The role of agenda melding in measuring news media literacy

Christine McWhorter

Norfolk State University, USA

OPEN ACCESS

ABSTRACT

During the past few decades, educators, advocates and researchers have developed initiatives to increase news media literacy. Recent surveys indicate that audiences combine agendas from various media to suit their own needs through group discussion. This process is called "agenda melding." Agenda melding includes the "need for orientation" function in a social context that acknowledges that the perceived importance of news issues changes in relation to their discussions with others. Using an online survey instrument with a sample of young adults, this study measures the level of news media literacy in young adults and examines the relationship between news media literacy, mindfulness, locus of control, and agenda melding. This study sought to determine whether relationships exist between the agenda melding process and news media literacy. Findings suggest that participation in the agenda melding process is associated with increases in levels of news media literacy.

Keywords: *news media literacy, agenda melding, young adults, digital media.*

INTRODUCTION

Recent trends, issues, and research needs regarding news media literacy relate to the dramatically changing digital media environment that has emerged in the United States and elsewhere in recent years. This new media landscape has altered the way traditional news organizations function generally, and how they report and disseminate news. It has also created opportunities for new types of news outlets, journalists, and critics of traditional news organizations and practices to arise. News media literacy must be better understood in light of these changes and how individuals, groups, audiences, and cultures seek, respond to, are affected by, understand, and even participate in this new news climate.Inherent in many media literacy definitions is the underlying implication that media literacy is important in K-12 education. However, many researchers and organizations, even those advocating for media literacy education, overlook adults' media literacy needs (Livingstone et al., 2003). Since the practice of teaching media literacy, including news media literacy, to children is not yet widespread in the United States, many adult Americans have never been exposed to any formal method of media literacy education (Dennis, 2004). There is currently a "catch up" factor for adults. In addition, those about to enter, or who have recently entered adulthood need media literacy skills and abilities as well (Dennis, 2004).

At a collegiate level, media literacy courses are more likely to be taught, but remain rare (Silverblatt & Stuhlman, 2007). On the college campus, media literacy tends to be associated with mass communication courses and introductory communication classes. In introductory classes, media literacy is addressed in terms of information literacy and usually includes instruction on credible sources. In mass communication classes, communication theories such as uses and gratifications, cultural theory, and agenda setting are typically covered (Dennis, 2004). It may be the case that the media literacy skills taught through these classes have cumulative effects on news media literacy. However, courses in which news media literacy is the primary emphasis or goal, rather than being embedded in coursework aimed at fulfilling other or multiple purposes, seem to be quite uncommon. It is also unknown precisely how media literacy competencies are approached (Martens, 2010).

More research is needed to determine the efficacy of these courses in the context of media literacy and news media literacy. Educational services that involve news media literacy instruction are needed for young adults enrolled in colleges and also for adults in continuing education programs aimed at preparing students for professional fields and trades (Beckett, 2017; Farmer, 2019; Luhtala & Whiting, 2018). As a result, it is vitally important for scholars to find theory-based methods of increasing news media literacy.

One area for scholars to explore is agenda melding. Agenda melding is "the social process by which we meld agendas from various sources, including other people, to create pictures of the world that fit our experiences and preference" (McCombs et al., 2014, p. 794). Based on the time-tested theory of agenda setting, agenda melding describes the way media users learn about issues. In traditional agenda setting, issue salience is transferred solely from mass (vertical) media to individuals. Conversely, with agenda melding, issue salience is transferred "horizontally" through interaction with people. "One joins the community by finding a medium of connection and learning the issue saliencies of the community" (Shaw et al., 1999, p. 7). These media connections could be interpersonal sources, vertical media, or horizontal media (Ragas & Roberts 2009).

The agenda-melding model could prove useful to news media literacy scholarship because it may help explain the mechanism by which individuals learn about news. Agenda melding occurs because "those who desire to join a group or community, but who have little information about it, will be the most likely to seek information about its agenda from other persons or from various media such as newspapers and magazines" (Weaver et al., 2010, p. 2). This process mirrors actions of individuals who demonstrate high levels of news media literacy. It is possible that the changing ways in which people meld news could have an association with their level of news media literacy. To help answer this question, more scholarly research is needed, including studies designed to determine the level of news media literacy among those that are interacting with news. This study is an effort to help meet this need by examining the news media literacy level of young adults aged 18-25 in the United States, the extent to which they are involved in the agenda melding process, and whether agenda melding is associated with news media literacy levels.

LITERATURE REVIEW

Scholars argue that news, and therefore news media literacy, is important because of the prominent role it can

play in influencing the lives of citizens (Vraga et al., 2015). Citizens are expected to become active, knowledgeable participants in the democratic system (Ashley et al., 2017). How an individual determines, which news sources to trust, how to understand different candidates' assertions, how to vote, and how to participate in civil society are all key issues related to news media literacy. Furthermore, social media, blogs, and video content sites have all become sources of news in the digital landscape, especially for young adults (Mitchell, 2018). While these platforms allow information to travel at lightning speed, they also allow unchecked and often inaccurate information to be spread (Jang & Kim, 2018). With the advent and proliferation of digital media, people need more than ever to critically assess information that is being conveyed through these digital outlets (Shoemaker & Reese, 2011; Shoemaker & Vos, 2009).

Conceptualizing news media literacy

Several authors have outlined definitions and dimensions of media literacy (Ashley et al., 2013; Maksl et al., 2015; Martens, 2010). Components of media literacy include knowledge of media messages, media audiences, media content, media industries, media effects, the real world, and the self (Martens, 2010; Potter, 2015.) The combination of these structures and drives determines the ways in which people will process information (Potter, 2015). Thus, media literate people are those who understand media industries, effects, and content. They think about their experience with media and exercises control over their media choices.

These media literacy components are also fitting elements of news media literacy. News media literacy extends these concepts and integrates elements that are specific to news. A person's level of news media literacy fluctuates depending on:

> the degree to which one engages in mindful versus automatic thought-processing of news, the degree to which one perceives herself as being in control versus the news media being in control of the influence of news media, and the knowledge one has of the institutions that produce news, the way in which the content of the news is produced and the effects of that content on people (Ashley et al., 2013, p. 7).

