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Audiences' Choice of Sources and Verification of News: Do Age and Educational Level Matter in Ghana?

Peter N. Amponsah[a] and Mavis Okyere[b]

[a]Department of Journalism and Communication Sciences, Catholic University of Ghana, Sunyani, Ghana
[b]Department of Education and Science Education, Catholic University of Ghana, Sunyani, Ghana

Corresponding author: **Peter N. Amponsah.** P. O. Box 363, Sunyani, Ghana, West Africa. Tel. +233208149531.
ORCID: 0000-0002-6734-0005; Email: peter.amponsah@cug.edu.gh

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Abstract: Today's news media landscape exposes audiences to multi-faceted media choices. Using an audience-centered approach in a cross-sectional survey of 419 respondents, we examined the audience's choice of news sources and their assessment of media credibility and verification of news as determined by the demographic factors of age and educational level. The results indicate that mainstream news media outlets are generally more popular than social media, but the latter has more appeal among younger people. While audiences' age and education count in selecting the most reliable news outlets, the different age brackets generally have similar tendencies to validate the news they receive from their most reliable sources. However, persons with higher levels of education are more likely to validate news than those with lower levels of education. Thus, we discuss the implications of our findings on fake news and misinformation for young people.

Keywords: audience, validation of news, traditional media, demographic characteristics, social media, news-democracy

1. INTRODUCTION

Users have a wide range of options for the source and content of their media library in the contemporary media environment. However, audiences' motives, tastes, preferences, beliefs, interests, or opinions, and hence selectivity, exist prior to their intake of news. It implies that different orientations have an impact on purchasing choices. At the same time, the contemporary high-choice information environment and the proliferation of partisan media, particularly online news outlets, have significantly widened audiences' opportunities for selective exposure (Iyengar et al., 2019). This contemporary high-choice media environment makes the idea that media is active in influencing politics, informing citizens, and making democracy work highly debatable.

Due to the prevalence of the Internet, news and information that formerly only reached the public after expert analysis and meticulous gatekeeping now do so seconds after occurring (Jurrat, 2011). Armed with internet-connected devices, ordinary citizens who were heavy media consumers have become active creators of media content described as "citizen journalism" (Bowman & Willis, 2003). Also, online media's bottom-up and interactive nature seems to challenge conventional media's top-down and hegemonic structure (Kramp, 2015).

Media consumers are concerned about the veracity of the endless information that these media platforms disseminate every day, while media practitioners are embroiled in a dispute regarding the ethics and professionalism of these media platforms. In addition, the quick and easy information dissemination through personal networks enabled by social media has also raised concerns about the reception and spread of fake news that is inaccurate, misleading, and often fabricated in whole or in part (Allcott & Gentzkow, 2017).

Fake news poses a severe threat to democracy since it can influence people's opinions and decisions (Thorson, 2016). News validation, or the process of validating news, has grown in importance for users (Lazer et al., 2018). It is unclear why some users are more inclined to verify news than others and how the verification process varies depending on the situation (Edgerly, Mouro, Thorson, & Tham, 2020). Hence, the flood of information generated daily by both mainstream and digital media has left doubts in the audience's minds regarding the news's authenticity in many countries due to the rise of partisan reporting and the rampant presence of fake news (van Aelst et al., 2017). The perception of the credibility of information disseminated by these two media platforms has been the focus of many media and communication researchers, which have yielded confounding results, as some reveal that digital media are perceived as more credible (Johnson & Kaye, 1998; Wilson et al., 2011), while others reveal the opposite (Kiousis, 2001; Kovaic et al., 2010; Mehrabi et al., 2009). Other researchers have explored the possible association between audience exposure to the media and their perception of media credibility and trustworthiness (Tsfati, 2010; Tsfati & Cappella, 2005; William, 2012).

Although previous research established a correlation between media exposure and perception of credibility, little scholarly attention has been paid to how news audiences prefer to access both media platforms and how age and education differences influence their intent to verify the news. This paper aims to contribute to the literature by investigating the age and education demographics' role in understanding the nature of people's selective exposure to news and their intent to validate news due to media credibility. Therefore, this study (a) considers the level of trust in media sources and how this influence people's media choices and (b) examines the role such sociodemographic factors as age and educational level play in media exposure and trust in news media. It applies an audience-oriented perspective to the study of audience choice of news sources and the assessment of media credibility concerning the demographic factors of age and education that influence them. Implications of our findings on society are discussed in the conclusion.

