you have. CIRCLE a number on EACH of the following:

No Trust Complete

| Newspapers | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Television | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Radio | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Online-only news website | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |


| Online <br> website | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| Online radio/TV/ cable website | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Twitter | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |


| Facebook | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Internet blogs or |  |  |  |  |  |  |  |  |  |  |  |
| Weblogs | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

8. What is your age?
9. Are you female or male? Female $\qquad$ Male $\qquad$
10. What is your major?

If you have any questions, please contact me at 402-613-4301 or my thesis adviser Dr. Laurie Thomas Lee at 402-472-0595. If you have any further questions, you may contact the UNL Institutional Review Board at 402-472-6965.

## Appendix A3: Descriptive Data for Average Trust by News Sources

TABLE A-3
AVERAGE TRUST BY NEWS SOURCES

|  | N | Mean | Std. <br> Deviation |
| :--- | :---: | :---: | :---: |
|  |  |  |  |
| Average Trust in: | 489 | 7.19 | 1.847 |
| Newspapers | 488 | 6.29 | 2.134 |
| TV | 483 | 6.26 | 2.046 |
| Radio | 488 | 6.09 | 2.205 |
| Online-only news websites | 485 | 6.68 | 2.100 |
| Online newspaper websites | 480 | 5.66 | 2.160 |
| Online radio/TV/cable websites | 483 | 2.96 | 2.527 |
| Twitter | 489 | 3.30 | 2.346 |
| Facebook | 482 | 3.09 | 2.410 |
| Internet blogs/weblogs |  |  |  |

## Appendix A4: Descriptive Data for Average Use of News Media by News Sources

TABLE A-4
AVERAGE USE OF NEWS MEDIA BY NEWS SOURCES

|  | N | Mean | Median | Std. <br> Deviation |
| :--- | ---: | ---: | ---: | :---: |
|  |  |  |  |  |
| How Often (Average Number |  |  |  |  |
| of Times) in the Past Week Getting |  |  |  |  |
| News from: |  |  |  |  |
| Newspapers | 487 | 1.64 | 1.00 | 1.815 |
| TV | 486 | 2.99 | 2.00 | 2.560 |
| Radio | 486 | 2.08 | 1.00 | 2.309 |
| Online-only news websites | 486 | 2.22 | 1.00 | 2.672 |
| Online newspaper websites | 486 | 1.50 | 0.00 | 2.414 |
| Online radio/TV/cable websites | 485 | 1.15 | 0.00 | 2.140 |
| Twitter | 484 | 0.98 | 0.00 | 4.931 |
| Facebook | 483 | 2.41 | 1.00 | 2.770 |
| Internet blogs/weblogs | 486 | 0.72 | 0.00 | 1.675 |
|  |  |  |  |  |
| Time (Average Minutes) Spent |  |  |  |  |
| Yesterday Getting News from: | 485 | 9.74 | 0.00 | 19.851 |
| Newspapers | 481 | 35.63 | 15.00 | 54.688 |
| TV | 484 | 20.60 | 0.00 | 48.336 |
| Radio | 484 | 17.19 | 0.00 | 38.421 |
| Online-only news websites | 483 | 7.56 | 0.00 | 22.209 |
| Online newspaper websites | 484 | 6.93 | 0.00 | 24.883 |
| Online radio/TV/cable websites | 484 | 8.23 | 0.00 | 31.645 |
| Twitter | 480 | 33.64 | 0.00 | 69.264 |
| Facebook | 685 | 6.12 | 0.00 | 23.641 |
| Inernet blogs/ weblogs |  |  |  |  |