Since news media literacy requires learning about "production, content, effects of news, and the skills to apply this knowledge when using news media" (Kleemans et al., 2016, p. 75), the concept requires a more nuanced definition than generalized media literacy. Schwarz (2011) defines news media literacy as "the ability to critically evaluate, interpret, and process as well as participate in news media and journalistic content in order to participate as active citizens in democratic society" (p. 1).

Media Literacy Measurement. Based on what scholars have outlined as components of media literacy, researchers have found success measuring media literacy using qualitative, quantitative, and mixed research methodologies. These studies typically measure critical thinking, comprehension, knowledge of media structures, and knowledge of production, and can be used in a variety of educational and practical contexts (Arke & Primack, 2009; Duran et al., 2008; Hobbs & Frost, 2003). Several studies investigate measures of media literacy as they pertain to combating negative behaviors espoused by media messages such as smoking, adopting a negative body image, and unhealthy sexual behavior (Pinkleton et al., 2007; Pinkleton et al., 2008; Primack et al., 2009).

News media literacy measurement. As an increasingly significant topic under the media literacy umbrella, news media literacy requires a more specific form of media literacy measurement. Measurement helps researchers "understand baseline levels of news media literacy among Americans" (Vraga et al., 2015, p. 42). For instance, the scale used by Ashley et al. (2013) measures news media literacy based on consumption and production habits. The model focuses on three dimensions: how audiences are targeted for profit and influence, how messages affect viewers' point of view based on content and various production techniques, and how messages that filter reality and omit information can affect users' perception of reality. Other scholars measure active citizenship in a democratic society as a vital component of news media literacy (Vraga et al., 2015).

Maksl et al. (2015) developed a measuring instrument based on cognitive processing of media information. The instrument provides a theory-based guideline for measuring general overall news media literacy, making it suitable for exploring relationships between news media literacy and behaviors that could affect it. This scale is the basis for the present study. The scale developed by Maksl et al. (2015) measures news media by adopting Potter's knowledge structures model to news media. The present study focused on three aspects of news media literacy: mindful processing, locus of control, and knowledge structures. Mindful thought processing focuses on the specific ways in which people process news. Locus of control deals with

the degree to which media users are in control of their news experience. Finally, knowledge structures aspect covers how much media users know about the news-making process. It was sectioned into three categories: media industries, media content, and media effects. The present study showed news media literacy can be specifically measured using critical thinking components.

Agenda melding

As the news environment has changed, so have agenda setting effects. The most prominent change stems from the democratization of news. Until recently, legacy or "vertical" media controlled when and how audiences received information (Francisco, 2014; Jenkins, 2006; Weaver et al., 2010). The proliferation of digital media has created a democratization effect where blogs, social media, and wikis give anyone access to information instantly. The exclusivity of vertical media has, therefore, been replaced by a high interactivity environment. This type of environment allows the audience to experience a high degree of choice from various groups and alternative media, which are known as horizontal media (Weaver et al., 2010). These changes have affected the media-gathering environment and have accelerated the process of agenda melding.

Agenda melding focuses on audiences and how they receive media messages. The process operates in two ways. Through their own values and environmental effects, audiences choose media outlets that are specialized and fit their own interests. The media choices made by the audience members affect the transfer of salience (Shaw et al., 2006). Alternatively, agenda melding can occur when audiences converge through news discussion creating a "group consumption." In this way, audiences initiate inter-group salience among groups to which they belong, whether on-line or off-line (Shaw et al., 2006).

Agenda melding and news media literacy

Although literature about agenda melding focuses on transfer of salience (Ragas & Roberts, 2009; Shaw et al., 1999; Shaw et al., 2006; Takeshita, 1993), several media and communication findings may explain how the components of agenda melding enhance not only salience transfer, but also learning. This connection could indicate an association between the agenda melding process and the process of developing of news media literacy. Agenda melding draws theoretical

grounding from the agenda-setting literature. Need for orientation, a well-researched aspect of agenda setting, explains that an individual's desire to learn about a civic issue depends on the level of uncertainty and perceived interest in the issue (Einwiller et al., 2010; Matthes, 2008; Weaver, 1980). Individuals with a greater need for orientation for an issue will be more likely to learn the media agenda on the issue (Weaver, 1991). Need for orientation is also related to education. Weaver et al. (2010) found that "individuals with higher levels of education are more likely to experience greater need for orientation." These authors argue that higher education typically increases interest in public issues, which in turns causes people with more education to mirror the media's agenda. Since need for orientation drives agenda melding (Ragas & Roberts, 2009), it is reasonable to suggest people who engage in a high level of agenda melding are driven to learn about news. This drive to learn about news may indicate a relationship between agenda melding and news media literacy.

An important part of the agenda melding process includes discussing news with groups online. Agenda melding scholars argue, "The available media in the marketplace have exploded. Some of us read newspapers on the Web, find or create groups of similar interest on Facebook or Twitter" (McCombs et al., 2014, p. 793). Scholars also posit that, "Smaller communication segments replace mass media as major sources of information and opinion" (Shaw et al., 2006, p. 24). Shaw et al. (1999) define groups as "collections of people based on some shared values, attitudes, or opinions" (p. 8). Thus, questions were created to discern whether individuals joined news-based groups online or in person. Agenda melding also includes a process where individuals "meld their individual agendas with the agendas of the group" (Ragas & Roberts, 2009, p. 46). Therefore, questions were developed that measure whether news issues that are important to participants change based on their discussions with others, whether online or in person. Another important component of agenda melding involves learning of events from many sources. Scholars argue, "Audiences most probably mix the agendas in ways that are personally comfortable. Audiences meld the agendas from a variety of sources" (Shaw & McCombs, 2008, p. 7). Therefore, a question was added to determine whether participants use a variety of news sources when gathering news. Finally, Shaw et al. (2006) argue that, "The vertical media's reach has declined, while that of the alternative media - horizontal media that primarily interpret details - has increased" (p. 18).