2. LITERATURE REVIEW

The concept of news

Due to its function as a means of disseminating information, news has a specific relationship to democratic societies and, subsequently, to informed citizens and participation (Schudson, 1998). In contrast to their expectations of other media genres and the murky hybrid media context, research has shown audiences' approval of the news's democratic value and their expectations of such professional standards as factualness, neutrality, and objectivity from news (Edgerly, 2017; Edgerly & Vraga, 2020b).

The concept of news has three features. Firstly, it is audience-focused because it considers audiences' agency in making sense of media genres and assessing media messages and outcomes. Secondly, it assumes that people may have difficulty defining news but can identify it when they perceive specific media content (Baum, 2003; Edgerly, 2017). Thirdly, the concept of news assumes differences in audiences' evaluation of such "news." Thus, researchers may consider whether audiences' ratings of a media message impact higher learning and participation or whether media content or type may establish variations in audience evaluations. Moreover, researchers' (Amazeen & Bucy, 2019; Vis̆ňovsky & Radosĭnská, 2021) recent concern over fake news suggests such news can impact how audiences would categorize certain media content as fake news, which would have low ratings and outcomes.

Harold Lasswell's model of communication, developed in 1948, emphasized five components: (a) *who,* (b) *said what,* (c) in which *channel*, (d) to *whom* and (e) with what *effect*. Alternatively, "who communicates the information," "*what* is communicated, *how* it is communicated, *by whom* it is communicated, and *where* … [and] audience *who receives* the message" (Edgerly & Vraga, 2020a, p. 423). Audience evaluation of news from media outlets involves an interaction of "who communicates the information" (sources) and "who receives the message" (audiences).

Audiences have individual differences in encountering a media message. Individual differences also manifest in motivations. Accordingly, some theories of news consumption decisions reveal that many motivations shape audiences' media choices, including entertainment, ideologically driven choices, socially driven consumption, and information need (Lee, 2013). The motivations drive audiences' processing, perception and assessment (McQuail, 2010). Consequently, audiences' evaluations of the news content vary, especially in a hybrid media context (Baym, 2017). Among individual differences are sociodemographic characteristics, prior media experiences and political orientation.

Demographic differences in news consumption

Previous research indicates that audiences' motivational factors, including sociodemographic characteristics, produce systematic differences. Regarding sociodemographic variables that can influence news consumption patterns, previous studies suggest that gender, age, and education matter, such as gender, age, and education in media consumption (Esser & Steppatt, 2017; Norris, 2000). Such relevance of demographic variables for differentiating news diets informs news outlets often characterized by a distinct audience profile that differs in gender, age, education, income, and race/ethnicity (Reis et al., 2017; Tewksbury, 2005). Similarly, some studies suggest that demographic variables can predict one's media choices (Hasebrink & Popp, 2006; Taneja et al., 2012; van Rees & van Eijck, 2003).

The Role of Age

According to Cohen (2013), age significantly affects how people worldwide consume news. He asserts that younger people prefer online news whereas older people consume more traditional mass media (television and newspapers). Recent studies imply that younger people consume less news than older people (Chyl & Lee, 2013; McCombs et al., 2011). Again, regarding age, older cohorts typically consume more news than younger cohorts do, but this is mostly restricted to traditional media outlets (i.e., newspapers and television) (see Elvestad & Phillips, 2018).

Personal needs change with age, reflected by changes in media preferences. Young people born into the hybrid media environment have a more flexible approach to media choices, standards, and sensemaking of news that may differ from their older counterparts (Gottfried & Anderson, 2014). However, older people have less interest in media content that has negative valence. (Carstensen, 2006; Mather & Carstensen, 2005). Their motivation to expand their horizons and acquire information about new societal trends decreases with age. At the same time, young people value novelty and invest time and energy in acquiring information to expand their horizons.

The Role of Education

Studies show that education is a relevant yet complex predictor of news consumption (Esser & Steppat, 2017). According to Esser and Steppat, people with high education watch T.V. less than people with lower levels of education and read more newspapers than people with lower levels of education. However, researchers generally agree that people with less education consume less news than more educated people (Bergström, Strömbäck, & Arkhede, 2019; McCombs et al., 2011). Education is also a central predictor of media use, but this relationship is less straightforward than is often assumed (Esser & Steppat, 2017). The

highly educated tend to consume most news through newspapers, while the evidence is more mixed regarding T.V. news (Shehata & Strömbäck, 2011).