## Appendix A5: Frequencies Table for Most Important News Source and Sources for Last and Next Major News Events

## TABLE A-5 <br> FREQUENCIES FOR MOST IMPORTANT NEWS SOURCE, AND SOURCES FOR LAST AND NEXT MAJOR NEWS EVENTS

|  | N | \% |
| :---: | :---: | :---: |
| Most Important News Source is: |  |  |
| Newspapers | 51 | 10.7 |
| TV | 159 | 33.3 |
| Radio | 34 | 7.1 |
| Online-only news websites | 80 | 16.7 |
| Online newspaper websites | 73 | 15.3 |
| Online radio/TV/cable websites | 40 | 8.4 |
| Twitter | 5 | 1.0 |
| Facebook | 21 | 4.4 |
| Internet blogs/weblogs | 8 | 1.7 |
| Other media source | 4 | 0.8 |
| Not from media | 3 | 0.6 |
| Total | 478 | 100.0 |
| Source for Last Major News Event: |  |  |
| Newspapers | 27 | 5.5 |
| TV | 176 | 36.1 |
| Radio | 45 | 9.2 |
| Online-only news websites | 72 | 14.8 |
| Online newspaper websites | 26 | 5.3 |
| Online radio/TV/cable websites | 29 | 5.9 |
| Twitter | 15 | 3.1 |
| Facebook | 53 | 10.9 |
| Internet blogs/weblogs | 7 | 1.4 |
| Other media source | 4 | 0.8 |
| Not from media | 34 | 7.0 |
| Total | 488 | 100.0 |
| Source for Next Major News Event: |  |  |
| Newspapers | 26 | 5.3 |
| TV | 108 | 22.2 |
| Radio | 10 | 2.1 |
| Online-only news websites | 157 | 32.3 |
| Online newspaper websites | 112 | 23.0 |
| Online radio/TV/cable websites | 46 | 9.5 |
| Twitter | 3 | 0.6 |
| Facebook | 9 | 1.9 |
| Internet blogs/weblogs | 2 | 0.4 |
| Other media source | 7 | 1.4 |
| Not from media | 6 | 1.2 |
| Total | 486 | 100.0 |

## Appendix A6: Descriptive Data by Gender Based on Average Overall Trust in News Media

TABLE A-6
AVERAGE OVERALL TRUST IN NEWS MEDIA BY GENDER

| AVERAGE OVERALL |  |  |  |  |
| :--- | :--- | :---: | :---: | :---: |
|  |  | N | Mean | Std. <br> Deviation |
|  | Female | 205 | 6.01 | 1.505 |
| Average Overall Trust | Male | 284 | 5.60 | 1.650 |
| in News Media | Total | 489 | 5.77 | 1.603 |
|  |  |  |  |  |

## Appendix A7: Descriptive Data by Gender Based on Average Trust in Different News Sources

TABLE A-7
AVERAGE TRUST IN DIFFERENT NEWS SOURCES

|  |  | N | Mean | Std. <br> Deviation |
| :---: | :---: | :---: | :---: | :---: |
| Trust in: |  |  |  |  |
| News media in general | Female | 205 | 6.01 | 1.505 |
|  | Male | 284 | 5.60 | 1.650 |
|  | Total | 489 | 5.77 | 1.603 |
| Newspapers | Female | 205 | 7.32 | 1.805 |
|  | Male | 283 | 7.10 | 1.878 |
|  | Total | 488 | 7.19 | 1.849 |
| TV | Female | 205 | 6.70 | 1.918 |
|  | Male | 282 | 6.00 | 2.233 |
|  | Total | 487 | 6.29 | 2.133 |
| Radio | Female | 202 | 6.27 | 1.934 |
|  | Male | 280 | 6.26 | 2.215 |
|  | Total | 482 | 6.26 | 2.045 |
| Online-only news websites |  | 205 | 6.28 | 2.148 |
|  | Male | 282 | 5.96 | 2.241 |
|  | Total | 487 | 6.09 | 2.206 |
| Online newspaper websites | Female | 205 | 7.04 | 1.912 |
|  |  | 279 | 6.42 | 2.190 |
|  | Total | 484 | 6.68 | 2.098 |
| Online radio/TV/ cable websites | Female | 200 | 5.90 | 2.040 |
|  | Male | 279 | 5.48 | 2.233 |
|  | Total | 479 | 5.66 | 2.162 |
| Twitter | Female | 200 | 3.17 | 2.498 |
|  | Male | 282 | 2.67 | 2.557 |
|  | Total | 482 | 2.88 | 2.542 |
| Facebook | Female | 205 | 3.58 | 2.207 |
|  | Male | 283 | 3.11 | 2.433 |
|  | Total | 488 | 3.31 | 2.350 |
| Internet blogs/ weblogs | Female | 202 | 3.09 | 2.274 |
|  | Male | 279 | 3.10 | 2.532 |
|  | Total | 481 | 3.10 | 2.424 |

