

Does Skepticism Predict News Media Literacy: A Study on Turkish Young Adults

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Abstract

The 2010's are when information and informatics age coexist, information overload has been transformed into a mass engineering tool, "imposing bombardment" has become the norm. The most influential tool of this cultural-industrial act is news media. Efforts to educate young adults, who are most active in touch with information, in view of news media are needed. Skepticism has the potential to improve news media literacy of young adults. The present study investigates whether young adults' skepticism levels predict young adults' news media literacy levels. The research problem was analyzed with correlational research model. Two different research populations (Çanakkale Onsekiz Mart University and Atatürk University) were determined for the purpose of the study. The results revealed positive, moderate, significant relationships between skepticism levels and news media literacy of young adults. "Self-determining" and "interpersonal understanding" competences - the components of skepticism - have a positive effect on news media literacy. The "search for knowledge" and "questioning mind" has the potential to positively affect news media literacy.

Keywords: media literacy, news media literacy, skepticism, young adult, young adult literacy

1. Introduction

1.1 Introduce the Problem

The 21st century is called the "digital age". Both digital tools in the digital age platform and ongoing application interfaces in the information age platform have strengthened subjective impose, and they have tried to hide the relativism emphasis. This has caused media tools to broadcast poor information flow consisting of prejudice, propaganda, manipulation, and disinformation. Besides, it has also increased the percentage of hidden flows. It has been expected that humans, the subject of digital age, has been equipped with the hardware to make the basic material practical taken into consideration that the basic material of digital age is digital information. From this viewpoint, news media literacy has appeared to be an alternative analysis in the usage of news media, which is the daily habits of young adults who are the subject of our study.

The mention of media literacy paradigm and news media suggests that audiences are expected to be active prosumer-producing consumers. Thus, it has been anticipated that individuals are not only to obtain news from a single source but also they must have a profile in which they reach different sources for news contexts, criticize, assess, search for alternatives and make their own news contexts. This profile is conceptualized as news media literacy in digital age. A communication process has come through which news contexts are canalized in both traditional and digital platforms and Web1.0 and Web2.0 technologies which are from digital platforms, and moreover individuals are to be both source and audience potentials. News media literacy brings individuals the equipment about the difference between "dirty information" and "hygiene information". Moreover, it brings them active writer features that have dirty information-hygiene information concern about their own producing news contexts in the communication process.

News media literacy, which is commented as practical equipment in the digital age, must be one of the important educational aims. However, there is a need for valid educational arguments as to which educational policies answer the question "how". In this manner, skepticism has been brought out with the critical thinking, which has a natural relationship with in base of critical thinking skill. Therefore, the hypothesis that the skepticism is one of

the main elements for news media literacy has come into being. Therefore, it should be researched whether there is an effect of skepticism levels of young adults upon their news media literacy levels in the study.

1.2 Conceptual Frame of Study

Skepticism is considered to be subjective and to be caused by lack of belief or trust, and it leads to doubt, questioning, or rejection of a claim, which may be referred to as resistance to persuasion (Giarlo, 2006). A skeptic refuses to accept without evidence, without suspect, and without a critique of offered information (Urbonienė, Endrawes, & Matawie, 2013). When skeptics are dissatisfied with the information presented to them, they seek out additional information to confirm or disconfirm the claims in the message (Hutchens, Hmielowski, Pinkleton & Beam, 2016). It has a broad nature which borrows from academic literature in accounting, psychology, philosophy, management, organizational behavior, and several others (Sikkema, 2014). As indicated in studies conducted in different fields, skepticism is multi-dimensional (Giarlo, 2006; Hurtt, 2010).

Mohr, Eroglu, and Ellen (1998) state that skepticism is one of two constructs to explain individuals' reactions to communicational efforts, and the second is cynicism. They also express that cynicism is referred to as an enduring and deep belief, whereas skepticism tends to vary according to situations and therefore it is not so long lasting as cynicism. Cappella and Jamieson (1997) define cynicism as inconfidence and disbelief in the political construct, state officers, and other associated institutions, e.g. the media. The related literature and everyday language contain countless references to "healthy" and "unhealthy" skepticism (Giarlo, 2006). Albaugh (1997) defines skepticism as a position that knowledge is limited and is donated by a questioning attitude. Also according to her, unhealthy skepticism is really fear and the inability to allow for new ideas. Pinkleton, Austin, Zhou, Willoughby, and Reiser (2012) discuss skepticism as a potential and unharmed substitute to cynicism because it adopts a critical but flexible attitude toward news and information. They find skepticism contributes to decreased apathy and increased efficacy (Hutchens et al, 2016). Researchers also claim that skepticism can make valuable contributions to the improvement of information drilling skills (Pinkleton et al., 2012). Moreover, the complex and non-routine nature of problem solving and skepticism and their requirement for cognitive complexity drive scholars to infer that they are interrelated (Urbonienė, Endrawes, & Matawie, 2013).

