The Influence of Personality and Education on Online News Consumption and Reader Satisfaction – A Systematic Review

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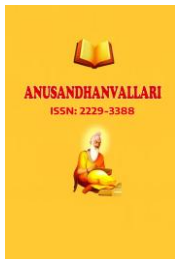Email: minal2413@gmail.com

Abstract

Digital transformation has redefined news consumption by shifting audiences from traditional print to mobile applications, websites and social media channels. As competition among digital news platforms intensifies, understanding the determinants of reader satisfaction has become crucial. Among the variables shaping news engagement, personality (specifically the introversion–extraversion spectrum) and educational attainment (undergraduate versus postgraduate) have emerged as decisive yet underexplored predictors. This systematic review synthesizes studies published between 2010 and 2025 to examine how these two factors jointly influence online news consumption and satisfaction patterns. Findings show that personality shapes information needs and content preferences: extraverts prefer socially shared, audiovisual and interactive formats, whereas introverts prefer deep, text-rich and distraction-free content. Similarly, postgraduate users prefer long-form, data-driven and multi-source reporting, while undergraduate users favor concise, visually enriched and convenience-based news updates. When personality and education interact, their combined effect becomes more powerful in predicting cognitive involvement, emotional responses and loyalty to digital news platforms. The review concludes that personalization strategies that integrate both psychological and educational segmentation can enhance user satisfaction and foster sustainable reader engagement. Practical recommendations for digital publishers, implications for communication research and directions for future academic work are presented.

Keywords - Personality, Education, Online news consumption, Reader satisfaction, Digital news platforms

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1. Introduction

The digital media landscape has undergone a monumental transformation over the last two decades. The emergence of smartphones, high-speed internet, and social networking platforms has redefined how audiences consume news. Unlike traditional print or broadcast media, digital news provides immediacy, personalization, multimedia integration, and interactive participation. Audiences have shifted from passive receivers of information to active participants, sharing, reacting to, and shaping the news cycle. This shift has intensified global competition among digital news outlets, making reader satisfaction an essential determinant of long-term audience engagement, platform loyalty, and business viability.

Online news consumption, however, is not universally uniform. Some individuals prefer text-heavy and analytical reporting, while others gravitate toward short, visual, or conversational news structures. Some consume news for knowledge enhancement, others for social interaction or entertainment. These varied motivations highlight the importance of individual differences in determining reader experience particularly personality and education, two factors that strongly influence information processing and media engagement.

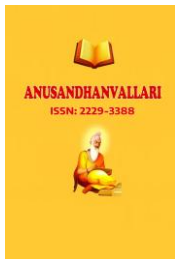1.1 Personality as a Determinant of News Consumption

Personality plays a central role in determining how individuals process information, communicate, and navigate digital media environments. Among the five major personality types, one of the most meaningful distinctions for online news consumption is the Extraversion–Introversion dimension. This distinction captures whether a person gains energy from social interaction and external stimulation (extraversion) or from reflection and internal processing (introversion). These two personality tendencies give rise to fundamentally different motivations for engaging with news, and therefore result in different patterns of satisfaction when using digital news platforms. While both groups may consume news regularly, the underlying psychological purpose of news consumption varies greatly, shaping the types of news formats they prefer and the features that increase their satisfaction.

Extraverts are typically sociable, energetic, emotionally expressive, and outwardly oriented. For them, news is not merely a source of information but a means of participating in social life. Consuming news provides opportunities to discuss trending topics, contribute opinions, or engage with communities around shared issues of interest. As a result, extraverted audiences tend to prefer audiovisual and multimedia formats such as live news broadcasts, video explainers, short reels, and platform-generated highlights that are visually engaging and easy to share. They are particularly drawn to news distributed on social platforms, where they can comment, react, tag others, or initiate conversations. Features such as polls, live chats, panel discussions, and community debates align well with their desire for emotional stimulation and interpersonal connection. For extraverts, satisfaction with a digital news platform increases when it supports active engagement rather than passive consumption, providing opportunities for visibility, expression, and participation.

The news behaviour of extraverts is also closely tied to identity signalling. Sharing articles, reacting to posts, and publicly expressing viewpoints allow extraverts to communicate their personal values, group affiliations, and social standing. Even when the informational value of a news story is moderate, extraverts may still derive high satisfaction if the story triggers conversation or enables them to feel connected with peers. This explains why extraverts often show greater loyalty to platforms that prioritize real-time interaction, trending topics, and emotionally charged content, as these elements support their social orientation. A digital news experience that restricts interaction or lacks immediacy tends to be perceived as unsatisfying by this group, even if the content is high quality.

Introverts are typically introspective, reflective, and self-paced in their cognitive and emotional processing. Their motivation for consuming news is not rooted in social participation but in knowledge acquisition, understanding, and meaning construction. Introverted readers prefer environments that support concentration and allow them to engage deeply with content without interruption. Therefore, they are naturally drawn to text-heavy formats, such as long-form articles, editorial analyses, background reports, and explanatory journalism. Rather than brief trending clips or viral headlines, introverts gravitate toward structured writing that offers nuanced details, contextual history, and multiple perspectives.

For introverts, satisfaction is highest when digital news platforms provide depth, clarity, autonomy, and minimal social pressure. They value features such as reader mode, article bookmarks, archives, clean typography, and chronological organization, all of which enable self-directed and distraction-free reading. Introverted users also prefer platforms that respect boundaries where engagement is optional rather than expected. Unlike extraverts, who often feel motivated by metrics like likes and comments, introverts often feel uncomfortable when forced to engage publicly or when platforms overemphasize sharing and reacting. Their sense of satisfaction arises from internal cognitive fulfilment rather than external validation.