## Appendix A8: Descriptive Data by Gender Based on Average Use of News Media

TABLE A-8
AVERAGE USE OF NEWS MEDIA BY GENDER

|  |  | N | Mean | Std. <br> Deviation |
| :--- | :--- | :---: | :---: | :---: |
| How Often (Average Number of | Female | 205 | 1.62 | .949 |
| Times) in the Past Week Getting | Male | 281 | 2.52 | 11.591 |
| News from News Media | Total | 486 | 2.14 | 8.840 |
|  |  |  |  |  |
| Time (Average Minutes) Spent | Female | 204 | 13.92 | 18.041 |
| Yesterday Getting News from | Male | 280 | 17.87 | 17.903 |
| News Media | Total | 484 | 16.21 | 18.049 |

## Appendix A9: Descriptive Data by Gender Based on Average Use of Different News Sources

TABLE A-9a
HOW OFTEN IN THE PAST WEEK GETTING NEWS FROM DIFFERENT NEWS SOURCES BY GENDER

|  |  | N | Mean | Std. Deviation |
| :---: | :---: | :---: | :---: | :---: |
| How Often (Average Number of Times) in the Past Week Getting News from: |  |  |  |  |
| Newspapers | Female | 205 | 1.45 | 1.770 |
|  | Male | 280 | 1.77 | 1.816 |
|  | Total | 485 | 1.64 | 1.801 |
| TV | Female | 205 | 2.63 | 2.229 |
|  | Male | 279 | 3.26 | 2.753 |
|  | Total | 484 | 2.99 | 2.561 |
| Radio | Female | 204 | 2.11 | 2.173 |
|  | Male | 280 | 2.05 | 2.408 |
|  | Total | 484 | 2.08 | 2.310 |
| Online-only news websites | Female | 204 | 1.95 | 2.328 |
|  | Male | 280 | 2.42 | 2.891 |
|  | Total | 484 | 2.22 | 2.676 |
| Online newspaper websites | Female | 205 | 1.17 | 1.664 |
|  | Male | 279 | 1.75 | 2.823 |
|  | Total | 484 | 1.51 | 2.417 |
| Online radio/TV/ cable websites | Female | 204 | 0.83 | 1.780 |
|  | Male | 279 | 1.39 | 2.349 |
|  | Total | 483 | 1.15 | 2.143 |
| Twitter | Female | 203 | 1.07 | 2.439 |
|  | Male | 279 | 0.92 | 6.157 |
|  | Total | 482 | 0.99 | 4.941 |
| Facebook | Female | 202 | 2.75 | 2.741 |
|  | Male | 279 | 2.18 | 2.776 |
|  | Total | 481 | 2.42 | 2.773 |
| Internet blogs/ weblogs | Female | 204 | 0.64 | 1.659 |
|  | Male | 280 | 0.77 | 1.693 |
|  | Total | 484 | 0.72 | 1.678 |

TABLE A-9b
TIME SPENT YESTERDAY GETTING NEWS FROM DIFFERENT NEWS SOURCES BY GENDER

|  |  | N | Mean | Std. <br> Deviation |
| :---: | :---: | :---: | :---: | :---: |
| Time (Average Minutes) |  |  |  |  |
| Spent Yesterday Getting |  |  |  |  |
| News from: |  |  |  |  |
| Newspapers | Female | 204 | 6.18 | 14.249 |
|  | Male | 279 | 12.36 | 22.829 |
|  | Total | 483 | 9.75 | 19.886 |
| TV | Female | 203 | 24.99 | 46.168 |
|  | Male | 276 | 43.71 | 59.128 |
|  | Total | 479 | 35.78 | 54.753 |
| Radio | Female | 204 | 16.26 | 40.902 |
|  | Male | 278 | 23.86 | 53.121 |
|  | Total | 482 | 20.64 | 48.427 |
| Online-only news websites | Female | 204 | 12.04 | 29.496 |
|  | Male | 278 | 21.10 | 43.582 |
|  | Total | 482 | 17.27 | 38.485 |
| Online newspaper websites | Female | 204 | 4.56 | 11.726 |
|  | Male | 277 | 9.83 | 27.350 |
|  | Total | 481 | 7.59 | 38.485 |
| Online radio/TV/ cable websites | Female | 204 | 3.12 | 12.883 |
|  | Male | 278 | 9.77 | 30.641 |
|  | Total | 482 | 6.96 | 24.931 |
| Twitter | Female | 203 | 11.82 | 39.650 |
|  | Male | 279 | 5.68 | 24.105 |
|  | Total | 482 | 8.27 | 31.706 |
| Facebook | Female | 202 | 41.71 | 83.860 |
|  | Male | 276 | 27.76 | 55.920 |
|  | Total | 478 | 33.65 | 69.381 |
| Internet blogs/ weblogs | Female | 204 | 5.17 | 24.825 |
|  | Male | 279 | 6.86 | 22.837 |
|  | Total | 483 | 6.15 | 23.686 |