Hurtt (2010) refines the trait concept by developing a multidimensional psychological scale which measures trait professional skepticism which is comprised of six relatively stable, enduring characteristics of an individual (e.g., questioning mind, suspension of judgment, search for knowledge, interpersonal understanding, autonomy/self-determining and self-esteem/self-confidence). In their totality these six dimensions suggest a balance between keeping an open mind and actively questioning until the skeptic is satisfied with enough evidence to arrive at a conclusion. The Hurtt (2010) skepticism scale was also developed using broad psychological measures not limited to a specific knowledge domain. This allows the scale to be used in a flexible manner across disciplines, a contention supported by Hurtt herself when she acknowledges that the scale was intentionally designed to be used on a business, not just accounting, subject pool (Sikkema, 2014; Holley, 2016).

Over the last decades, audience has been increasingly offered more options to get access to information related to current affairs (Edgerly, 2015; Hoffman, 2016; Mihailidis, 2014; Tsfati & Peri, 2006). Thanks to globalization and segmented media, people can benefit from various news sources to retrieve political information apart from the ones provided by sector-dominating channels (Tsfati & Peri, 2006). McWhorter (2016) underlines, the proliferation of internet and digital media have drastically altered the media environment during the past 25 years. According to her, the proliferation of digital media has created a democratization effect where blogs, social media, and wikis give anyone access to information instantly. Media—especially digital platforms—are central to identity formation, social relationships, and life outside school (Valenzuela, Bachmann & Aguilar, 2016) and are more pervasive now than ever before. Scholars note that young adults (age 18-25) spend a majority of their waking hours with technology (Vaterlaus, Patten, Roche, & Young, 2015). A recent American Press Institute survey found that the vast majority of people between the ages of 18 and 34 get their news from social media (American Press Institute, 2015).

Journalism performs three basic tasks in a democratic setting, namely observing and informing the public, being an independent actor by participating in the public life, and presenting people with the needed media to share their opinions. People must regard media as an independent and competent actor for it to be able to fulfill these tasks (Hoffman, 2016). An ideal world requires a strong, properly operating democracy built on informed, well-educated, and proactive citizens. News media plays a crucial part in providing information for citizens about the leaders' plans, resolutions, probable steps and consequences associated with these parameters (Hutchens et al, 2016). In addition, contemporary scholars have found that news consumption has a positive effect on civic awareness, openness to civic discussion and civic participation (McWhorter, 2016). Buckingham

(2000) revealed a strong correlation between consumption of news about public affairs and the political socialization process, and thinks that there is an increasing understanding about the capacity of youngsters, as citizens, to make conscious decisions or to actively participate in political processes.

The continuing decline of legacy media, especially print newspapers, coupled with the proliferation of entertainment media, has raised concerns over the future of news audiences and the expectation of an informed citizenry (Valenzuela et al., 2016). With the heavy influence of advertising, corporate agendas, and entertainment in traditional news, along with the inaccurate information often found in online news sources, navigating media messages can be difficult. The past decade has witnessed the mingling and blurring of the lines among news, opinions, entertainment, propaganda and other types of media content (Kovach & Rosenstiel, 2011). As Reaves, Hitchon, Park and Yun (2004) cited; in the digital age, manipulation of images is becoming the norm, leaving audiences the responsibility of separating fact from fiction. Educators argue that many adults, especially young adults, lack media literacy skills- the ability to analyze media messages. However, empirical tests on media literacy are sparse, especially in the area of news (McWhorter, 2016).

As media literacy has grown more prominent, academics of media literacy, be they research or teaching people, have made efforts to define “being media literate”, and moreover to find a common ground to characterize the related concepts, e.g. information literacy, digital literacy, critical literacy, and news literacy (Hobbs, 2008). Definitions of media literacy emphasize building skills to become more mindful media consumers capable of navigating complex media landscapes (Livingstone, 2004). As Maksl, Craft, Ashley, and Miller (2016) cited; media, information, digital, and civic literacy all share conceptual terrain with news literacy. News has a unique role in democratic societies as it is expected to inform citizens to enable them to make sound democratic decisions. Therefore, it is important to interrogate news and its societal implications (Vraga, Tully, Kotcher, Smithson, & Broeckelman-Post 2015). The idea that news content has a crucial role in democracy underlies the need for a special news-oriented category in media literacy, and thus news procurers need to assume significant responsibilities to inform citizens relying on democracy (Christians, Glasser, McQuail, Nordenstreng, & White, 2009). News greatly facilitates the functioning of democracy, and therefore such audience activities as news consumption, civic engagement, democratic participation, and active citizenship are possibly promoted by news media literacy (Ashley, Maksl, & Craft, 2013). Also prior research suggests that; different family, social, and psychological variables influence the behavior of media audiences, making them more or less inclined to consume news and follow the journalistic content that news media provide (Valenzuela et al., 2016).