Apart from a few exceptions regarding age (Andersen et al., 2020; Diehl, Barnidge & Gil de Zuniga, 2019; Loader, Vromen & Xenos, 2014), the literature is scanty to lay a solid relationship between the sociodemographic variables of gender, age and education and patterns of news consumption within the current media environment. Some scholars have found that hard and soft news audiences differ in various characteristics, such as education, gender, and political knowledge (Baum, 2003; Prior, 2003; Reinemann et al., 2011). In addition, one study of five European countries showed that consumers who used legacy brands more than born-digital media tended to be male and have higher education and income (Vara-Miguel, 2020). The highly educated, men and older cohorts tend to be more politically interested than groups with lower education, women, and younger cohorts (Prior, 2019).

Media exposure and perception of media credibility

Selective Exposure

In order to investigate the effects of media exposure patterns and information choices on viewers' perceptions of mainstream and digital media credibility by gender and educational level, this study uses a selective exposure framework as its theoretical underpinning. Literature on selective exposure suggests that individuals actively choose the media they use and intentionally select content to which they pay attention. The concept of selective exposure, theoretically grounded by Festinger's (1957) cognitive dissonance theory, is the assumption that people expose themselves to media content that reinforces their pre-existing beliefs while avoiding information that negates their pre-existing views. This theory posits that people deliberately select and avoid media platforms and content based on their personal choices and preferences, thus conferring the power of choice on the media audience rather than the mass media.

However, studies have revealed that while the audience may be able to attend to information that confirms their pre-existing beliefs consciously, they inadvertently get exposed to disagreeable information (Stroud, 2011; Tewksbury et al., 2001; Valentino et al., 2009). According to Weeks et al. (2017), these unintentional and incidental exposures motivate media audiences to seek more attitude-reinforcing information. The theory of selective exposure emphasizes individuals' selective choices and preferences. Researchers suggest that the current media environment offers almost infinite choices regarding the types of information to consume and the type of people they wish to engage.

Media Credibility

Also, news consumption may entail credibility and preferences in the active selection and lapse into a habitual consumption pattern once the initial selection is congruent and satisfying (Chan-Olmsted et al., 2013). In contemporary, high-choice media environments, trust in news media sources, especially traditional ones, is continuously declining (Strömbäck et al., 2020). This consumption pattern explains why the issue of media trust and how it influences patterns of news use have received consistent attention.

Scholars point to the fact that, from a democratic perspective, one of the most important functions of the news media is to inform citizens (Holbert, 2005). In fulfilling this function, the media must offer people the information they need to be free and self-governing (Strömbäck, 2005). At the same time, people must trust the news media they use (Strömbäck, 2020). Theoretically, Tsfati and Cappella (2003) suggest that trust in news media is linked to actual news use. People tend to turn to the news to get accurate information about the world and obtain a proper picture of what is happening at some point. At the same time, they suggest that the audience is rational and wants to achieve the highest levels of utility from the news media they use. Hence, "a correlation between news media trust and exposure can be expected" (Strömbäck et al., 2020, p. 145). Therefore, one can expect people sceptical towards a specific news source to consume less news from

that source as part of their media diet. As an example, people with lower levels of trust in mainstream media. Relatedly, misinformation, disinformation and mal-information, generally termed fake news, are linked to a considerable decline in public confidence in mainstream media (Newman, Fletcher, Kalogeropoulos, Levy & Nielsen, 2018; Ognyanova, Lazer, Robertson & Wilson, 2020).

Over the years, scholars have empirically tracked trends in the public's opinion about the credibility of different media platforms and factors influencing public perception. While earlier investigations conducted in the pre-internet era show that perception of media credibility is mainly influenced by media literacy and demographic factors like; age, gender and level of education (Mulder, 1981; Robinson & Kohut, 1988), studies on this subject matter, since the advent of digital media, have shown that media credibility perception among the public is contingent upon factors such as interpersonal discussion, media use (Bucy, 2003; Kiousis, 2001), media exposure (Tsfati & Cappella, 2003; Wanta & Hu, 1994), political ideology, and partisanship (Lee, 2010), and religious disposition (Golan & Day, 2010).

More recently, with the multiplicity of media organizations and the proliferation of news outlets, the media audience has never been more inundated with numerous choices of media platforms and media content, resulting in widespread scepticism about the authenticity of media platforms and the veracity of the information they churn out (Banda, 2010). This recent phenomenon has sparked renewed interest in media credibility research. Literature suggests that people tend to pay more attention to media platforms they trust and consume content that align with their predispositions while avoiding media they distrust (Kiousis, 2001; Tsfati & Cappella, 2003), affirming the principle of selective exposure.