## Appendix A10: Descriptive Data by College/Major Based on Average Overall Trust in News Media

TABLE A-10
AVERAGE OVERALL TRUST IN NEWS MEDIA BY COLLGE/MAJOR

|  | N | Mean | Std. <br> Deviation |  |
| :--- | :--- | ---: | :---: | :---: |
| Overall Trust in | Agricultural Sciences \& Natural | 70 | 5.57 | 1.571 |
| News Media | Resources | 13 | 5.39 | 1.290 |
|  | Architecture | 43 | 5.19 | 1.834 |
|  | Arts \& Sciences | 42 | 5.85 | 1.641 |
|  | Business Administration | 119 | 5.99 | 1.454 |
|  | Education \& Human Sciences | 107 | 5.81 | 1.630 |
|  | Engineering | 16 | 6.27 | 1.043 |
|  | Fine \& Performing Arts | 39 | 6.24 | 1.192 |
|  | Journalism \& Mass |  |  |  |
|  | Communications | 4 | 6.04 | 1.768 |
|  | Public Affairs \& Community |  |  |  |
|  | Services | 55 | 5.59 | 2.035 |
|  | Double Majors | 3.85 | 2.764 |  |
|  | Undeclared | 488 | 5.78 | 1.604 |
|  | Total |  |  |  |

## Appendix A11: ANOVA and Descriptive Data for Trust in News Media in General by Most Important News Source

## TABLE A-11a <br> ANOVA: TRUST IN NEWS MEDIA IN GENERAL BY MOST IMPORTANT NEWS SOURCE

|  |  | Sum of <br> Squares | df | Mean <br> Square | F | Sig. |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
|  | Between Groups |  | 88.536 | 10 | 8.854 | 2.840 |
| Trust in News | Within Groups | 1443.582 | 463 | 3.118 |  |  |
| Media in General | Wotal | 1532.118 | 473 |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

TABLE A-11b
TRUST IN NEWS MEDIA IN GENERAL BY MOST IMPORTANT NEWS SOURCE

|  | N | Mean | Std. <br> Deviation |  |
| :--- | :--- | ---: | ---: | ---: |
| Trust in News | Most important news source is: |  |  |  |
| Media in General | Newspapers | 50 | 6.00 | 1.938 |
|  | TV | 159 | 6.53 | 1.706 |
|  | Radio | 34 | 5.94 | 1.808 |
|  | Online-only news websites | 78 | 6.42 | 1.533 |
|  | Online newspaper websites | 72 | 6.03 | 1.935 |
|  | Online radio/TV/cable websites | 39 | 5.95 | 1.685 |
|  | Twitter | 6 | 7.67 | .816 |
|  | Facebook | 21 | 7.14 | 1.459 |
|  | Internet blogs/weblogs | 8 | 5.63 | 2.264 |
|  | Other media source | 4 | 4.75 | 2.754 |
|  | Not from the media | 3 | 3.67 | 4.041 |
|  |  |  |  |  |
|  | Total | 474 | 6.28 | 1.800 |
|  |  |  |  |  |