The strong contrast between extraverted and introverted patterns illustrates that digital news satisfaction is highly dependent on user platform compatibility. A platform optimized for audiovisual excitement and social interaction may generate high satisfaction among extraverts but simultaneously overwhelm or frustrate introverts. Likewise, a platform that prioritizes long-form reading and calm interfaces may deeply satisfy introverts but feel slow and unexciting to extraverts. This distinction demonstrates that news satisfaction is not solely based on content quality, but rather on how well the platform's design aligns with the psychological needs of the user. For developers, journalists, and media organisations, this means that a universal design approach can unintentionally disadvantage certain personality groups.
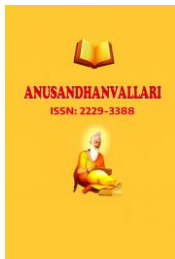
Taken together, these insights reinforce the importance of adaptive and customizable digital news environments. News organisations that enable users to switch between visual, interactive modes and quiet reading modes are better positioned to fulfil the expectations of both extraverts and introverts. Providing options rather than one standard interface helps maintain long-term satisfaction and prevents disengagement. In a highly competitive digital media landscape, understanding the Extraversion and Introversion divide becomes essential not only for content personalization but also for promoting inclusive access to reliable information.

1.2 Education as a Determinant of News Consumption

Educational attainment is another well-established predictor of online news consumption. Individuals with post-graduate levels of education tend to demonstrate higher digital literacy, greater familiarity with research-based information, and stronger awareness of journalistic norms. This group generally expresses higher trust in credible and evidence-based news outlets and shows a clear preference for analytical, data-driven, and context-rich reporting. For them, news consumption is closely linked to intellectual development, knowledge expansion, and informed decision-making. As a result, they are more likely to engage with long-form articles, expert commentary, investigative reports, and multi-source comparative explanations. In contrast, audiences with under-graduate levels of education favor formats that prioritize simplicity, convenience, and rapid understanding.

They tend to engage more with short, easy-to-interpret news updates that provide essential information quickly and without cognitive load. Visual summaries, bullet-point highlights, infographics, and entertainment-oriented or conversational formats are perceived as more appealing and accessible. This difference does not imply an ability gap, but rather reflects distinct ways of processing information. Whereas post-graduate readers seek depth and evidence-based detail, under-graduate readers respond more positively to clarity, relatability, and engaging presentation styles. Together, these patterns demonstrate that online news satisfaction is closely tied to how well information format aligns with the educational background and cognitive preferences of the audience, rather than simply the quality of the content itself.

Importantly, education also influences information-verification habits, shaping how individuals evaluate the credibility and usefulness of digital news. Post-graduate and highly educated readers are more likely to cross-check sources, engage in comparative evaluation, and question media biases, demonstrating a more analytical and sceptical approach to information. They show greater familiarity with concepts like fact-checking, agenda setting, media framing, and editorial bias, which helps them identify when information is incomplete, ambiguous, or manipulated. These users frequently triangulate information across multiple platforms such as online newspapers, academic sources, government portals, and investigative journalism sites before forming opinions. For them, reader satisfaction arises from intellectual certainty, verification transparency, and perceived journalistic integrity.

Highly educated users are also more likely to be aware of misinformation threats and algorithmic manipulation. They often recognise how trending news and viral content can be shaped by commercial, political, or ideological interests. As a result, they tend to value features like hyperlinks to primary evidence, research references, author credentials, and timestamp histories. Satisfaction for this group is therefore linked not just to what is being reported, but also to how information is validated and presented. When these transparency cues are absent, their confidence in the platform decreases, even if the news content itself appears informative. Hence, platforms that provide detailed sourcing and clear reporting processes tend to experience higher loyalty from post-graduate audiences.
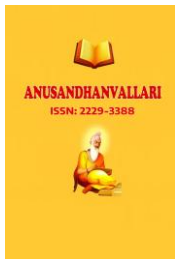
Conversely, less-educated readers tend to rely on consistency, familiarity, and platform convenience when evaluating news, placing more trust in sources they encounter frequently or those recommended within their social networks. For many individuals in this group, credibility is inferred from factors like recognisable branding, emotional resonance, or how widely a piece of news is shared online. While this does not imply lack of intelligence or critical thinking, it reflects different cognitive pathways for evaluating information. Short, visually rich, and conversational news formats such as social media posts, bullet-point summaries, and video explainers are perceived as more accessible and time-efficient, especially for individuals engaged in demanding work environments or with limited exposure to academic reading styles.

Another key observation is that audiences with lower educational attainment often experience satisfaction without certainty they may feel well-informed or emotionally connected to content even when scepticism remains low. Trust is formed primarily through emotional validation and platform loyalty, rather than through evidence-based assessment. This can create vulnerabilities to sensationalism or persuasive messaging, especially during large-scale events such as elections, public health crises, or celebrity controversies. In contrast, highly educated users may experience certainty without satisfaction when information is accurate but emotionally disconnected, which explains why simple factual reporting does not always guarantee mass engagement.