Group participation and news media literacy

In addition to agenda melding studies, participatory learning theories also provide a basis for why agenda melding may have a relationship to news media literacy. Advocates of learning through interaction say it positions "students as critical, collaborative, and creative participants in the social construction of knowledge" (Burgess, 2006, p. 105). McLoughlin and Lee (2008) argue that many of the most important aspects of learning are supported through participatory learning. Socialization, access to open communities, and access to peer-to-peer networks are all characteristics that increase learning about news and may affect news media literacy as well.

Use of multiple media sources and news media literacy

The pervasive nature of horizontal media (niche) has affected the way the media agenda is set. Audiences' ability to tailor news interests and information to unique specifications means they can "meld the news" to fit specific agendas, which they can then tailor to fit their unique interest (Shaw et al., 2006). Users of niche media in the current digital media environment often use traditional media to get primary news information, but then, reframe it by visiting internet forums, chat rooms, or other virtual communities to further discuss the issue (Roberts et al., 2002). The use of multiple media outlets may affect the way audiences understand news. The use of diverse news sources is positively related to knowledge about news (Kohut et al., 2007). Recent findings also assert that learning is supported when learners are able to make a connection between assigned tasks and their own interests and goals, as is the case when evaluating and choosing between sources (Hartnett, 2011; McCombs, 2005).

METHOD

In this section, the research approach and particular methods that were used to address the specific purpose of this study will be presented.

Design of the study

This study uses a survey research approach to explore young adults' level of news media literacy, degree of participation in the agenda melding process, and the relationship between them. The measuring instrument that was developed and used in the study was, in part, a modified version of the news media literacy scale developed by Maksl et al. (2015).

Sample. A sample of young adults aged 18-25 from across the United States responded to the survey, which was developed and conducted using the Survey Monkey platform. In addition to recruitment via Survey Monkey, permission was obtained from faculty members in several colleges in the United States to recruit both undergraduate and graduate college students via email distribution.

To recruit young adults who hadn't been exposed to post-secondary education, links were given to youth and young adult groups outside of educational settings. For instance, church groups, social groups, and hobby-based groups received appeals. Additionally, solicitation occurred through the snowball technique, wherein information about the study and a link to the questionnaire at the Survey Monkey.com research site was shared through personal and professional social networks including Facebook, Google+, Twitter, Pinterest, and LinkedIn. There were no financial incentives for taking part in this study. The goal was to garner a minimum of 500 completed responses over a 3-week period. 509 respondents began the survey over the three-week period. The completion rate was slightly above 80% with 408 participants completing the survey.

Participants. The participants were mostly female, (54%), ethnically diverse (60% White/Caucasian, 9% African American, 6% Asian/Pacific Islanders, 6% Hispanic, 6% multiple ethnicities, and 1% American Indian or Alaskan Native), and aged 18-25. Education levels varied: 4% had earned a graduate degree, 28% had earned a bachelor's degree, 30% had completed some college, 9% had earned an associate's degree, 13% had earned a high school degree or its equivalent, such as a GED, and 3 % had earned less than a high school degree.

News media literacy measures

This study uses an instrument based on the news media literacy scale developed by Maksl et al. (2015). The instrument was modified and used in a previous study (McWhorter, 2019). This scale is comprised of 60 individual continuous variables that measure the level of news media literacy in students. The scale is focused on "the perceived motivations of media producers, differing interpretations of media by audiences, and incongruities between reality and media's representation of it" (Maksl et al., 2015, p. 2). The modified version of this instrument (McWhorter, 2019) is combined in this

study with additional items intended to measure the extent to which they are involved in agenda melding.

The instrument was comprised of three parts. Part one measured the level of news media literacy. Part two measured the degree to which respondents are involved in agenda melding. Part three measured the demographics of the participants. To measure news media literacy, the scale developed by Maksl et al. (2015) original survey included three of Potter's (2013) dimensions of media literacy: knowledge of media structures, locus of control, and mindfulness. The modified version of the survey, used by McWhorter (2019) and in the present study, was comprised of four of Potter's dimensions: knowledge of media structures, media effects, locus of control, and mindfulness. Principal components analysis was used to examine the factorability of the 12 news media literacy items. Items include knowledge of media structures, locus control, knowledge of media effects, mindfulness, and agenda melding.

Knowledge of media structures. The knowledge of media structures measurement dimension reflects Potter's (2013) dimensions of media literacy. It is measured using an index from previous research (Maksl, 2015) to evaluate areas of knowledge about media organizations and how they work. The index is made of multiple-choice questions that have one answer each. For example, one question asks, "When it comes to reporting the news, the main difference between a website like Google News and a website like CNN.com is that: a. Google does not have reporters who gather information, while CNN does**,** b. Google focuses on national news, while CNN focuses on local news**,** c. Google has more editors than CNN does**.** d. Google charges more money for news than CNN does**,** e. Don't know." The index was computed by totaling the number of correct answers.

Locus of control. Locus of control is the degree to which the respondents believe they control their news experience. Study participants responded to each of these items or questions using a 7-point agree-disagree scale. The scale included seven items (α = .77) based on Maksl et al.'s (2015) scale (α = .635). Items included "If I take the right actions, I can stay informed." A higher score demonstrates a greater media locus of control.

Knowledge of media effects. Knowledge of media effects measures whether participants believe that news media affect them. Participants responded using a 7-point agree-disagree Likert scale. The scale was comprised of 3 items (α = .70) (McWhorter, 2019). Instead, the questions were constructed based on media

theories that state a higher media literate person would be aware of effects media has on them (Davison, 1983; Potter, 2013). Items included "News stories cause me to reflect on my beliefs." A higher score indicates a greater knowledge of media effects.

Mindfulness. Mindfulness measures the degree to which participants are mindful, critical thinkers about their news experience and their lives in general. Participants responded on a 7-point agree-disagree Likert scale. The scale included 3 negatively worded questions (α = .70) based on the scale developed by Maksl et al. (2015) (α = .780). The responses to these items were reverse-coded during the data analysis. Items included "I don't like to have to do a lot of thinking.*"* A lower score demonstrates a greater degree of mindfulness.