“What does news literacy refer to?” has become so intriguing a question that it has been posed and answered in several ways, and has been the subject of study for many people including but not limited to scholars, teachers, journalists. Individuals suffer from difficulty differentiating reliable information from misinformation, which causes concerns over the credibility of news and jeopardizes people’s ability to be active participants in democratic life (Maksl et al., 2016). News media literacy relies on some critical variables, such as how to choose between information sources, how to evaluate different candidates, how to vote and how to be a proactive member of civil society (McWhorter, 2016). As Hoffman (2016) cited, news media literacy derives from media literacy, but with a special emphasis on the roles of the informed, savvy citizen and the journalist to safeguard democratic institutions. Maksl, Ashley and Craft (2015) suggest that news media literacy comes to incorporate how and why people interact with news media, what kind of a sense they derive from the offered information, and how their own news consumption affects them. Also as Flemming (2014, p. 156) noted that, “*It would be a generation of news consumers who would learn how to distinguish for themselves between news and propaganda, verification and mere assertion, evidence and inference, bias and fairness, and between media bias and audience bias*”.

1.3 Purpose of Research

The purpose of research is to investigate whether skepticism predicts news media literacy. The following sub-purposes are investigated in this framework.

- Is there any significant relationship between news media literacy and skepticism levels of young adults?
- Do young adults’ skepticism levels predict young adults’ news media literacy levels?

2. Method

2.1 Research Design

The study is a quantitative research and modeled as correlational research. According to Weathington, Cunningham, and Pittenger (2010, p. 299) “correlational research allows to study the relationship between two or more variables. Researchers can use the correlation to make predictions about one variable (dependent) using

another variable (independent)". And also, according to Gravetter and Forzano (2012, pp. 351-352) "one important use of correlational research is to establish a relationship between variables that can be used for purposes of prediction. Within a correlational study, the two variables being examined are essentially equivalent. Nonetheless, correlational studies often identify one variable as the predictor variable and the second variable as the criterion variable". In this correlational study, researchers firstly investigate correlation between variables and then if there is a significant relationship between variables researchers continue to investigate for prediction. Researchers use the young adults' skepticism scores to predict news media literacy levels. In this situation, "young adults' skepticism scores" are the predictor variable and "young adults' news media literacy scores" are the criterion variable.

2.2 Population and Sample

Two research populations were identified for the purpose of the study. The first one is young adults studying at Çanakkale Onsekiz Mart University in Çanakkale province. The other is the undergraduate young adults at Atatürk University in Erzurum province. Both populations differ in terms of sociocultural background, socioeconomic background and political view. Convenience sampling was employed to create the sampling.

The formula " $N > 50 + 8m$ " is used in correlational research (especially in multiple regression analyses) in order to determine the sampling size (Tabachnick & Fidell, 2007). In this formula, "N" refers to the number of participants, "m" to the number of independent variables, and "50" to constant participants. The level of skepticism is designated as the independent variable and comprises 6 sub-dimensions. Therefore, the number of participants for both populations should amount to more than 98 participants. As 255 and 355 young adults from Çanakkale Onsekiz Mart University (ÇOMU) and Atatürk University, respectively, were included in the present study, the number of participants was considered adequate.

The analysis of the participants revealed that the number of female participants (65.1% from ÇOMU and 67.6% from Atatürk University) was higher than that of males (34.9% from ÇOMU and 32.4% from Atatürk University). It was observed that the participants were between 18 and 30 years old and found out that mean ages of the participants from ÇOMU and Atatürk University were 21.35 and 20.66 years, respectively.

The analysis of the frequency related to following news media showed that the number of participants saying "everyday" was higher in both sampling groups (48.2% for ÇOMU; 43.7% for Atatürk University), which is followed by "every 2 or 3 days" (36.5% for ÇOMU; 42.3% for Atatürk University) and "once a week" (15.3% for ÇOMU; 14.1% for Atatürk University). The participants follow news media mostly on television, online newspapers and social media.