## Appendix A12: ANOVA by College/Major: Average Trust in Different News Sources

| TABLE A-12 <br> ANOVA BY COLLEGE/MAJOR: AVERAGE TRUST IN DIFFERENT NEWS SOURCES |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Sum of Squares | df | Mean Square | F | Sig. |
| Average Trust in: Newspapers | Between Groups Within Groups Total | $\begin{array}{r} 64.801 \\ 1590.275 \\ 1655.076 \end{array}$ | $\begin{array}{r} 10 \\ 476 \\ 486 \end{array}$ | $\begin{aligned} & 6.480 \\ & 3.341 \end{aligned}$ | 1.940 | . 038 |
| TV | Between Groups Within Groups Total | $\begin{array}{r} 143.807 \\ 2063.117 \\ 2206.924 \end{array}$ | $\begin{array}{r} 10 \\ 475 \\ 485 \end{array}$ | $\begin{array}{r} 14.381 \\ 4.343 \end{array}$ | 3.311 | . 000 |
| Radio | Between Groups Within Groups Total | $\begin{array}{r} 76.295 \\ 1928.220 \\ 2004.516 \end{array}$ | $\begin{array}{r} 10 \\ 470 \\ 480 \end{array}$ | $\begin{aligned} & 7.630 \\ & 4.103 \end{aligned}$ | 1.860 | . 049 |
| Online-only news websites | Between Groups Within Groups Total | $\begin{array}{r} 84.371 \\ 2243.278 \\ 2327.648 \end{array}$ | $\begin{array}{r} 10 \\ 475 \\ 485 \end{array}$ | $\begin{aligned} & 8.437 \\ & 4.723 \end{aligned}$ | 1.786 | . 061 |
| Online newspaper websites | Between Groups Within Groups Total | $\begin{array}{r} 90.745 \\ 1989.905 \\ 2080.650 \end{array}$ | $\begin{array}{r} 10 \\ 472 \\ 482 \end{array}$ | $\begin{aligned} & 9.074 \\ & 4.216 \end{aligned}$ | 2.152 | . 020 |
| Online radio/TV/cable websites | Between Groups Within Groups Total | $\begin{array}{r} 128.608 \\ 2072.130 \\ 2200.738 \end{array}$ | $\begin{array}{r} 10 \\ 467 \\ 477 \end{array}$ | $\begin{array}{r} 12.861 \\ 4.437 \end{array}$ | 2.898 | . 002 |
| Twitter | Between Groups Within Groups Total | $\begin{array}{r} 127.285 \\ 2976.196 \\ 3103.480 \end{array}$ | $\begin{array}{r} 10 \\ 470 \\ 480 \end{array}$ | $\begin{array}{r} 12.728 \\ 6.332 \end{array}$ | 2.010 | . 031 |
| Facebook | Between Groups Within Groups Total | $\begin{array}{r} 34.434 \\ 2625.365 \\ 2659.799 \end{array}$ | $\begin{array}{r} 10 \\ 476 \\ 486 \end{array}$ | $\begin{aligned} & 3.443 \\ & 5.515 \end{aligned}$ | . 624 | . 793 |
| Internet blogs/weblogs | Between Groups Within Groups Total | $\begin{array}{r} 137.204 \\ 2543.996 \\ 2791.200 \end{array}$ | $\begin{array}{r} 10 \\ 469 \\ 479 \end{array}$ | $\begin{array}{r} 13.720 \\ 5.659 \end{array}$ | 2.425 | . 008 |


[^0]:    Lee, Soo Hui, "Does Trust Really Matter? A Quantitative Study of College Students' Trust and Use of News Media" (2011). Theses from the College of Journalism and Mass Communications. 15.
    https://digitalcommons.unl.edu/journalismdiss/15

[^1]:    ${ }^{1}$ The distinction between confidence and trust depends on perception and attribution. However, both concepts involve expectation toward another party that may lapse into disappointment when the expectation fails (Luhmann, 2000).

[^2]:    ${ }^{2}$ UNL Fact Book 2009-2010 is the most up-to-date version found on the website. The enrollment data for Spring 2011 was not yet available at the time this thesis was written.

[^3]:    *. Correlation is significant at the 0.05 level (2-tailed).
    **. Correlation is significant at the 0.01 level ( 2 -tailed).

[^4]:    *. Correlation is significant at the 0.05 level (2-tailed).
    **. Correlation is significant at the 0.01 level ( 2 -tailed).

[^5]:    *. Correlation is significant at the 0.05 level (2-tailed).
    **. Correlation is significant at the 0.01 level ( 2 -tailed).

[^6]:    *. Correlation is significant at the 0.05 level (2-tailed).
    **. Correlation is significant at the 0.01 level ( 2 -tailed).

[^7]:    *Correlation is significant at the 0.05 level (2-tailed).
    **. Correlation is significant at the 0.01 level (2-tailed).

[^8]:    ${ }^{3}$ News feed on Facebook is the center column of one's homepage. It is a constantly updating list of stories from people and Pages that one follows on Facebook.

[^9]:    *. Correlation is significant at the 0.05 level (2-tailed).
    **. Correlation is significant at the 0.01 level (2-tailed).

[^10]:    *. Correlation is significant at the 0.05 level (2-tailed).
    **. Correlation is significant at the 0.01 level (2-tailed).