Agenda melding. Agenda melding refers to the degree to which participants use multiple sources to gather news and the degree to which participants shared and discussed news with groups online and offline (Shaw et al., 1999; Shaw et al., 2006). The degree of agenda melding was measured using a 7-point agree-disagree Likert scale. The scale included nine questions not used in previous research. Examples of these questions include: "I discuss news with others within online news groups" and "I watch a variety of sources of each story to get a full view.*"* Items were created that measured how much participants trust news groups (horizontal) in comparison to vertical sources. A composite variable was created based on previous theory that describes the agenda melding process. A higher score demonstrated a greater degree of agenda melding. Principal components analysis was used to examine the factorability of the nine agenda melding items.

Research hypotheses

This study seeks to determine whether relationships exist between the agenda melding process and news media literacy. A factor analysis was conducted to assess reliability and internal content validity in order to create a composite variable that measures agenda melding. The following hypothesis was created:

H1: Factor analysis will support a theoretical based agenda melding composite variable based on high factor loadings.

Takeshita (1993) discusses how agenda melding includes the 'need for orientation' function of agenda setting, noting, "The more people feel that something is of interest, and that they do not know enough about it,

especially to make a decision such as voting, the more attention they pay to news stories" (p. 17). This suggests agenda melding may be connected with news media literacy, since the motivations that lead to need for orientation in agenda melding (desiring information about news and seeking it from several sources) are also related to news media literacy, particularly the locus of control and mindfulness dimensions. Thus, the following hypotheses have been posed:

H2: Increases in agenda melding will be associated with increases of mindfulness.

H3: Increases in agenda melding will be associated with increases of locus of control.

Although the relationship between news media literacy and agenda melding has yet to be explored, factors that relate to the concept of agenda melding have been researched in a modest way. Kohut et al., (2007) found that participants who used multiple sources of news, a behavior essential to the agenda melding process, were more knowledgeable than participants who did not. Seeking various sources of news for the purpose of critique and analysis is a behavioral element in many definitions of media literacy (Martens, 2010; Tallim, 2010). Moreover, Ferdig and Trammel (2004) argue that participatory learning, which is activated through the agenda melding process, helps students learn by enculturating them into a community of practice. Since this process increases learning, its

application to news may indicate an association with news media literacy. Thus, the following hypotheses are posed:

H4: Increases in agenda melding will be associated with increases of locus of control.

H5: Increases in level of agenda melding will be associated with increases of knowledge of media structures.

Findings

Factor Analysis. A principal components analysis with an oblimin rotation was used to examine the factorability of the 12 news media literacy items and the 9 agenda melding items. The Kaiser-Meyer-Olkin Test of Sampling was .827, confirming the sufficiency of the sample. Bartlett's test of sphericity was significant at 3447.99, $p < .001$, indicating correlations between items were appropriate for principal components analysis. Stevens' (2002) criteria was also used to determine which factors would comprise each variable. Since the sample size was greater than 300, a loading of .3 or more is considered important. In this study, factors with a loading of .4 or more were included in the variable. The results of the analysis revealed 5 components with an eigenvalue over 1 that, combined, explained 53% of the variance.

Table 1. *Factor loadings of agenda melding variables based on a principal component analysis with Oblimin rotation for 9 items*

	Use various sources (TV, blogs, various networks) to create agenda and discuss news with groups	Trust social groups' view about issues more than other media sources
Use Multiple sources	.656	
Involved in online and offline groups	.808	
Interact with others about news online or in person	.504	
Important news issues change based on discussion	.490	
Trust my friends' views on news		.521
Discuss news with others in online groups	.746	
Like to be the first to share a story in online groups	.565	
Believe stories I learn about from news groups		.533
News stories I learn about throughout groups are more accurate than other sources		.618

Agenda melding variables. The first hypothesis (H1) predicted a factor analysis would support a theoretical based agenda melding composite variable based on high factor loadings. Surprisingly, agenda melding questions

loaded on two separate components. One factor seemed to measure participants' use of various media sources for news in addition to their tendency to discuss news with groups (Cronbach α .80) and accounted for 24.8%

of the variance. The second factor loaded on all the questions associated with belief or trust in group as opposed to other news sources (Cronbach α .71) and accounted for 4.90% of the variance. This seemed to reveal two separate components of agenda melding, as Table 1 shows.

Thus, two variables measuring agenda melding were created. They are called Agenda Melding and Trusting Friends. Agenda Melding measures the degree to which participants meld news agendas through the agenda melding process, which includes using various sources to gather news, and discussing news in online and offline groups. Trusting Friends measures the degree to which participants trust their group more than other sources of news (see Table 2). A standardization of the means was computed to ensure that the means are comparable. The standardized means range from 1 to 10 and are included in Table 2.

Table 2. *Descriptive statistics for agenda melding variables*

	#Of items	Mean (SD)	Skewness	Kurtosis	Cronbach α	Standardized Mean
Agenda melding	6	21.9 (7.0)	-.05	.118	.80	5.32
Trusting friends	3	9.9 (3.39)	.86	-.128	.71	3.83

AGENDA MELDING = Using various news sources and discussing news with friends
TRUSTING FRIENDS = Trusting friends over other sources

News media literacy level dependent variables. The factors that are based on the original three news media literacy dimension fit the structure developed by Maksl et al. (2015) and Potter's (2013) structure involving knowledge of media effects, mindfulness, and locus of control. In this study, knowledge of media effects, (3 items; α .703) explained 7.9% of the variance, mindfulness (3 items; α .776) explained 13.51% of the variance, and locus of control (6 items; α .768), explained 6.39% of the variance (See Table 3). The emergence of these dimensions confirms the usefulness of the dimensions outlined in the study developed by Maksl et al. (2015) and Potter's (2013) text. Therefore, variables were created for each dimension based on factor loadings. The fourth dimension, knowledge of media structures, was measured using a short "quiz" about the news media industry, rather than developed as a composite variable. All four dimensions of media literacy are correlated at a statistically significant level ($p < .05$) (see Table 4).