Overall, education determines the depth of cognitive involvement in online news consumption. Higher education predicts analytical, comparative, and context-driven processing, whereas lower education predicts pragmatic, experiential, and convenience-driven processing. Neither style is inherently superior; they simply reflect different ways of interacting with information. However, satisfaction outcomes are maximised when digital news platforms match their presentation style to the user's literacy profile. Platforms with tiered content structures offering short summaries for quick readers and long-form deep dives for analytical readers are better positioned to engage audiences across educational backgrounds. Reader satisfaction is not solely determined by content quality but by content reader compatibility. The same piece of news may produce feelings of trust and empowerment in a highly educated reader while generating confusion or disengagement in a less-educated reader, or vice versa. Therefore, designing news platforms that acknowledge differing educational profiles is essential for improving satisfaction, retention, and public access to reliable information.

1.3 The Combined Role of Personality and Education

The interaction of personality and education provides deeper insights into how digital audiences evaluate and experience online news. Although personality types and educational attainment each influence news consumption independently, the combination of both creates highly specific satisfaction patterns. For instance, individuals who score high in openness to experience and also possess post-graduate education demonstrate the strongest preference for long-form, balanced, evidence-based journalism. These users show high cognitive engagement and actively seek multiple perspectives before forming judgments. Their satisfaction stems from analytical clarity,

data transparency, and access to expert viewpoints.

Digital platforms that provide hyperlinks to primary sources, research reports, timelines, and explanatory graphics successfully appeal to this segment. Their expectations for journalism are grounded not only in curiosity and critical thinking which are shaped by personality but also in advanced literacy and academic exposure derived from higher education. A contrasting pattern emerges when examining extraversion combined with undergraduate education. Extraverted audiences are socially motivated and emotionally expressive; therefore, their satisfaction is not primarily rooted in analytical detail but in interaction, stimulation, and participation.

Undergraduate readers in this group tend to prefer audiovisual and conversational formats, including video explainers, short news clips, live broadcasts, and trending content embedded in social platforms. They respond favourably to features such as likes, comments, discussion threads, shares, reaction buttons, and polls. Their satisfaction increases when platforms allow them to publicly express opinions, align with group identity, and engage emotionally with peers. This does not imply a lack of intellectual interest; instead, it reflects a different pathway to satisfaction one grounded in social belonging and emotional activation rather than deep cognitive evaluation. Such users are more likely to abandon a platform that limits interaction or that relies heavily on static, text-heavy reporting.

An additional relevant group is individuals high in neuroticism, who exhibit strong emotional sensitivity, including fear, anxiety, or stress when confronted with negative news. Interestingly, education does not reduce or regulate their emotional reactivity. Regardless of whether individuals are post-graduates or under-graduates, neurotic audiences may develop heightened attention toward sensational headlines, crisis coverage, political conflict, celebrity controversy, or disaster-related news. Satisfaction among this group is not stable it fluctuates according to the emotional tone and intensity of the content they consume. A platform that reports crises in a dramatic or alarmist tone may temporarily increase satisfaction due to emotional resonance, yet in the long term it may generate fatigue or stress.

Conversely, balanced and solution-oriented framing can reduce distress and enhance sustained trust and satisfaction. Despite the clear theoretical relevance of these patterns, it is notable that no previous systematic review has examined personality and education together as predictors of online news reader satisfaction. Existing research has tended to analyse personality types or education in isolation, leaving the combined effects understudied. This gap underlines the importance and novelty of the present study, which synthesizes research to demonstrate how the psychological and educational profiles of digital audiences collectively determine news consumption preferences and satisfaction outcomes.
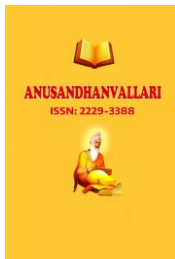
1.4 Objectives of the Study

1. Examine how personality types influence online news consumption and satisfaction.
2. Analyse how educational attainment impacts preferences and engagement with digital news.
3. Investigate how the interaction between personality and education shapes reader satisfaction.

1.5 Significance of the Study

Understanding how personality and education influence news satisfaction is essential because:

- Digital publishers are increasingly investing in AI-driven personalization algorithms.

- Reader satisfaction is directly linked to platform retention and subscription revenue.
- Media literacy and psychological factors influence trust and vulnerability to misinformation.
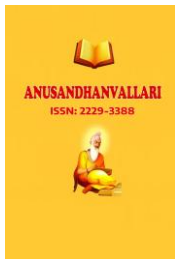
2. Review of literature

The review of literature reveals two dominant determinants influencing online news reader satisfaction personality types and educational background. Studies across communication psychology, digital journalism, and human computer interaction suggest that readers do not engage with news platforms randomly; rather, they exhibit predictable content preferences shaped by enduring individual differences (Fletcher & Park, 2017). With the widespread integration of multimedia formats, hyperlinked narratives, personalized feeds, and social participation features, the influence of personality on news consumption has become more visible than ever.

2.1 Personality Types and Online News Consumption

Personality plays a central role in shaping how individuals process information, communicate, and interact with digital environments. Within the Big Five Personality Model, one of the most influential dimensions in the context of news consumption is the Extraversion–Introversion continuum, because it determines whether individuals seek stimulation from the external world or derive fulfilment through internal reflection. In digital journalism, this trait predicts not only news selection habits but also emotional responses, cognitive motivations, and satisfaction outcomes. While both introverts and extraverts may consume similar news topics, their underlying motivations and preferred modes of engagement differ significantly, making the extraversion–introversion dimension a crucial determinant of audience satisfaction in online news platforms. (de Bruin, Vliegenthart, Kruikemeier, & de Haan, 2024)