Tsfati (2010) argued that trust in a particular medium is associated with exposure to such a medium. He found a strong relationship between exposure to mainstream media and trust in the media, while consumption of nonmainstream news was correlated with media scepticism. William (2012) showed that attention to news correlates with audience trust in the message, source, and media. Similarly, an investigation on the influence of mass media use on media trust conducted by Hopmann et al. (2015) revealed that the use of specific media types leads to more trust in those media, confirming the findings of earlier studies on the effect of media exposure on audience trust of the mass media (Kiousis, 2001; Tsfati & Cappella, 2003, 2005; Wanta & Hu, 1994). While these studies have significantly increased understanding of the influence of media exposure on audience attitude towards the media, there is an inconsistency in the operationalization of media trust as a variable.

Many of these studies conceptualized media trust concerning confidence in and reliance on media platforms (e.g. Hopmann et al., 2015; Tsfati, 2010; Tsfati & Cappella, 2003, 2005; William, 2012), while other studies discuss media trust based on the perception of accuracy of media coverage (e.g. Kiousis, 2001; Wanta & Hu, 1994). This conceptual irregularity between media trust and media credibility has been a consistent limitation in media credibility research (Hellmueller & Trilling, 2012), resulting in methodological inaccuracies (Guo, 2018). Although both concepts share some underlying overlaps, evaluations of trust in the media and perception of media credibility are conceptually distinct.

According to Hellmueller and Trilling (2012), trust research depends on the societal functions of the media, while credibility research relies more on interpersonal factors. Guo (2018) explained that the semantic distinction between both concepts is quite pronounced such that a disregard for usage could distort the measurement of media performance evaluation. The present study distinguishes between the two concepts by focusing on the audiences' perception of media credibility. Here, media credibility is defined as evaluating the believability and reliability of the media based on the audiences' perception of the accuracy, factuality, fairness, and balance of media content.

Such audiences' assessment of credibility in news consumption implies evaluating the source as an important factor. News sources are important to reporting and producing factual and verified news in maintaining journalism ideologies, including news-democracy principles of objectivity, balance and diversity, to advance the media's interpretive role of shaping the news and public agenda (Franklin & Carlson, 2010). While reporters of news outlets use statements of sources through gatekeeping and selecting what represents the news discourse, news outlets epitomize news sources for the audience. Audiences have the sense in their media consumption that news outlets as their sources of news depend on "primary" news sources, and over-reliance on such sources such as government officials, the police and public-relations professionals can taint the news with biases (Grabe, Zhou, & Barnett, 1999; Lewis, Williams & Franklin, 2008).

Through their evaluation, audiences find data consistent or inconsistent with their beliefs, consider inconsistent information sources less credible, and perceive consistent information more positively (Hollander, 2018). Thus, active media users can choose ideological content that emphasizes their ideological predispositions or perspectives, but they may go beyond partisanship to include individual and situational differences (Hollander 2018). Therefore, this study focuses on answering the following research questions:

RQ1. Do audiences select the most reliable news outlets by age and educational level?

RQ2. Would age and educational level determine audiences' validation of news from their choice of reliable news outlets?

This study also hypothesized the following:

$\mathbf{H_0}$: Validation of news is the same across categories of age and educational brackets
$\mathbf{H_1}$: Validation of news is not the same across categories of age and educational brackets

3. METHOD

This study examined whether age and educational level influence audiences' selective exposure to what they perceive as reliable news outlets and whether audiences' assessments of what is reliable news moderate their intention to verify media messages. We used a cross-sectional survey design for the study because of its utility in determining how different categories of people react to the news. The cross-sectional survey also permitted us to study respondents' characteristics as age and education determined how they react to news media outlets (Creswell, 2012).

The target population was adults (18 years and above) in Ghana. The accessible population was all adults in the Ahafo, Ashanti, Bono, and Bono East Regions. Because the population size could not be determined (unknown), we depended on Kibuacha's (2021) formula to decide the appropriate sample for the study.

$$n = \frac{z^2 \times sd \times (1 - sd)}{e^2}$$

Where:
Z= the z-score for a chosen confidence interval
sd = the standard deviation, how much variance is allowed
e= the confidence level.