Table 3. *Descriptive statistics and standardized means for composite variables measuring news media literacy for young adults aged 18-25*

	#Of items	Minimum	Maximum	Mean	*SD*	Cronbach α	Standardized Mean
Structures	7	0	7	3.76	1.9		5.38
Mindfulness	3	3	21	7.8	3.7	.77	2.68
Locus	6	6	42	28.8	5.9	.77	6.33
Effects	3	3	21	13	3.7	.70	5.55

Structures = Knowledge of media structures
Mindfulness = Mindfulness
Locus = Locus of control
Effects = Knowledge of media effects

Measuring the association between agenda melding and news media literacy. Descriptive and inferential statistics were generated using SPSS. Multiple regression analysis of information generated through SPSS was used to examine the relationships the relationship between level of news media literacy and participation in the agenda melding process. All four dimensions of media literacy are correlated (see Table 4). A high score in each level would denote a high level of news media literacy. However, people will be stronger in some areas than others. Because of this, the present study will determine news media literacy by analyzing each dimension separately. The second hypothesis (H2) predicted greater levels Agenda Melding would be associated with mindfulness. A multiple regression ($R^2 = .06$, $p < .01$) confirmed that level of agenda melding was associated with level of mindfulness ($B = .18$, $p < .01$). Thus, H2 is supported.

Table 4. *Pearson correlation of media literacy variables*

	STRUCTURES	MINDFULNESS	LOCUS	EFFECTS
Structures	1			
Mindfulness	-.327	1		
Locus	.315	-.218	1	
Effects	.311	0.39	.351	1

Structures = Knowledge of media structures
Mindfulness = Mindfulness
Locus = Locus of control
Effects = Knowledge of media effects

Therefore, use of various news sources and discussing news with friends is related to thinking critically about one's news experience. In addition, a multiple regression ($R^2 = .06$, p < .01) was conducted to determine whether Trusting Friends was associated with mindfulness. The regression determined that Trusting Friends was associated with mindfulness at a significant level ($B = .28$, $p < .01$). Thus, relying on ones friends' view about news is related to thinking critically about one's news experience.

The third hypothesis (H3) predicted that the levels Agenda Melding would be associated with the level of locus of control. A multiple regression ($R^2 = .20$, $p < .01$) confirmed that the level of agenda melding was associated with level of locus of control at a significant level ($B = .40$, $p < .01$). Thus, H3 is supported. Use of various news sources and discussing news with friends is related to the degree to which one controls their own news experience. In addition, a multiple regression was conducted to determine whether Trusting Friends was associated with level of locus of control. A multiple regression ($R^2 = .20$, $p < .01$) determined that level of agenda melding is not associated with level of locus of control ($B = .40, p < .01$). Thus, relying on one's friends' view about news is not related to the degree to which one controls their own news experience.

The fourth hypothesis (H4) predicted that increases Agenda Melding would be associated with increases in level of knowledge of media structures. A multiple regression ($R^2 = .03, p < .01$) confirmed that the level of agenda melding is associated with level of knowledge of media structures ($B = .18$, $p < .01$). Thus, H4 is supported. Use of various news sources and discussing news with friends is related to the degree to which one understands news organizations and how they are run. In addition, a multiple regression ($R^2 = .03$, $p < .01$) determined Trusting Friends is not associated with level of knowledge of media structures ($B = .002$, $p < .01$). Thus, relying on one's friends' view about news is not related to the degree to which one understands news organizations and how they are run.

The fifth hypothesis (H5) predicted that increases in level of agenda melding will be associated with increases of knowledge of media structures. A multiple regression ($R^2 = .06$, $p < .01$) confirmed that the level of agenda melding was associated with the level of knowledge of media effects ($B = .22$, $p < .01$). Thus, H5 is supported. Use of various news sources and discussing news with friends is related to the degree to which one believes news affects them. In addition, a multiple regression was conducted to determine whether Trusting Friends was associated with level of knowledge of media effects. The multiple regression ($R^2 = .06$, $p < .01$) determined that Trusting Friends was associated with a greater level of knowledge of media effects ($B = .15$, $p < .01$). Thus, relying on one's friends' view about news is related the degree to which people believe news affects them.

DISCUSSION

This study set out to examine the ways in which the changing media environment affects the news media literacy level of young adults between the ages of 18 and 25 years old in the United States. More specifically, this study examined the extent to which they are involved in the agenda melding process and how agenda melding affects news media literacy levels. It was hoped that this would lead to insights that would be meaningful to scholars, educators, media professionals, and others interested in increasing news media literacy in the United States and elsewhere (Hobbs, 2019).

Agenda melding and news media literacy

An area of major interest in this study was the relationship between agenda melding and news media literacy. As discussed in the literature review, agenda melding involves a two-fold process. The first part of the process occurs when audiences combine agendas from various media in order to suit their own needs (McCombs, 2005). As niche broadcasting and audience

fragmentation rises, audiences have an increased ability to choose news options that cater to their lifestyle and desires. The result of this process is that the traditional role of media, including news media, serving a gatekeeping function is declining in exclusivity (Meraz, 2009). Alternate news sources such as blogs, news forums, and news groups allow audiences to maintain a greater level of control over their news consumption. They are no longer bound to consuming what is being reported through legacy media (Messner & Garrison, 2011). The results of this study generally confirm these trends. According to Shaw et al. (1999), the second aspect of the process occurs when people interact with online and offline groups to share and discuss news. As predicted by existing agenda melding research, this study found that young adults in the United States were involved in this aspect of the agenda melding process.

This study's findings suggest that participation in the agenda melding process is associated with increases in levels of news media literacy. Both aspects of agenda melding, which combining agendas using various media as well as building an agenda through discussing news in groups, raised news media literacy level on every measured dimension. In addition, this study found that trusting friends more than other sources raised news media literacy on two dimensions: mindfulness and media effects.