Extraverts are characterized by sociability, assertiveness, and high emotional expressiveness. For them, news consumption is closely tied to social participation and interpersonal connection rather than purely informational gain. Extraverted individuals actively seek opportunities to interact around news including debating, reacting, and publicly sharing opinions because participation satisfies their need for external stimulation and social validation. As a result, extraverts prefer audiovisual and interactive formats, such as live news broadcasting, video explainers, short trending clips, and real-time discussion forums (Northup, Santana, Choi, & Puspita, 2022). These formats offer immediacy, emotional impact, and opportunities for social display, which enhance their satisfaction. Extraverts tend to gravitate toward news distributed on social media platforms because these environments enable liking, commenting, tagging others, joining conversations, and reacting to public opinion. They also respond strongly to emotionally charged news stories such as politics, celebrity controversies, and sports victories because such content stimulates arousal and social energy (Barnes, Mahar, Cockshaw, & Wong, 2018). Even when the factual depth of a news item is limited, extraverts may still report high satisfaction if the news triggers discussion, supports identity expression, or allows visible participation in trending debates (Wu, 2023). Their loyalty to a news platform grows when it supports social recognition mechanisms, including badges for contribution, locally highlighted comments, or community voting systems.

A contrasting pattern is found among introverts, who are introspective, reflective, and cognitively self-directed. For them, the value of news lies primarily in knowledge acquisition, internal meaning-making, and thoughtful personal understanding rather than external expression or social display. Introverted users prefer text-rich and cognitively demanding news formats such as long-form articles, investigative reports, editorial columns, and explanatory journalism because these formats allow extended engagement with ideas without interruption (Barnes, Mahar, Cockshaw, & Wong, 2018). These readers favour calm, minimalistic, and distraction-free

interfaces that provide stability and concentration. Features such as reader mode, bookmarks, archives, and thematic organization enhance their satisfaction by supporting uninterrupted deep reading (Eg, 2019). Unlike extraverts, who derive satisfaction from emotional stimulation and interaction, introverts experience satisfaction when platforms enable clarity, autonomy, focus, and depth. They often avoid autoplay videos, intrusive pop-ups, and aggressive algorithms that force rapid consumption, and may disengage when a platform pushes users toward public visibility or forced participation (Gnambs & Appel, 2018). Intellectual independence, rather than social acknowledgment, forms the core of satisfaction for this group.
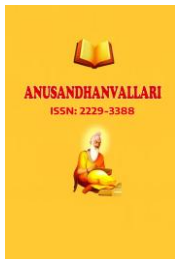
These differences, however, do not reflect superiority of one consumption pattern over another; rather, they highlight divergent psychological pathways of satisfaction. Extraverts gain fulfilment from social energy and shared emotional experiences, whereas introverts gain fulfilment from quiet discovery and reflective comprehension. Consequently, mismatches between user personality and platform design lead to dissatisfaction. For instance, an introverted reader may feel overwhelmed on a news app dominated by auto-playing videos, public comment prompts, and push notifications promoting trending controversies. Conversely, an extravert may find a quiet, highly text-based news environment "boring" or isolating, leading to low satisfaction despite the intellectual quality of content. This demonstrates that the impact of digital news is relational it depends not only on content quality but on how well the platform aligns with psychological needs.

A growing body of literature supports these interpretations. Research shows that extraverts report higher satisfaction from news platforms emphasizing social interaction, continuous updates, and multimedia stimulation (Lampropoulos & Siakas, 2022), whereas introverts report higher satisfaction from platforms offering long-form journalism, low sensory overload, and selective interaction opportunities (Northup, Santana, Choi, & Puspita, 2022). Studies further indicate that extraverts tend to recall news based on emotional resonance and community discourse, while introverts recall news based on thematic detail and personal interpretation (Seidman, Personality traits and social media use, 2020). Emotional sensitivity although commonly associated with neuroticism manifests differently across the extraversion spectrum: extraverts often respond strongly to enthusiasm-driven content such as sports or pop culture, whereas introverts respond more strongly to intellectual or socially meaningful narratives (Seidman, Self-presentation and belonging on Facebook: How personality influences social media use and motivations, 2013). The distinction is therefore not only behavioural but cognitive and emotional.

The extraversion–introversion dimension is a powerful predictor of online news reader satisfaction. Extraverts thrive in environments that provide interaction, immediacy, and visibility, while introverts prefer structured, deep, and independent modes of news engagement. Neither user type represents the "ideal" digital reader; they embody two equally valid psychological orientations toward information (Sørensen, 2020). To increase satisfaction and retention across personality groups, news platforms should allow users to switch between social-media-style viewing and deep-reading modes, ensuring that both extraversion-driven and introversion-driven needs are supported. Recognizing these personality-dependent patterns is crucial not only for content personalization and platform design, but also for ethical digital journalism that respects diverse cognitive and emotional needs.

2.2 Education and Online News Consumption

Educational background shapes not just knowledge level but also critical literacy, verification skills, and content interpretation. Educational background significantly shapes the way audiences understand, interpret, and evaluate digital news content. Rather than being a simple indicator of academic achievement, education influences critical literacy, verification skills, information-evaluation habits, and expectations from journalism. Two groups undergraduate and postgraduate users demonstrate sharply different motivations for consuming news and distinct

pathways to satisfaction, resulting in contrasting digital behavior and engagement trends.
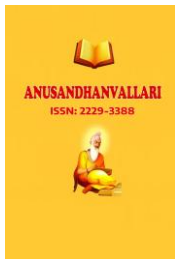
Individuals with postgraduate education possess greater exposure to academic research, structured reasoning, and analytical reading habits. Consequently, they are more receptive to detailed reporting, evidence-driven analysis, expert commentary, and multi-source confirmation. For these readers, news consumption is not just about being updated but also about deepening understanding and evaluating the credibility of information. Postgraduate audiences are more likely to click beyond headlines, explore embedded hyperlinks and references, read data visualizations carefully, and compare multiple sources to validate facts. Empirical studies confirm that postgraduate education is strongly associated with analytical engagement and fact-checking tendencies, especially during complex political and scientific events (Wu, 2023). Their satisfaction arises when platforms provide transparency, context, and intellectual depth attributes that reduce ambiguity and increase cognitive certainty.