A safe standard deviation of 0.5 (Kibuacha, 2021) was used. We estimated 95% confidence that the sample would represent the population. That is e = 0.05, and the corresponding z-score is 1.96.
Therefore, the sample size was:

$$n = \frac{(1.96)^2 \times 0.5 \times (1 - 0.5)}{(0.05)^2}$$
$$= \frac{3.8416 \times 0.25}{0.0025}$$
$$= \frac{0.9604}{0.0025}$$
$$= 384.16$$

Based on the obtained value, a sample size of 385 or high was assumed to be appropriate for the study. So, we conveniently selected a minimum of 100 respondents from each region.

For the study, we used a questionnaire as our data collection instrument. The questionnaire was in three sections. Section A was devoted to finding the sociodemographic information of respondents. Sections B and C were five-point Likert scale items to obtain respondents' views about news and the media. Section B asked respondents to rate news content based on the news source. Items in section C were used to determine whether respondents' news ratings moderate their behavioral intention to verify the news.

4. RESULTS

This section presents the study's outcomes, applying an audience-oriented perspective to the audience choice of news sources and assessment of media credibility as determined by the demographic factors of age and educational level. The cross-sectional survey of 419 respondents yielded the following results.

Table 1: Most Reliable Source of News by Age and Educational Level

		Television	Newspapers (Printed)	Radio	Web/Social Media	Total
Age	18-24	37(33.6%)	42(38.2%)	14(12.7%)	17(15.5%)	110
	25-34	69(39.0%)	55(31.1%)	30(16.9%)	23(13.0%)	177
	35-44	28(38/8%)	24(31.6%)	18(23.7%)	6(7.9%)	76
	45-55+	13(23.2%)	16(28.6%)	26(46.4%)	1(1.8%)	56
	Total	147(35.1%)	137(32.7%)	88(21.0%)	47(11.2%)	419
Educational Level	Primary	27(29.7&)	29(31.9)	29(31.9)	6(6.6%)	91
	Junior high	18(32.1%)	20(35.7%)	17(30.4%)	1(1.8%)	56
	Senior high	23(25.6%)	26(28.9%)	23(25.6%)	18(20.0%)	90
	undergraduate	33(45.2%)	24(32.9%)	6(8.2%)	10(13.7)	73
	postgraduate	46(42.2%)	38(34.9%)	13(11.9%)	12(11.0%)	109
	Total	147(35.1%)	137(32.7%)	88(21.0%)	47(11.2%)	419

The descriptive analysis of data on participants' most reliable sources of the news based on age and educational level reveals that most participants favour the mainstream media: 147(35.1%) favour television, 137(32.7%) favour newspapers, and 88(21%) prefer radio. Social media was the least favourite source of news by participants. Out of the 47(11.2) participants who indicated that social media is their reliable source of news, 17 were 18-24 years representing 15.5 % of participants in this age group. Another 23 were of the age of 25-34, representing 13.0% of this age bracket. Only six and one participants, respectively, of the age groups 35-44 and 45-55+, said social media was their reliable news source. This finding reveals that young people between 18-34 prefer social media to adults aged 35-55+. This preference could be attributed to the fact that more youth than older people are into using social media platforms. Again, it was observed as in

Table one that only a small percentage of participants with primary and junior high-level education favoured social media, 6(6.6%) and 1(1,8%), respectively. Of the 47(11.7%) of the 417 participants who favoured social media as the most reliable source, the highest count was recorded for those with secondary-level education, 18(20%). Only a small portion of primary and junior high education participants indicated social media is their reliable news source, 6(6.6%) and 1(1.8%), respectively.

Next, we wanted to know how participants in these age groups validate the news they receive from their most reliable sources. Respondents were asked to indicate their conduct of what they do with news they read/listen to, from their choice of a reliable source on a scale of 1-5, where 1=Strongly Disagreed, 2=Disagreed, 3=Uncertain, 4=Agreed and 5=Strongly Agreed. Negatively worded items were coded in reverse order. Eight items elicited respondents' views on how they validate news from reliable sources. The average of a respondent's responses to these eight items was obtained to represent his/her validation of news. Hence, the grand mean for these items is used to interpret the respondents' attitudes toward validating news from their reliable sources. A mean of less than three indicates respondents do not validate news from their choices of reliable news sources, and a mean greater than three indicates they validate news from the sources. The result in Table 2 reveals that, generally, the participants in the different age brackets and educational levels tended to validate news. Each of the age brackets/groups and the different education levels had a mean greater than three; it can be said that the respondents validated the stories they received from their trusted sources.