2.3 Data Collection Tool and Analysis

The levels of participants' news media and skepticism literacy have been determined with the questionnaire technique. The Skepticism Scale of Hurtt (2010) was used to measure the participants' skepticism levels. The "News Media Literacy Scale", developed by Ashley, Maksl and Craft (2013), Rosenbaum's (2007) "Media Literacy Assessment Tool", and Kıncal and Kartal's (2009) media literacy synthesis were deployed to measure the participants' levels of news media literacy. Both measuring tools have been translated into Turkish by achieving linguistic validity. Content validity was achieved based on the views of 2 academic specialists in Education Programs and Teaching and 3 academicians specialized in Media Literacy. The Skepticism Scale consists of 30 items and 6 sub-dimensions (Hurtt, 2010): self-determining, self-confidence, suspension of judgment, search for knowledge, interpersonal understanding, and questioning mind.

The News Media Literacy Scale comprises 44 items and 9 sub-domains (Ashley, 2013; Kıncal & Kartal, 2009; McWorter, 2016; Potter, 2013): locus of control, motivations for news consumption, doubt on news media, questioning news, representation of reality, subjective presentation of news, subjective interpretation of messages, awareness of news message production, create news media.

Rating Scale was used in both scales and the replies were obtained based on evenly spaced 6 rates ranging from "strongly disagree" to "strongly agree".

The internal consistency coefficient (Cronbach's Alpha) was measured to investigate the reliability of scales intended for both samplings. The Cronbach's alpha coefficient of the Skepticism Scale was calculated to be .876 for ÇOMU sampling and .887 for Atatürk University. The Cronbach's alpha coefficient of the News Media Literacy Scale was .782 and .789 for ÇOMU and Atatürk University, respectively. The Cronbach's alpha coefficients of both scales were interpreted to be reliable for each sampling group.

The obtained data were analyzed with SPSS 21.0 software program. The analyses of skewness and kurtosis values along with histogram analysis showed that the data were normally distributed. The Pearson correlation

analysis was employed for correlational analysis. The statistical process for using one variable to predict another is called regression (Gravetter and Forzano, 2012, p. 352). So, multiple regression analysis was conducted to investigate the independent (criterion) variable's capability to predict dependent (predictor) variable.

3. Results

3.1 Relationship between Skepticism and News Media Literacy

Table 1. Relationship between news media literacy levels and skepticism levels of young adults

ÇOMU		News media literacy level
	Pearson Correlation	,454**
Skepticism level	Sig. (2-tailed)	,000
	N	255
Atatürk U.		News media literacy level
	Pearson Correlation	,532**
Skepticism level	Sig. (2-tailed)	,000
	N	355

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

The interpretation of Table 1 shows that there is a positive moderate significant relationship between skepticism levels and news media literacy levels of the young adults of both research populations ($r=.454$ $p<.05$ for ÇOMU; $r=.532$ $p<.05$ for Atatürk University). It was concluded that as the skepticism levels of young adults of Çanakkale Onsekiz Mart University and Atatürk University got higher, so did their news media literacy levels.

3.2 Skepticism's Capability to Predict News Media Literacy

Table 2. Multiple regression (Enter) analysis results concerning the prediction of news media literacy levels of young adults according to their skepticism levels

Research Population	Predictor Variable	News Media Literacy						
		B	Standard Error	B	t	p	Binary r	Partial R
ÇOMU	Constant	2,475	,208		11,901	,000		
	Self-Determining	,168	,038	,295	4,365	,000*	,427	,267
	Self-Confidence	,004	,023	,010	,166	,869	,166	,011
	Suspension of Judgment	,030	,036	,056	,843	,400	,292	,053
	Search for Knowledge	,071	,040	,125	1,786	,075	,350	,113
	Interpersonal Understanding	,090	,036	,159	2,519	,012*	,326	,158
	Questioning Mind	,014	,034	,028	,401	,689	,320	,025
Atatürk U.	Constant	2,214	,150		14,796	,000		
	Self-Determining	,152	,027	,283	5,728	,000*	,441	,294
	Self-Confidence	,035	,024	,077	1,454	,147	,341	,078
	Suspension of Judgment	-,007	,031	-,013	-,230	,818	,304	-,012
	Search for Knowledge	,069	,031	,142	2,241	,026*	,417	,119
	Interpersonal Understanding	,094	,027	,175	3,461	,001*	,366	,182
	Questioning Mind	,055	,027	,119	2,040	,042*	,396	,109

* $p<0.05$.

In consideration of the sampling group from Çanakkale Onsekiz Mart University, the developed skepticism model is significant in explaining the news media literacy levels of young adults [$R^2=.249$; Adjusted $R^2=.230$; $F=13.670$ $p<.05$].