Because of this, postgraduate audiences tend to gravitate toward long-form journalism, investigative reporting, and specialized news formats such as policy analyses, international affairs breakdowns, scientific reporting, and economic commentary. They are less responsive to sensational content, clickbait headlines, and emotionally driven coverage. A news platform may publish a trending or viral topic, but postgraduate readers evaluate it primarily based on accuracy, evidence, and expert voices (Anderson, 2018). If these standards are not met even when the platform is visually appealing their satisfaction declines sharply. For postgraduate audiences, the perceived reliability of the platform is inseparable from the credibility of the article, and credibility is determined by structure, sourcing, and methodological transparency rather than emotional appeal or speed.

In contrast, undergraduate users exhibit different patterns of digital news consumption shaped by practicality, time constraints, and cognitive accessibility. Undergraduate audiences show strong preference for short, easy-to-interpret news updates that quickly convey essential information without requiring intensive reading. Their satisfaction tends to be highest with visual summaries, bullet-point explainers, infographics, short video clips, and conversational storytelling that simplify complex topics. Empirical evidence shows that undergraduate users prioritize convenience, relatability, and audiovisual richness over analytical detail (Lee, 2021). They are more likely to access news through social platforms, mobile notifications, influencers, and entertainment-based news scripts rather than through dedicated long-text webpages. This does not indicate a lack of interest in news, but rather reflects different habits of digital learning and time management.

The difference in satisfaction patterns becomes clear when comparing the two groups. Postgraduate users value depth, credibility, objectivity, and expert authority, seeking content that stimulates reflection and supports informed opinion formation. Undergraduate users value clarity, speed, convenience, and engaging presentation, seeking content that delivers information efficiently and in a visually appealing manner. A news platform can present the same information in two formats an article and a short reel yet each format may serve a different educational group effectively (Patel, 2021). What satisfies one segment may frustrate another. For example, a postgraduate reader may find short reels superficial or lacking context, while an undergraduate reader may find long-form articles overwhelming or time-consuming.

Research on digital journalism increasingly highlights that satisfaction is not determined only by content accuracy, but by content–audience compatibility (Wei & Hindman, 2011). Postgraduates read news not only to stay updated, but to interpret social, political, scientific, and economic developments, whereas undergraduates frequently read news to remain socially aware, culturally engaged, and informed in everyday conversation. In this sense, both user groups contribute to the digital news ecosystem but evaluate success through different cognitive frameworks. Studies further indicate that educational background affects trust formation, with postgraduate audiences

exhibiting more scepticism and requiring multiple confirmations before trusting information, while undergraduate audiences tend to rely more on familiar sources and social proof such as how widely news is shared or how positively it is discussed online (Anderson, 2018)
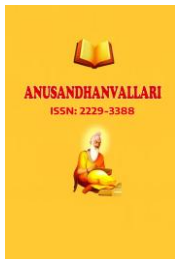
Educational attainment is a strong predictor of how online news is processed, evaluated, and emotionally experienced. Postgraduate audiences show analytical, research-oriented, and validation-driven consumption patterns, while undergraduate audiences show convenience-driven, visual-oriented, and entertainment-supported patterns (Zhang & He, 2007). Recognizing these differences allows news platforms to design content that respects cognitive diversity and promotes satisfaction across educational backgrounds. Ultimately, a one-size-fits-all model of journalism is no longer effective in the digital environment, and education-adaptive design is critical for long-term audience engagement.

2.3 Combined Influence of Personality and Education

Although personality and education independently influence news choices, their combined interaction produces a much more powerful prediction of online news consumption and reader satisfaction. When examined together, these variables help explain not only what users choose to read, but why certain formats resonate emotionally or intellectually (Yuan, 2011). For example, individuals high in openness with postgraduate education demonstrate the strongest preference for long-form, evidence-driven journalism because both their psychological tendency toward intellectual curiosity and their advanced literacy skills reinforce deep information processing (Baptista & Gradim, 2020). Conversely, extraverted undergraduates demonstrate higher engagement with fast, visually stimulating, socially interactive news because their social orientation and their preference for simplicity intersect to support rapid, emotionally engaging media formats. Thus, the interaction of personality and education clarifies why readers exposed to the same news platform may report drastically different satisfaction outcomes not because of news quality, but because of the fit between their cognitive–emotional preferences and the structure of the platform.

The interaction effect further explains diverse behaviour patterns within the same personality group. For instance, extraverts with postgraduate education express high satisfaction when audiovisual news formats allow social engagement and include analytical depth, while extraverts with undergraduate education show satisfaction even in the absence of analytical depth, as long as the content supports emotional stimulation and group interaction (Antunovic, Parsons, & Cooke, 2018). A similar pattern exists among introverts: highly educated introverts prefer text-rich analytical journalism and report high satisfaction when digital environments offer focused, distraction-free reading. Introverts with lower education, however, may still prefer reading rather than audiovisual formats but may Favor shorter text forms and simplified interpretive structures due to lower familiarity with dense academic language (Casero-Ripollés, 2012). These micro-patterns show that neither personality nor education alone can fully explain satisfaction; rather, the combination of both variables shapes expectations about how news should be delivered and what makes a platform feel meaningful or overwhelming.