Table 2: Validation of News by Age and Educational Level

		Mean	Median	Standard deviation
Age	18-24	3.405	3.500	0.929
	25-34	3.490	3.500	0.814
	35-44	3.338	3.500	0.709
	45-55+	3.246	3.380	0.839
Educational Background	Primary	3.204	3.250	1.033
	Junior high	3.380	3.500	0.529
	Senior high	3.328	3.500	0.626
	undergraduate	3.595	3.500	1.046
	postgraduate	3.532	3.630	0.724

It could be observed that even though all the age groups and educational levels had a mean greater than three, they all validated the news they received from their choice of reliable news sources. However, differences were observed in the mean scores and the medians; hence, we wanted to test if the different age groups and participants of different educational levels differ in their tendency to validate news. A normality test was run to see if the validation of news is normally distributed for the different age groups and education levels. The result is presented in Table 3.

Table 3: Normality Test

		Statistic	df	p-Value
Age	18-24	0.125	110	0.001
	25-34	0.119	177	0.001
	35-44	0.170	76	0.001
	45-55+	0.101	56	0.200
Educational Background	Primary	0.124	91	0.001
	Junior high	0.161	56	0.001
	Senior high	0.164	90	0.001
	undergraduate	0.181	73	0.001
	postgraduate	0.079	109	0.093

The Kolmogorov test of normality reveals that the data set on validation of news were not normally distributed in the age groups 18-24, 25-34, and 35-44, respectively, [D(110) =0.125. $p < 0.05$; D(177) = 0.119, $p < 0.05$; D(76) = 0.170, $p < 0.05$]. Only that of the age group 45-55+ was normal [D(56) = 0.101, $p > 0.05$]. For the Educational levels, too, all the validating of news was not normally distributed for all the categories except the postgraduate level [D(109) = 0.079, $p > 0.05$]. Primary, junior high, senior high, and undergraduate respectively had [D(91) = 0.124, $p < 0.001$; D(56) = 0.161, $p < 0.05$; D(90) = 0.164, $p < 0.05$; and D(73) = 0.181, $p < 0.05$]. Hence, a parametric test could not be used to compare the age groups and the categories of educational levels on their validating of news from their choices of reliable sources. Therefore, the Kruskal-Wallis H test was used to compare the groups, a nonparametric equivalence of the ANOVA test.

Firstly, Levene's test for homogeneity of variances was run to test whether the variances of the groups were similar. This test allowed us to use the Kruskal-Wallis H test to compare median or mean ranks. The test, as presented in Table 4, shows that the test for the age groups based on means [F(3, 415) = 1.446, $p = 0.229$] and medians [F(3, 415) = 1.430, $p = 0.233$] were both not significant at a 5% alpha level. However, the test based on means [F(4, 414) = 2.641, $p = 0.033$] and medians [F(4, 414) = 2.777, $p = 0.027$] were significant for educational levels at a 5% significant level.

Table 4: Test of Homogeneity of Variances for Age Groups and Educational Levels

		Levene Statistic	df1	df2	p-Value
Age	Based on mean	1.446	3	415	0.229
	Based on median	1.430	3	415	0.233
Educational level	Based on mean	2.641	4	414	0.033
	Based on median	2.777	4	414	0.027

Since the homogeneity of variance tests revealed that the variances of the four age groups were homogenous, the Kruskal-Wallis H test was used to compare the medians of these groups at a 5% significance level.

H_0: News validation is the same across categories of age brackets.

H_1: News validation is not the same across categories of age brackets.

Table 5: Independent Samples Median Test for Validating News among Categories of Age Brackets

Total N	419
Median	3.500
Test Statistic	0.804[a]
Degree Of Freedom	3
Asymptotic Sig.(2-sided test)	0.848

After comparing the medians of the four age brackets, the result reveals no significant difference between the groups. The four age groups were significantly not different in their validating of news from their choice of reliable sources [H(3) = 0.804, p > 0.05]. This finding implies participants of the four age brackets had similar tendencies to validate news. Similarly, the Kruskal-Wallis test was used to test the following hypothesis concerning the educational levels of participants:

H_0: News verification is the same across categories of educational level.
H_1: News verification is not the same across categories of educational level.