It was realized that the level of self-determining level ($\beta=.295$, $p<.05$) and interpersonal understanding sub-domains ($\beta=.159$, $p<.05$) could significantly predict news media literacy levels of young adults. The standardized regression coefficients (β) signify that self-determining level and interpersonal understanding level of young adults (the former higher than the latter) positively affect and increase news media literacy level. A positive weak significant relationship was observed between news media literacy level and the self-determining and interpersonal understanding sub-domains. Partial correlation results described by checking the other predictors yielded a positive relationship with self-determining level (Partial $R = .267$), which is higher than the relationship with the others, and a positive relationship with interpersonal understanding level (Partial $R = .158$).

In consideration of the sampling group from Atatürk University, the developed skepticism model is significant in explaining the news media literacy levels of young adults [$R^2=.318$; Adjusted $R^2= .306$; $F=27.024$ $p<.05$].

It was observed that self-determining level ($\beta=.283$, $p<.05$), interpersonal understanding level ($\beta=.175$, $p<.05$), search for knowledge level ($\beta=.142$, $p<.05$) and questioning mind level ($\beta=.119$, $p<.05$) could significantly predict news media literacy levels of young adults. According to the standardized regression coefficients (β), self-determining levels of young adults had the highest effect level, which was followed by interpersonal understanding level, search for knowledge level, questioning mind level. These variables positively affected and increased the level of news media literacy. A positive weak significant relationship was observed between the level of news media literacy and the levels of self-determining, interpersonal understanding, search for knowledge, and questioning mind. According to the partial correlation results described by checking the other predictors, there is a positive relationship with self-determining level (Partial $R = .294$), which is higher than the relationship with the others, with interpersonal understanding level (Partial $R = .119$), search for knowledge level (Partial $R= .119$) and questioning mind level (Partial $R= .109$).

4. Discussion

The results revealed positive, moderate, significant relationships between skepticism levels and news media literacy levels of young adults. In both sampling groups, as the skepticism levels of young adults increased so did the news media literacy levels. This finding substantiates the hypothesis that skepticism can be an effective tool to increase the level of news media literacy.

The speed of information dissemination and its increasing availability have made consumers more inquisitive and skeptical about the information transmitted through a media (Spikes & Haque, 2014). Due to the embodiment of such a consumer profile, media has had to produce policies and methods to maintain its power and hegemony. Media companies market interests and needs they themselves defined rather than the ones appealing to the related audience, e.g. by means of advertisements. Thus, audience must adopt a skeptical attitude towards advertisements (Rogow, 2011). The information offer policies and methods that media companies produce for advertisements go true for news media as well. Hence, receivers will need basic requirements to be able to be aware of the artificial reality. The most important of these is access to an information source. In relation to information accessibility, internet allows for checking news content from assorted sources. However, if individuals are not suspicious, this process will not work. On the other hand, ones who want to avail of this opportunity are expected to hold research skills, contextual knowledge and a little bit of skepticism (Poundstone, 2016, p. 228). Skepticism plays a key role in preventing individuals from being defenseless against media. Media literacy, a 21st century skill, which is globally accepted by education scholars and whose validity has been proven in scientific studies, foregrounds skepticism. There is a great deal of research suggesting that media literacy supports, necessitates, and promotes skepticism (Austin, Chen, & Grube, 2006; Austin, Muldrow, & Austin, 2016; Castellanos, 2007; Edgar, 2009; Irving & Berel, 2001; Kealy, 2004; Kleebung, 2010; Moody, 2009; Parsemain, 2016; Potter, 2004; Thoman & Jolls, 2004). Media literacy's approach and capacity to authorize receiver can only be realized by inculcating skepticism in individuals (O'Neill & Barnes, 2008). Thus, the operationalization of skepticism for news media literacy is considered necessary in terms of rational thinking and the scientific outputs of the present study produced substantiating results. Moreover, there are studies emphasizing that a functional level of skepticism about news media is crucial (Hughes, Spicer, & Lancaster, 2011; Kajimoto, 2016; Morris & Forgette, 2007; Tsfati & Peri, 2006; Zeng, 2014).

After revealing the relationship between skepticism and news media literacy, this study puts forward the results concerning skepticism's sub-domains' capability to predict news media literacy. The analysis of the sub-domains of skepticism, which has the potential to predict the level of news media literacy, shows that some sub-domains affect news media literacy level and some do not. The evaluation of the findings from the ÇOMU sampling group suggests that self-determining and interpersonal understanding of young adults are critical determiners of and exert a positive effect on news media literacy level. The other sub-domains of skepticism cannot affect news

media literacy. Similarly, the findings from the Atatürk University sampling group indicate that self-determining, interpersonal understanding, search for knowledge and questioning mind levels of young adults are critical determiners of and exert a positive effect on news media literacy level. The other sub-domains of skepticism cannot affect news media literacy.