Recent research reinforces this interaction-based view, showing that personalization strategies matching personality × education segments significantly increase reading time, platform loyalty, and subscription intention. Platforms that offer multimode consumption such as short visual summaries for fast readers and comprehensive explainers for analytical readers can simultaneously satisfy different audience blocks rather than privileging one type of user (Fletcher & Park, 2017). In contrast, platforms that rely on a single news style risk alienating user groups whose psychological and educational profiles do not align with the platform's content structure. The implication is that digital journalism must move beyond "universal audiences" and adopt adaptive content

frameworks that respect differences in cognition, motivation, and literacy. A personalization approach that recognizes the joint influence of personality and education not only enhances user experience but also supports healthier news habits by reducing dissatisfaction, information fatigue, and disengagement (Omar, 2014). Therefore, integrating these two predictors into digital platform design is essential for sustaining long-term audience satisfaction, ethical personalization, and publisher viability.

3.   Theoretical Framework

3.1 Uses and Gratifications Theory (UGT)

UGT proposes that audiences actively choose media content to fulfil their cognitive, emotional, and social needs. Personality plays a crucial role in shaping the nature of these needs and therefore influences the motivations behind news consumption. For example, introverts typically seek information-based gratification, preferring news that supports learning, reflection, and personal understanding. In contrast, extraverts are motivated by socially driven gratifications and are more likely to consume news to participate in conversations, engage with others, and gain social validation through interaction. Thus, personality helps determine what individuals expect to gain from the news they consume (Omar, 2014).
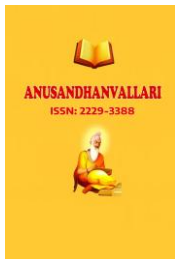
4.   Discussion

The purpose of this systematic review was to examine how personality types and educational background shape online news consumption and reader satisfaction in a rapidly evolving digital media environment. The discussion integrates converging findings from empirical studies to explain similarities, differences, and interaction patterns across user groups.

4.1 Personality as the Psychological Engine of News Preferences

The presented findings demonstrate that personality types, as defined by the Big Five Model, serve as stable predictors of content preference, platform selection, and satisfaction drivers. Unlike demographic factors such as age or gender, personality reflects deeper psychological mechanisms that dictate why and how individuals engage with digital news. One of the clearest contrasts emerges between extraverts and introverts. Extraverts pursue stimulation, social validation, and emotional participation; therefore, they are highly satisfied by interactive and audiovisual news formats that allow public engagement through comments, reactions, and sharing. Introverts, conversely, pursue depth, intellectual enrichment, and autonomy, leading to greater satisfaction from text-oriented, analytical, and less socially intrusive platforms.

Alongside this distinction, other personality dimensions also shape news experience. Openness and conscientiousness are associated with the highest levels of platform satisfaction openness due to enjoyment of varied perspectives and knowledge expansion, and conscientiousness due to preference for credible and structured reporting (Barnes, Mahar, Cockshaw, & Wong, 2018). Agreeableness and neuroticism predict emotional rather than cognitive satisfaction, with agreeable users drawn to positive narratives and neurotic users reacting strongly to crisis-oriented content. These nuances confirm that reader satisfaction cannot be treated as a uniform cognitive indicator. It is shaped by emotional, motivational, and social needs unique to individual personality patterns.

4.2 Education as a Moderator of News Understanding, Trust, and Engagement

Education plays a decisive role in shaping cognitive engagement and evaluation strategies. Individuals with higher levels of education tend to invest more cognitive effort in processing digital news, making them more sensitive to source credibility, evidence-based reporting, logical coherence, and journalistic transparency. Because they process information analytically, they show the strongest satisfaction with long-form, balanced and context-rich journalism that explains an issue rather than merely presenting it. Sensational, oversimplified or emotionally charged reporting tends to decrease their satisfaction because it undermines depth and accuracy.

Individuals with lower levels of education prioritize accessibility, simplicity, and quick understanding, and therefore feel most satisfied with audiovisual formats, short bullet-point summaries and convenience-based news consumption on social platforms (Zhang & He, 2007). However, research also indicates that satisfaction among Undergraduate groups does not equate to trust; in many cases, entertainment-based satisfaction coexists with low trust in "elite" journalism. This distinction has important implications for both media researchers and news platform designers.

4.3 Influence of Personality and Education on Satisfaction

When personality and education interact, their combined effect is stronger than either predictor alone. Users do not simply prefer different news formats they interpret and evaluate news through distinct psychological and cognitive pathways shaped by both types (Lampropoulos & Siakas, 2022). For example, an extravert with lower education may value audiovisual, fast, and socially interactive news, while a highly educated introvert may prefer long-form, analytical, and distraction-free reporting. These deeply rooted differences explain why user experiences on digital news platforms appear inconsistent across audience segments, because users evaluate satisfaction using different priorities (Anderson, 2018).
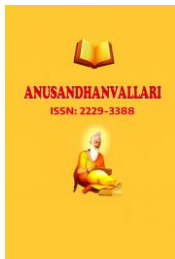
4.4 The Digital News Ecosystem is Not "One Audience"

A major implication of this review is that digital news consumers should not be treated as a single homogeneous audience. Personality-driven and education-driven differences mean that the same platform can satisfy one user segment while alienating another, depending on whether the format aligns with their cognitive and emotional expectations. For instance, a postgraduate introvert may become overwhelmed by auto-play videos and socially charged interfaces, while a lower-educated extravert may disengage from dense, text-heavy reporting with limited interaction (Wei & Hindman, 2011). Thus, reader satisfaction is not determined by content quality alone, it depends on content–user fit.