Since the homogeneity of variance test for validating news among the different levels of education was significant, the Kruskal- Wallis H test was used to compare the mean ranks of these categories of educational levels. The result in Table 5 reveals that at a 5% significant level, there is a significant difference between the five categories of educational levels in validating news from their choice of reliable sources of news [H(4) = 18.382, p =0.003].

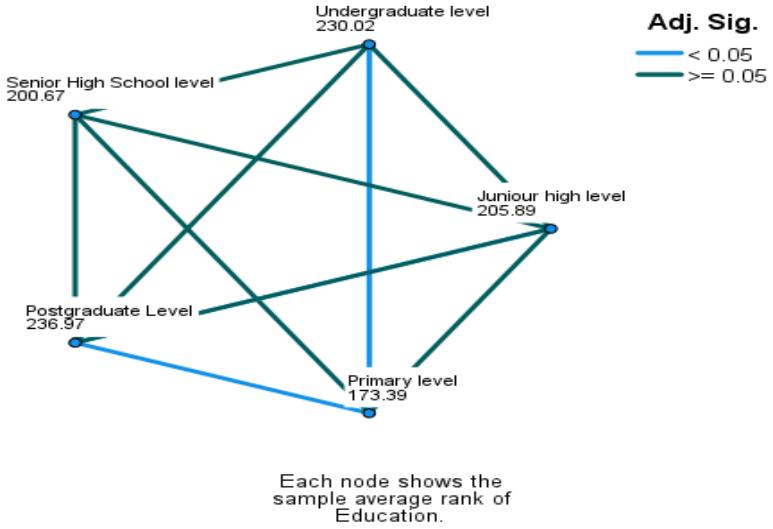
Table 5: Independent Kruskal-Wallis H Test

Education	Mean Rank
Primary level	173.39
Junior high level	205.89
Senior High School level	200.67
Undergraduate level	230.02
Postgraduate Level	236.97
Total	
Kruskal-Wallis H	18.382
Df	4
Asymp. Sig	0.003

This finding indicates that the categories differ in their tendency to validate news from their choice of reliable sources. Participants with postgraduate education had the highest mean rank of 236.97, and undergraduates with a mean rank of 230.02 followed this. Junior High and Senior High levels had a mean rank of 205.89 and 200.67, respectively. Primary-level participants had the least mean rank for validating news (mean rank = 173.39). Since the test was significant at a 5% alpha level, a Bonferroni post hoc test was used to compare the groups pairwise. Figure 1 shows a difference between the three groups of educational levels.

This finding indicates that the categories differ in their tendency to validate news from their choice of reliable sources. There is a significant difference between the tendency to validate the news of participants with primary education and those with undergraduate education. The undergraduate-level participants had a mean rank of 230.02 which is higher than that of the participants with primary education, who had a mean rank of 173.39. This finding indicates those with undergraduate-level education are more inclined to validate news than those with primary-level education. Furthermore, participants of postgraduate level education (mean rank = 236.97) had a higher tendency to validate news than those with primary level education (mean rank = 163.39).

Figure 1: Pairwise Comparison of Validating of News Based on Educational Levels



This result reveals that the higher one's level of education, the higher the tendency for the person to validate news. Persons with higher levels of education are more likely to validate news than those with lower levels of education.

5. DISCUSSION

According to age and educational level demographic characteristics, this study applied an audience-oriented viewpoint to the audience's selection of news sources, appraisal of media credibility, and verification of news. The results showed that choosing the most trustworthy news sources depends on the audience's age and education. However, the age brackets generally had similar tendencies to validate news they received from their most reliable sources. Yet, persons with higher levels of education were more likely to validate news than those with lower levels of education.

Regarding participants' most reliable news sources based on age and educational level, the study showed that most participants favour the mainstream media (prefer television, newspapers, radio, and social media in that descending order). Social media was the least favourite source of news by participants. However, young people between 18-34 years largely accounted for the value of that audience category, preferring social media. According to Cohen's finding (2013), for example, age influences news consumption across borders, and older people consume more traditional mass media (television and newspapers), whereas younger people prefer online news. Although the present study did not consider the size of news consumption to determine, as Elvestad and Phillips (2018) would want us to believe that older cohorts typically consume more news than younger cohorts, our findings support theirs that the consumption of older cohorts is mostly restricted to traditional media outlets. The youth's preference of social media for news suggests that more youth than older people rely on social media platforms for information, i.e., more of the news they consume online.