In the light of the aforementioned explanation, analysis of the results obtained from both sampling groups show that the sub-domains self-determining and interpersonal understanding positively affect news media literacy, while the variables self-confidence and suspension of judgment have no effect. Search for knowledge and questioning mind produced effect on news media only in a single sampling group, but it did not in the other.

The self-determining level of young adults, in other words the behavior of deciding whether to accept or refuse given information based on their subjective evaluations independent of the manipulations of external factors (e.g. authorities, friends, media, culture) (in other words, taking epistemic risks), promotes the behavior of following news media from a more critical and inquisitive viewpoint and of looking for an alternative news media. Besides, the level of interpersonal understanding, i.e. efforts to understand the other individuals' behaviors and to evaluate and question the factors causing their behaviors, changes their perspective to news media and helps them acquire news media competence. Moreover, young adults' searching for alternative information, dissatisfaction by a single source, constant high level of motivation to learn (search for knowledge), and questioning the validity and accuracy of a piece of information (questioning mind) allow them to be prepared against news media.

Consequently, news media literacy is one of the crucial competences young adults should have for social order to be able to operate properly and functionally. Thanks to news media literacy, young adults act autonomously in defiance of the sense of reality, which mainstream and local media channels try to create, and they take active part in the construction of reality. It helps them develop the potential to become active activists in an attempt to end cultural industry and social engineering seriously criticized by the Frankfurt School. Questioning the accuracy of reality is among the fundamental responsibilities of young adults in the face of information overload and disinformation. Individuals are expected to possess a high level of news media literacy for them to be able to fulfill this responsibility. News media literacy is among the basic literacy types that individuals should acquire in formal and informal education. However, it is not practical to boost the level of news media literacy despite the diversification and proliferation of information sources. From this viewpoint, the obtained results shed a considerable amount of light on education policies (to be) made to increase the level of news media literacy. Skepticism education should be included in the educational plans to raise the news media literacy levels of individuals. Self-determining and interpersonal understanding dimensions of skepticism in particular should be the basic competences for young adults to develop. Further, the efforts to inculcate search for knowledge and questioning mind competences should be supported for higher news media literacy.

4.1 Suggestions

It is important to improve the skepticism levels of young adults to increase their levels of news media literacy. Formal and informal educational practices should be implemented to develop young adults' self-determining and interpersonal understanding competences. The present study was conducted on undergraduate young adults. Thus, it should be replicated on young adults with different intellectual backgrounds. The results should be tested with causal comparative and experimental studies.

4.2 Limitations

The present study was carried out on undergraduate young adults with a specific level of intellectual background. Different results may always be obtained from young adults with different backgrounds. Besides, individuals not following news media were excluded from the study.

References

- Albaugh, P. R. (1997). *The role of skepticism in preparing teachers for the use of technology*. Paper presented at Education for Community: A Town and Gown Panel Discussion, Westerville, OH, (January 26, 1997).
- American Press Institute (2015). *How millenians get news: Inside the habits of America's first digital generation*. Retrieved April 11th, 2017, from <http://www.americanpressinstitute.org/wp-content/uploads/2015/03/How-Millennials-Get-News-Media-Insight-Project-March-2015-FINAL.pdf>
- 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>
- Austin, E. W., Chen, M. J., & Grube, J. W. (2006). How does alcohol advertising influence underage drinking? The role of desirability, identification and skepticism. *Journal of Adolescent Health*, 38, 376-384.