Discussion of news and news media literacy

The findings seem to support previous studies that suggest the process of purposefully involving oneself in an interactive, discussion-based news environment is related to a greater drive for information and a greater sense of control over one's news media knowledge. Several studies describe this process by indicating that learning in a group helps group participants retain information more fully and for a greater length of time. Discussion of ideas and concepts can lead to a more fully developed grasp of concepts. Lustria's (2007) study found that interactivity has a marked effect on understanding. It can "significantly affect comprehension as well as attitudes" (p. 1). Hartnett (2011) and McCombs (2005) each contends that when learners are free to connect their personal goals and interests with their learning concepts, the learning is supported more than when connections can't be made. In this study, it was evident that participants' knowledge about media and sense of control over their media experience were increased through group discussion. This finding is supported by scholarship that argues

adolescents who are skeptical about how algorithms select news for them on social media" thought more critically about news (Ku et al., 2019).

Not only do students learn information from one another, but learning in a participatory manner helps increase ownership of the learning process (Ferdig & Trammel, 2004). McLoughlin and Lee (2008) notes that access to open communities, peer networks, and socialization are all factors that lead to a greater amount of learning. These are provided through interactive and participatory learning. As the findings in this study suggest, some young adults who interact with others within news-related social media platforms or other Internet-related environments or communities may be adding to their level of news media literacy through this means. Group-based learning also creates an environment that allows students to become "critical, collaborative, and creative participants in the social construction of knowledge" (Burgess, 2006, p. 105). This aspect of news media literacy is vital. One of the core concepts of the skill is examining news in an analytical, critical way. Discussion concerning news issues, content, context, and perspective among groups increases the propensity to engage in analytical inquiry of media texts. Again, it can be inferred by the findings that this may be what is happening in the case of some young adults who participated in this study.

A link between news media literacy through agenda melding

The results of this study provide a greater understanding of the relationship between agenda melding and news media literacy that could be helpful in such efforts. The findings in this study also bolster the literature by indicating that media literacy may be related to the agenda melding process.

Agenda setting and agenda melding

A change in the agenda setting function. Recent changes in the way news is consumed and proliferated might lead some to believe consumers' participation in the agenda melding process has supplanted the agenda setting function (Waisbord, 2018). However, the findings of this study focusing on young adults do not suggest that the agenda setting function has been displaced. Although fragmentation has made it possible for people to vary sources and choose their own media, studies show that consumers' media "diet" might not be very diverse. Messner and Distaso (2008) found that the

traditional media and social media blogs have a symbiotic relationship. For example, traditional media use blogs as source material, and vice versa. The above authors argue, "By allowing each other to influence their news agendas, there is an indication that the traditional media and weblogs create what the researchers introduce and define as a news source cycle, in which news content can be passed back and forth from media to media" (Messner & Distaso, 2008, p. 447). Therefore, although the number of sources has increased, the amount of material does not necessarily reflect a greater amount of diversity.

Limitations of the study

This study tested the relationship between variables that may help us better understand news media literacy. Nevertheless, there are limitations of the study that need to be addressed. The first area of concern has to do with solicitation of responses. In this study, participants were recruited through email, social media, and through the Survey Monkey Platform. A diverse group of respondents participated in this study. However, there have been questions about data collection through similar platforms, such as Amazon's Mechanical Turk (MTurk). These platforms are extensively used for data collection. Nevertheless, some researchers have voiced concerns about data quality (Kennedy et al., 2018). Although MTurk samples have supplied higher quality data than "student samples, community samples, and even some high-quality national samples" (Kennedy et al., 2018, p. 1), some respondents have engaged in the malfeasant practice of gaining access to surveys restricted to the U.S. residents using Virtual Private Servers (VPSs). "Unfortunately, we know little about the scale and consequence of this fraud, and tools for social scientists to detect and prevent this fraud are underdeveloped" (Kennedy et al., 2018, p. 2). Second, understanding how people create agendas in the digital landscape is an ongoing process. Shaw et al., (1999) defined agenda melding as the two-fold process of creating agendas through using various media sources and discussing news with groups, both online and offline. This study measured agenda melding, but also found some limited effects from another variable, i.e., trust in friends' opinions about news. Although this variable isn't included in the definition of agenda melding, it is possible that the degree to which a person trusts their friends about news is connected to the agenda melding process. The relationship is unknown thus far.

Recommendations for future research

The present research should serve as a springboard for future research to be conducted in the area of news media literacy acquisition. First, the research found that several constructivist-learning theories contribute to the understanding of news media acquisition. Future research might include insights from scholars from both the communication and educational fields to use the newest theoretical understandings. Those new theoretical perspectives might frame various news media literacy studies and lead to a joint theory that explains how news media literacy skills are developed, in particularly, in digital media news environment that is being currently experienced.

Second, this research is one of only a handful of studies that address the habitual factors that are related to news media literacy on a young adult level. Although this study was able to find news media factors among young adults in the context of agenda melding, future studies will undoubtedly uncover further areas in which a person's media choices can be positively or negatively associated with news media literacy.

Finally, this study found that reliance on friend groups as a marker of credibility increases news media literacy in some areas (e.g., mindfulness, the degree to which people think critically about their news experience, and media effects, the degree to which people believe news affects them). In other areas, such as locus of control (the degree to which media users control their own news experience) and knowledge of media structures (the degree to which people understand news organizations and how they are run) were unaffected. Future studies can focus on how trust in friends for news related information can affect other aspects of news media literacy (Vraga et al., 2015).

REFERENCES

Arke, E. T., & Primack, B. A. (2009). Quantifying media literacy: development, reliability, and validity of a new measure. *Educational Media International, 46*(1), 53-65. https://doi.org/10.1080/09523980902780958

Ashley, S., Maksl, A., & Craft, S. (2013). Developing a news media literacy scale. *Journalism & Mass Communication Educator*, *68*(1), 7-21. https://doi.org/10.1177/1077695812469802

Ashley, S., Maksl, A., & Craft, S. (2017). News media literacy and political engagement: What's the connection? *Journal of Media Literacy Education*.