4.5 Ethical Considerations in Personalization

AI-driven personalization in news delivery offers benefits but also risks. When algorithms curate content solely based on past clicks and emotional engagement, they may unintentionally reinforce users' existing biases, promote selective exposure, and narrow the range of viewpoints encountered. This can deepen echo chambers, elevate sensational content, and polarize public opinion over time. Therefore, ethical personalization requires balancing user comfort with information diversity, ensuring that credibility and accuracy are not sacrificed for engagement metrics (Eg, 2019). Platforms that support choice-based personalization allowing users to configure content rather than forcing algorithmic feeds are more likely to protect both user autonomy and journalistic integrity.

5. **Findings**

This systematic review examined how personality types and educational background jointly influence online news consumption and reader satisfaction. The findings highlight that audience satisfaction with digital news platforms cannot be understood through demographic variables alone; instead, it must be viewed through psychological and educational lenses that shape how individuals interact with information. Personality determines the motivations and emotional triggers behind news engagement, while education shapes the depth of processing and evaluation. Therefore, identical content can generate very different responses across audience groups depending on their underlying psychological tendencies and literacy capabilities.

5.1 Personality is a Core Predictor of News Motivation and Preference

The findings strongly indicate that personality types are foundational to understanding digital news preferences, with each trait shaping distinct expectations from news platforms. One of the clearest contrasts emerges between extraverts and introverts: extraverts show the highest satisfaction when news environments provide social interactivity, audiovisual stimulation and opportunities for participation through comments, reactions and sharing, whereas introverts are most satisfied when platforms support deep, private and uninterrupted consumption with minimal noise and distraction. This contrast confirms that satisfaction drivers differ fundamentally across personality segments; thus, even when exposed to the same digital platform, perceived satisfaction varies not because of the content alone but because of the personality of the reader evaluating it.

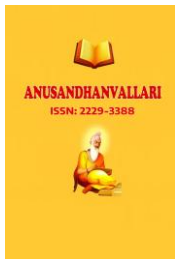5.2 Education Shapes Critical Processing, Trust, and Evaluation of News

The findings further demonstrate that education influences how news is cognitively processed and evaluated. Individuals with postgraduate education exhibit higher levels of critical thinking and source verification, value comprehensive reporting, expert voices and balanced perspectives, and are easily dissatisfied by sensational or ambiguous content. In contrast, individuals with undergraduate education prefer short, visual and quickly consumable formats, emphasize convenience, relatability and entertainment, and may experience satisfaction even without fully trusting journalism. A major insight is that satisfaction does not always equate to trust; many users report high satisfaction with entertainment-driven news while simultaneously holding low trust in institutional or traditional journalism.

5.3 Combined Influence Strengthens Predictive Power

The strongest finding is that personality and education interact to produce unique patterns of news consumption and satisfaction. Neither factor alone predicts user experience as accurately as the combination of both. When news platforms align their features with a reader's psychological tendencies and educational literacy, satisfaction rises significantly, whereas a mismatch between format and user profile leads to rapid disengagement and reduced platform loyalty.

5.4 Digital Personalization Must Account for Personality and Education

While personalized news feeds have become standard, current algorithms primarily match content based on previous clicks rather than underlying psychological needs. The review suggests that personality-adaptive personalization has the potential to significantly increase engagement and satisfaction, provided that platforms are cautious not to reinforce emotional vulnerabilities such as crisis-seeking tendencies among highly neurotic users. Ethical personalization should prioritize user-controlled customization over fully automated algorithmic prediction, prevent excessive narrowing of perspectives that create filter bubbles and polarization, and maintain a

balance between audience satisfaction and journalistic responsibility to ensure that credibility and information diversity are not compromised for engagement metrics.

5.5 Audience Satisfaction is multi-dimensional

User satisfaction cannot be defined through a single behavioural indicator such as the number of clicks, shares, or views. In digital news environments, satisfaction is a multidimensional experience that reflects how information is processed, internalized, and emotionally responded to by the reader.

From a cognitive perspective, satisfaction arises when news offers depth, detail and meaningful explanations that stimulate thought and understanding. From an emotional perspective, satisfaction results from feeling connected, supported or validated through the tone and framing of stories. A social dimension also exists, where satisfaction increases when platforms enable participation, interaction, and visibility among peers. For many users, the ability to comment, react or express identity through news is as important as the information itself. Finally, the functional dimension reflects the practical experience of news consumption, which depends on fast loading, easy navigation, accessibility, and readability.

Because different personality types and education levels prioritise these dimensions differently, no single feature can satisfy all audiences. A platform optimized for only one dimension such as emotional engagement will serve limited user groups, whereas a platform designed to support cognitive, emotional, social, and functional needs together is more likely to achieve broader and longer-term satisfaction across diverse readership segments.

5.6 Summary of Key Findings

The most critical learnings from this systematic review are:

1. Personality drives news preferences, emotional response, and satisfaction.
2. Education determines depth of processing, evaluation standards, and perception of credibility.
3. The interaction of personality × education predicts satisfaction more accurately than either variable alone.
4. Digital news platforms require multi-layered personalization to maintain long-term audience engagement.
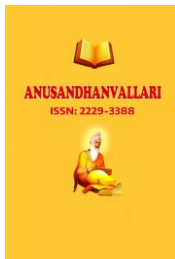
These findings provide a foundation for industry strategies and future academic research on digital news audiences.