- <https://doi.org/10.1016/j.jadohealth.2005.08.017>
- Austin, E. W., Muldrow, A., & Austin, B. W. (2016). Examining how media literacy and personality factors predict skepticism toward alcohol advertising. *Journal of Health Communication, 21*(5), 600-609. <https://doi.org/10.1080/10810730.2016.1153761>
- Buckingham, D. (2000). *The making of citizens: Young people, news and politics*. London, England: Routledge.
- Cappella, J. N., & Jamieson, K. H. (1997). *Spiral of cynicism: The press and the public good*. New York, NY: Oxford University Press.
- Castellanos, L. M. (2007). Media literacy and health behaviour among children and adolescents. *WHO Technical Meeting on Building School Partnership for Health, Education Achievements and Development*. Vancouver.
- Christians, C. G., Glasser, T. L., McQuail, D., Nordenstreng, K., & White, R. A. (2009). *Normative Theories of the Media: Journalism in Democratic Societies*. Urbana: University of Illinois Press.
- Edgar, P. (2009). *Teaching media literacy should be our priority*. Retrieved September 11th, 2017, from <http://www.patriciaedgaranddonedgar.com/>
- Edgerly, S. (2015). Making sense and drawing lines: Young adults and the mixing of news and entertainment. *Journalism Studies, October*, 1-18. <https://doi.org/10.1080/1461670X.2015.1100522>
- Fleming, J. (2014). Media literacy, news literacy, or news appreciation? A case study of the news literacy program at Stony Brook University. *Journalism & Mass Communication Educator, 69*(2), 146-165. <https://doi.org/10.1177/1077695813517885>
- Giarlo, M. J. (2006). The role of skepticism in human-information behavior: a cognitive-affective analysis. *Library Student Journal*. Retrieved April 7th, 2016, from <https://scholarsphere.psu.edu/downloads/g732d899x>
- Gravetter, F. J., & Forzano, L. B. (2012). *Research methods for the behavioral sciences* (4th ed.). Wadsworth, Cengage Learning: USA.
- Hobbs, R. (2008). Debates and Challenges Facing New Literacies in the 21st Century. In S. Livingston, & K. Drotner (Eds.), *International handbook of children, media and culture* (pp. 431-48). London: Sage. <https://doi.org/10.4135/9781848608436.n26> <https://doi.org/10.4135/9781848608436.n26>
- Hoffman, M. E. (2016). *News media literacy and social media usage* (Unpublished doctorate thesis). University of Missouri-Columbia, US.
- Holley, S. C. (2016). *The relationship between professional skepticism and critical thinking of accounting managers: A quantitative study* (Unpublished doctorate thesis). Capella University, US.
- Hughes, C. E., Spicer, B., & Lancaster, K. (2011). Young people's perceptions of, and engagement with, news media reporting on illicit drug issues: An Australian study. *Current Issues in Criminal Justice, 23*(2), 145-161.
- Hurt, R. K. (2010). Development of a scale to measure professional skepticism. *Auditing: A Journal of Practice & Theory, 29*(1), 149-171. <https://doi.org/10.2308/aud.2010.29.1.149>
- Hutchens, M. J., Hmielowski, J. D., Pinkleton, B. E., & Beam, M. A. (2016). A spiral of skepticism? The relation between citizens' involvement with campaign information to their skepticism and political knowledge. *Journalism & Mass Communication Quarterly, 93*(4), 1073-1090. <https://doi.org/10.1177/1077699016654439>
- Irving, L. M., & Berel, S. R. (2001). Comparison of media literacy programs to strengthen college women's resistance to media images. *Psychology of Women Quarterly, 25*, 103-111. <https://doi.org/10.1111/1471-6402.00012>
- Kajimoto, M. (2016). Developing news literacy curricula in the age of social media in Hong Kong, Vietnam and Myanmar. *Journalism Education, 5*(1), 136-154. <http://hdl.handle.net/10722/226574>
- Kealy, W. A. (2004). Media literacy. In J. L. Kincheloe, & D. Weil (Eds.), *Critical thinking and learning: An encyclopedia for parents and teachers* (pp. 287-290). Westport, Connecticut: Greenwood Press.
- Kıncal, R. Y., & Kartal, O. Y. (2009). Medya okuryazarlığı eğitimi, *Milli Eğitim Dergisi, 181*, 318-333.
- Kleebpung, N. (2010). *Advertising and media literacy: Young people and their understanding of the world of advertising in Australia and Thailand* (Unpublished doctoral dissertation). Victoria University.