9(1), 79-98. https://doi.org/10.23860/JMLE-2017-9-1-6

Ashley, S., Poepsel, M., & Willis, E. (2010). Media literacy and news credibility: Does knowledge of media ownership increase skepticism in news consumers? *The Journal of Media Literacy Education*, 2(1) 37-46.

Beckett, C. (2017). *'Fake news': The best thing that's happened to journalism.* POLIS: Journalism and Society at the LSE.

Burgess, J. (2006). Blogging to learn, learning to blog. In A. Bruns & J. Jacobs (Eds.), *Uses of blogs* (pp. 105-114). Peter Lang.

Davison, W. (1983). The third-person effect in communication. *Public Opinion Quarterly. 47(*1): 1-15. https://doi.org/10.1086/268763

Dennis, E. (2004). Out of sight and out of mind: The media literacy needs of grown-ups. *American Behavioral Scientist*, 202-211. https://doi.org/10.1177/0002764204267264

Duran, R. L., Yousman, B., Walsh, K. M., & Longshore, M. A. (2008). Holistic media education: An assessment of the effectiveness of a college course in media literacy. *Communication Quarterly*, *56*(1), 49-68. https://doi.org/10.1080/01463370701839198

Einwiller, S. A., Carroll, C. E., & Korn, K. (2010). Under what conditions do the news media influence corporate reputation? The roles of media dependency and need for orientation. *Corporate Reputation Review*, *12*(4), 299-315. https://doi.org/10.1057/crr.2009.28

Farmer, L. (2019). News literacy and fake news curriculum: School librarians' perceptions of pedagogical practices. Journal of Media Literacy Education, *11*(3), 1-11. https://doi.org/10.23860/JMLE-2019-11-3-1

Ferdig, R. E., & Trammell, K. D. (2004). Content delivery in the "blogosphere." *The Journal*, *31*(7), 12-20.

Hartnett, M., St. George, A., & Dron, J. (2011). Examining motivation in online distance learning environments: Complex, multifaceted and situation-dependent. *The International Review of Research in Open and Distance Learning*, *12*(6), 20-38. https://doi.org/10.19173/irrodl.v12i6.1030

Francisco, P. L. (2014). Legacy Media: A Case for Creative Destruction? *Palabra Clave*, 17(4), 1097-1113. http://dx.doi.org/10.5294/pacla.2014.17.4.5

Hobbs, R. (2019). Media industry involvement in media literacy. *The International Encyclopedia of Media Literacy*, *2*, 1-15.

Hobbs, R., & Frost, R. (2003). Measuring the acquisition of media-literacy skills. *Reading Research Quarterly*, *38*(3), 330-355. https://doi.org/10.1598/rrq.38.3.

Jang, S. M., & Kim, J. K. (2018). Third person effect of fake news: Fake news regulation and media literacy interventions. *Computers in Human Behavior*, *80*, 295-302. https://doi.org/10.1016/j.chb.2017.11.034

Jenkins, H. (2006). *Convergence culture: Where old and new media collide*. NYU Press.

Kennedy, R., Clifford, S., Burleigh, T., Waggoner, P., & Jewell, R. (2018). The shape of and solutions to the MTurk quality crisis. *Available at SSRN*.

Kleemans, M., & Eggink, G. (2016). Understanding news: The impact of media literacy education on teenagers' news literacy. *Journalism Education, 5*(1), 74-88. https://doi.org/10.1177/1077695813517885

Kohut, A., Morin, R., & Keeter, S. (2007). *What Americans Know: 1987–2007*. Pew Center for the People and the Press.

Ku, K. Y., Kong, Q., Song, Y., Deng, L., Kang, Y., & Hu, A. (2019). What predicts adolescents' critical thinking about real-life news? The roles of social media news consumption and news media literacy. *Thinking Skills and Creativity*, *33*, 100570. https://doi.org/10.1016/j.tsc.2019.05.004

Livingstone, S., Couvering, E. V., & Thumim, N. (2003, March 7). *Adult media literacy*. Retrieved November 24, 2010, from http://www.ofcom.org.uk/static/archive/itc/latest_news/press_releases/release.asp-release_id=679.html

Luhtala, M., & Whiting, J. (2018). *News literacy: The keys to combating fake news.* ABC-CLIO.

Lustria, M. L. A. (2007). Can interactivity make a difference? Effects of interactivity on the comprehension of and attitudes toward online health content. *Journal of the American Society for Information Science and Technology*, *58*(6), 766-776. https://doi.org/10.1002/asi.20557

Maksl, A., Ashley, S., & Craft, S. (2015). Measuring news media literacy. *Journal of Media Literacy Education, 6*(3), 29-45. https://doi.org/10.23860/jmle-2017-9-1-6

Martens, H. (2010). Evaluating media literacy education: Concepts, theories and future directions.

The Journal of Media Literacy Education, 2(1), 1-22. https://digitalcommons.uri.edu/jmle/vol2/iss1/1

Matthes, J. (2008). Need for orientation as a predictor of agenda-setting effects: Causal evidence from a two-wave panel study. *International Journal of Public Opinion Research, 20*(4), 440-453. https://doi.org/10.1093/ijpor/edn042

McCombs, M. (2005). A look at agenda setting: Past, present and future. *Journalism Studies, 6*(4), 543-557. https://doi.org/10.1080/14616700500250438

McCombs, M., Shaw, D., &. Weaver, D. (2014). New directions in agenda-setting theory and research. *Mass Communication and Society*, *17*(6), 781-802. https://doi.org/10.1080/15205436.2014.964871

McLoughlin, C., & Lee, M. J. W. (2008). The three P's of pedagogy for the networked society: Personalization, participation, and productivity. *International Journal of Teaching and Learning in Higher Education*, *20*(1), 10-27

McWhorter, C. (2019). News Media Literacy: Effects of Consumption. *International Journal of Communication*, *13*, 4838-4856.