6. Implications

The findings of this systematic review carry significant implications for digital journalism research, news platform design, and media industry strategy. As the global news ecosystem becomes increasingly competitive, understanding how personality and education shape user satisfaction is critical not just for engagement but for sustainability, ethics, and democratic information access.

6.1 Implications for Digital News Platforms and Industry

Digital news platforms and publishers can improve audience retention by aligning content formats with personality- and education-based user profiles rather than relying on a single universal interface. Extraverts

respond best to interactive and audiovisual features, while introverts prefer text-rich and distraction-free environments; open and conscientious users value evidence-driven reporting, and agreeable and neurotic users respond to emotional tone and narrative framing. Similarly, higher-educated readers seek long-form analytical journalism, whereas lower-educated readers require shorter, visual and easily digestible formats. Ethical personalization is essential, ensuring that news remains diverse, balanced and fact-based rather than exploiting emotional vulnerabilities or reinforcing filter bubbles.

6.2 Implications for Theory and Academic Research

This review expands academic understanding of digital news consumption by demonstrating that psychological traits are just as important as demographic variables in shaping media effects. Education operates not only as a socioeconomic marker but also as a cognitive moderator that influences interpretation, trust, and depth of news engagement. These insights indicate that user-based segmentation in digital journalism should incorporate internal psychological variables rather than relying solely on visible external characteristics. Future research on news effects, misinformation vulnerability and subscription behaviours can become more accurate by integrating personality × education interactions into theoretical models and empirical designs.

6.3 Implications for Society and Media Literacy

Because audiences process news differently based on psychological and educational differences, the same story can make one person feel informed while overwhelming or frustrating another. Likewise, a platform trusted by one group may be criticized by another due to mismatched expectations and cognitive styles. Therefore, media literacy programs should not be universal but psychologically adaptive. Introverts and highly educated readers need support in managing information overload in long-form content, while extraverts and lower-education users need training in credibility assessment for audiovisual and entertainment-based formats. This differentiated approach can help reduce misinformation risk, emotional polarization and susceptibility to persuasive sensationalism.
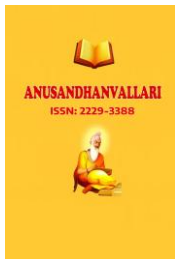
6.4 Implications for Subscription and Revenue Models

Long-term subscription success in digital journalism depends on meeting the diverse motivational needs of audience segments. Analytical readers—particularly those high in openness and with postgraduate education—are the most likely to pay for premium content, as they value depth, accuracy and expert analysis. In contrast, extraverted and socially driven audiences are less likely to subscribe unless premium plans include social privileges such as comment access, community spaces or recognition features. Revenue models that consider these motivational differences are better positioned to achieve sustainable subscriber growth and reduce churn.

7. Recommendations

Based on the systematic review findings, the following recommendations are proposed for digital news organizations, platform designers, journalists, and academic researchers:

7.1 Recommendations for Digital News Platforms

- Provide different reading modes based on personality (e.g., social/video mode vs. focus/reader mode).
- Structure every story with multiple depth levels — summary, explainer, and full analysis.
- Increase transparency with source links, expert references, and methodology details.
- Allow user-controlled personalization instead of fully algorithm-controlled feeds.

7.2 Recommendations for Journalists and Content Producers

- Maintain emotional engagement without compromising factual accuracy.
- Use data visualization to clarify information, not oversimplify it.
- Avoid conflict-focused framing that escalates polarization and distrust.
- Promote constructive storytelling that supports community well-being.

7.3 Recommendations for News Educators and Policymakers

- Design media-literacy training that adapts to personality differences.
- Provide overload-management skills for introverts and deeply analytical readers.
- Teach credibility-evaluation skills for audiovisual and social-news consumers.
- Use different instructional approaches for different education levels.

7.4 Recommendations for Researchers

Future researchers are encouraged to:

- Build psychometric tools to measure personality-linked news satisfaction.
- Investigate long-term behavioural patterns using longitudinal designs.
- Compare personality and education effects across cultural and linguistic groups.
- Study ethical and psychological outcomes of AI-driven news personalization.

8. Limitations & future scope

Despite the rigor of this systematic review, several limitations must be acknowledged.
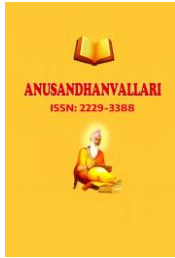
8.1 Limitations

- Existing research lacks direct integration; most studies examine personality or education separately, with limited focus on their combined effect.
- Rapid evolution of digital platforms, where news technologies change faster than academic research can record or analyse.
- Self-reported satisfaction biases, as many studies rely on surveys that may be affected by temporary emotions or situational influences.
- Cultural generalizability concerns, since personality-based interpretations may differ across countries, political environments, and levels of media freedom.

8.2 Future Scope

- Empirical testing of the conceptual model through quantitative studies to validate how strongly personality and education predict news satisfaction.
- Use of neuroscience and behavioural analytics such as eye-tracking, clickstream patterns, and biometrics to understand how different user types respond to news stimuli.
- Exploration of AI-driven adaptive news personalization with a focus on ethical algorithm design that enhances relevance without compromising accuracy.
- Cross-platform comparison studies to determine whether predictors of satisfaction differ across mobile apps, websites, and social media environments.

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