- Kovach, B., & Rosenstiel, T. (2011). *Blur: How to Know What's True in the Age of Information Overload*. New York: Bloomsbury.
- Livingstone, S. (2004). Media literacy and the challenge of new information and communication technologies. *The Communication Review*, 7, 3-14. <https://doi.org/10.1080/10714420490280152>
- Maksl, A., Ashley, S., & Craft, S. (2015). Measuring news media literacy. *Journal of Media Literacy Education*, 6(3), 29-45. <http://digitalcommons.uri.edu/jmle/vol6/iss3/3>
- Maksl, A., Craft, S., Ashley, S., & Miller, D. (2016). The usefulness of a news media literacy measure in evaluating a news literacy curriculum. *Journalism & Mass Communication Educator*, May, 1-14. <https://doi.org/10.1177/1077695816651970>
- McWhorter, C. (2016). *News media literacy in young adults: Effects of the new media environment* (Unpublished doctorate thesis). Regent University, US.
- Mihailidis, P. (2014). The civic-social media disconnect: exploring perceptions of social media for engagement in the daily life of college students. *Information, Communication & Society*, 17(9), 1059-1071. <https://doi.org/10.1080/1369118X.2013.877054>
- Mohr, L. A., Eroglu, D., & Ellen, S. P. (1998). The development and testing of a measure of skepticism toward environment claims in the marketers' communications. *The Journal of Consumers Affairs*, 32(1), 30-55. <https://doi.org/10.1111/j.1745-6606.1998.tb00399.x>
- Moody, K. E. (2009). A constructivist approach to media literacy education: The role of the library. In: *Proceedings of the World Library and Information Congress: 75th IFLA General Conference and Assembly*, 23-28 August, Milano Convention Centre, Milan.
- Morris, J. S., & Forgette, R. (2007). News grazers, television news, political knowledge, and engagement. *The Harvard International Journal of Press/Politics*, 12(1), 91-107. <https://doi.org/10.1177/1081180X06297122>
- O'Neill, B., & Barnes, C. (2008). *Media literacy and the public sphere: A contextual study for public media literacy promotion in Ireland*. Centre for Social and Educational Research, Dublin Institute of Technology.
- Parsemain, A. L. (2016). Do critical viewers learn from television? *Participations Journal of Audience & Reception Studies*, 13(1), 71-93.
- Pinkleton, B. E., Austin, E. W., Zhou, Y., Willoughby, J. F., & Reiser, M. (2012). Perceptions of news media, external efficacy, and public affairs apathy in political decision making and disaffection. *Journalism & Mass Communication Quarterly*, 89(1), 23-39. <https://doi.org/10.1177/1077699011428586>
- Potter, W. J. (2004). *Theory of media literacy: A cognitive approach*. Thousand Oaks: Sage. <https://doi.org/10.4135/9781483328881>
- Potter, W. J. (2013). *Media literacy*. Thousand Oaks: Sage Publications.
- Poundstone, W. (2016). *Head in the cloud: The power of knowledge in the age of Google*. London: Oneworld Publication.
- Reaves, S., Hitchon, J., Park, S., & Yun, G. (2004). If looks could kill: Digital manipulation of fashion models. *Journal of Mass Media Ethics*, 19(1), 56-71. https://doi.org/10.1207/s15327728jmm1901_5
- Rogow, F. (2011). Ask, don't tell: Pedagogy for media literacy education. *Journal of Media Literacy Education*, 3(1), 16-22.
- Rosenbaum, J. E. (2007). *Measuring media literacy: Youngsters, television, and democracy* (Unpublished doctorate thesis). Nijmegen, The Netherlands.
- Sikkema, S. E. (2014). *Professional skepticism of students: A descriptive study of differences in trait skepticism and personal values* (Unpublished doctorate thesis). Anderson University, US.
- Spikes, M. A., & Haque, Y. S. (2014). A case study combining online social media and video to teach news literacy. *Journal of Educational Technology Systems*, 43(1), 99-116. <https://doi.org/10.2190/ET.43.1.g>
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (5th ed.). Boston: Pearson Education, Inc.
- Thoman, E. & Jolls, T. (2004). Media literacy—A national priority for a changing world. *American Behavioral Scientist*, 48, 18-29. <https://doi.org/10.1177/0002764204267246>
- Tsfati, Y., & Peri, Y. (2006). Mainstream media skepticism and exposure to sectorial and extranational news media: The case of Israel. *Mass Communication & Society*, 9(2), 165-187.

https://doi.org/10.1207/s15327825mcs0902_3

- Urbonienė, A., Endraves, M., & Matawie, K. M. (2013). The relationship between students' thinking styles and professional skepticism. *International Journal on Global Business Management and Research*, 1(2), 5-13. <http://handle.uws.edu.au:8081/1959.7/533952>
- Valenzuela, S., Bachmann, I., & Aguilar, M. (2016). Socialized for news media use: how family communication, information-processing needs, and gratifications determine adolescents' exposure to news. *Communication Research*, January, 1-24. <https://doi.org/10.1177/0093650215623833>
- Valerlaus, J. M., Patten, E. V., Roche, C., & Young, J. A. (2015). # Getting healthy: The perceived influence of social media on young adult health behaviors. *Computers in Human Behavior*, 45, 151-157. <https://doi.org/10.1016/j.chb.2014.12.013>
- Vraga, E., 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.
- Weathington, B. L., Cunningham, C. J. L., & Pittenger, D. J. (2010). *Research methods for the behavioral and social sciences*. USA: John Wiley & Sons, Inc.
- Zeng, X. (2014). *Chinese young people's engagement with journalism: Perspectives and attitudes towards the news* (Unpublished doctoral dissertation). Bournemouth University, England.

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