Messner, M., & Distaso, M. W. (2008). The source cycle: How traditional media and weblogs use each other as sources. *Journalism Studies, 9*(3), 447-463. https://doi.org/10.1080/14616700801999287

Messner, M., & Garrison, B. (2011) Study shows blogs affect traditional news media agenda. *Newspaper Research Journal, 32*(3), 112-126. https://doi.org/10.1177/073953291103200309

Meraz, S. (2009). Is there an elite hold? Traditional media to social media agenda setting influence in blog networks. *Journal of Computer-Mediated Communication*, *14*(3), 682-707. https://doi.org/10.1111/j.1083-6101.2009.01458.x

Mitchell, A. (2018). *Americans still prefer watching to reading the news and mostly still through television*. Retrieved from http://www.journalism.org/2018/12/03/americans-still-preferwatching-to-reading-the-news-and-mostly-still-through-television/

Piaget, J. (1945). *Play, dreams and imitation in childhood*. Heinemann.

Pinkleton, B. E., Austin, E. W., Cohen, M., Chen, Y. C. Y., & Fitzgerald, E. (2008). Effects of a peer-led media literacy curriculum on adolescents' knowledge and attitudes toward sexual behavior and media portrayals of sex. *Health Communication*, *23*(5), 462-472. https://doi.org/10.1080/10410230802342135

Pinkleton, B. E., Weintraub Austin, E., Cohen, M., Miller, A., & Fitzgerald, E. (2007). A statewide evaluation of the effectiveness of media literacy training to prevent tobacco use among adolescents. *Health Communication*, *21*(1), 23-34.

Potter, W. J. (2004). *Theory of media literacy: A cognitive approach*. Sage Publications.

Potter, W. J. (2013). *Media literacy*. Sage Publications.

Potter, W. J. (2015). *Introduction to media literacy*. Sage Publications.

Primack, B., Sidani, J., Carroll, M., & Fine, M. J. (2009). Associations between smoking and media literacy in college students. *Journal of Health Communication, 14*(6), 541-555. https://doi.org/10.1080/10810730903089598

Ragas, M. W., & Roberts, M. S. (2009). Agenda setting and agenda melding in an age of horizontal and vertical media: A new theoretical lens for virtual brand communities. *Journalism & Mass Communication Quarterly*, *86*(1), 45-64. https://doi.org/10.1177/107769900908600104

Roberts, M., Wanta, W., & Dzwo, T. H. D. (2002). Agenda setting and issue salience online. *Communication Research, 29*(4), 452-465. https://doi.org/10.1177/0093650202029004004

Schwarz, F. (2011). *Media literacy and the news*. Retrieved from http://www.windesheim.nl/~/media/files/windesheim/researchpublications/120319_media_literacy_and_the_news.pdf

Shaw, E. F. (1976). The agenda-setting hypothesis reconsidered: Interpersonal factors. *Gazette*, *23*, 230-240. https://doi.org/10.1177/001654927702300403

Shaw, D. L., Hamm, B. J., & Terry, T. C. (2006). Vertical versus horizontal media: Using agenda-setting and audience agenda melding to create public information strategies in the emerging papyrus society. *Military Review, 86*(6), 13.

Shaw, D., & McCombs, M. (2008). Agenda setting in the new media landscape: Two perspectives and approaches to research. In *Colloquium for Philip Meyer, University of North Carolina, Chapel Hill*.

Shaw, D. L., McCombs, M., Weaver, D. H., & Hamm, B. J. (1999). Individuals, groups, and agenda melding: A theory of social dissonance. *International Journal of Public Opinion Research*, *11*(1), 2-24. https://doi.org/10.1093/ijpor/11.1.2

Shoemaker, P. J., & Reese, S. D. (2011). *Mediating the message*. Routledge.

Shoemaker, P. J., & Vos, T. (2009). *Gatekeeping theory*. Routledge.

Stevens, J. P. (2002). *Applied multivariate statistics for the social sciences* (4th ed.). Erlbaum.

Stuhlman, L., & Silverblatt, A. (2007). *Media literacy in US institutions of higher education: Survey to explore the depth and breadth of media literacy education*. Retrieved August, 9, 2011, from http://www.webster.edu/communications/academics/communications-journalism/media-literacy.html

Takeshita, T. (1993). Agenda-setting effects of the press in a Japanese local election. *Studies of Broadcasting*, *29*(1), 17-38. https://doi.org/10.1515/9780824863555-014

Tallim, J. (2010). For teachers: What is media literacy? Retrieved November 23, 2010, from http://www.mediaawareness.ca/english/teachers/media_literacy/what_is_media_literacy.cfm

Vraga, E. K., Tully, M., Kotcher, J. E., Smithson, A. B., & Broeckelman-Post, M. (2015). A multi-dimensional approach to measuring news media literacy. *Journal of Media Literacy Education*, *7*(3), 41-53. https://doi.org/10.1177/1464884918805262

Waisbord, S. (2018). Truth is what happens to news: On journalism, fake news, and post-truth. *Journalism Studies*, *19*(13), 1866-1878. https://doi.org/10.1080/1461670X.2018.1492881

Weaver, D.H. (1977). Political issues and voter need. In D.L. Shaw and M.E. McCombs (Eds.), *The Emergence of American Political Issues: The Agenda-Setting Function of the Press* (pp. 107-119). West Group.

Weaver, D. H. (1980). Audience need for orientation and media effects. *Communication Research*, *7*(3), 361-373. https://doi.org/10.1177/009365028000700305

Weaver, D. (1991). Political issues and voter need for orientation. in D.L. Protess & M.E. McCombs (Eds.), *Agenda Setting: Readings on Media, Public Opinion, and Policymaking* (pp. 131-139). Lawrence Earlbaum Associates.

Weaver, D., Wojdynski, B., Mckeever, R., & Shaw, D. (2010). Vertical and or versus? Horizontal communities: Need for orientation, media use and agenda melding. In *Proceedings of the Annual Convention of the World Association for Public Opinion Research*, Chicago, IL. https://doi.org/1010.13140/RG.2.1.3481.4881.