Moreover, the findings show that only a small percentage of primary and junior high-level education participants favoured social media. Still, the highest count was recorded for those with secondary-level education. This observation should be interpreted cautiously because primary-level pupils do not have unguided exposure to traditional and social media. On the other hand, the preference of the youth with secondary-level education is consistent with the findings about age and social media preference.

The findings of this selective exposure have implications regarding fake news, especially for the youth. Even though traditional media can spread misinformation through reports incorporating social media sources on

their online versions or trending articles, fake news has a greater online presence. Impliedly, previous findings in the U.S. and Argentina (Alhabash & Ma, 2017; Boczkowski et al., 2018) suggest the youth run a greater risk of exposure to consuming false news information, especially those motivated by leisure-convenience-seeking but lower information-seeking for Facebook use. However, empirical evidence suggests that young people may be less likely to click on fake news links (Loos & Nijenhuis, 2020). Still, it is of greater concern because removing information once it has been encoded in memory is harder.

Next, as verification has become an important practice in response to the threat of false news (Lazer et al., 2018), we wanted to know how audiences of different age groups and education levels validate the news they receive from their most reliable sources. The results reveal that audiences of different age brackets and educational levels generally tended to validate news they received from their trusted sources. However, the higher one's level of education, the higher the tendency for the person to validate news. Persons with higher levels of education are more likely to validate news than those with lower levels of education.

These findings support previous research (Esser & Steppatt, 2017; Norris, 2000; Prior, 2019; Rampersad & Althiyabi, 2020; Reis et al., 2017) insofar as all the different age groups have the intention to validate news but weakly significant that they the older one gets, the better they are at detecting fake news from real ones. However, the findings regarding education level are consistent with previous research (Harber & Cohen, 2005; Kim & Kim, 2020), that its increase is associated with lower levels of fake news acceptance.

The role of age and level of education indicate that these demographic factors are important and should be considered in the battle against fake news and misinformation. Impliedly, the harmful consequences of fake news on social media combined with the effects of filter bubbles and echo chambers in selective exposure drive the need to educate media users about fake news and its consequences. Also, these implications recommend such solutions as using fact-checkers' knowledge and developing information system training protocols for social media platforms to ensure higher quality content, raise awareness among users, and educate them about how to evaluate news. According to Soetekouw and Angelopoulos (2022), such a system can help the public increase their skills to analyze news critically. It may also help address concerns about the declining trust in traditional news outlets.

Although we followed a structured design, our work has limitations worth noting. This study is limited to using a non-random, purposive sample. There are also limitations to asking respondents to select which news outlets they used and their validation. Previous research shows that people tend to overreport their exposure to traditional news and news on social media and may not accurately recall their news consumption (Prior, 2013, 2019). Moreover, open-ended responses provide a more accurate measure of media exposure (Guess, 2015). Thus, we cannot be certain how well our findings reflect the general population of news consumers and their validation of news. However, future research may use or develop more objective measures, such as news evaluation tests.

Understanding the differences between how individuals of different ages and education levels value news media sources and verification of news helps understand audiences' fake news awareness and can be used to drive targeted education initiatives and define future research efforts. Another future study may consider possible variations in news perceptions to explore how different contexts and conditions may shape the verification processes.

6. CONCLUSION

This study adds to the body of literature showing that the sociodemographic characteristics of age and education level of audiences can motivate their news consumption patterns. Based on the findings, we recommend that media organizations and parents regulate underage exposure to social media because the underage lie at the bottom of the validation curve and are more vulnerable to misinformation. Moreover, social media appeal to young people, and the highest appeal occurs among those with a high level of education.

Hence, the young should be encouraged to augment their verification of news on social media or online platforms they consume. This way, they will minimize their vulnerability to misinformation and fake news on social media platforms.

Data Availability

Data used to support the findings of this study are available from the corresponding author upon request.

Conflicts of Interest

Authors declare that there are no conflicts of interest regarding the publication of this paper.

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Authors Profile

Peter Nkrumah Amponsah is an Associate Professor in the Department of Journalism and Communication Sciences at the Catholic University of Ghana. He obtained his PhD from Southern Illinois University at Carbondale. His research interest includes communication law, ethics and policy, digital image processing, and gender equality.

Mavis Okyere is an Assistant Professor in the Department of Mathematics and Science Education at the Catholic University of Ghana. She obtained her PhD in Mathematics Education from the University of Alberta. Her research interest includes ethnomathematics in the Ghanaian culture, cognition and metacognition, assessment in mathematics classrooms, and mathematics teachers' classroom practices.