



Department of Economics

Bachelor's Thesis

ANALYZING FAKE NEWS ON INSTAGRAM: A  
comparative analysis between Greece and Portugal

EVANGELIA POTHITOU

SUPERVISOR: ANASTASIOS A. ECONOMIDES

THESSALONIKI 2023

## ACKNOWLEDGMENTS

I extend my heartfelt gratitude to my thesis advisor, whose support and guidance have been instrumental throughout the entire process of researching and writing this thesis. His expertise, insightful feedback, and unwavering encouragement have been crucial in shaping the direction and quality of this thesis. I appreciate the mentorship and the positive impact it had on both my academic and personal growth throughout this process.

## Abstract

In our evolving digital society, we increasingly gather information from digital platforms rather than traditional sources. This digital era provides us with a plethora of information yet leaving us insufficient time to verify its authenticity. This thesis investigates the spread of fake news on social media, and more specifically on Instagram, focusing on a comparative analysis between two distinct European nations: Greece and Portugal. The research investigates the dynamics of fake news consumption on Instagram, focusing on post characteristics, influencer impact, users' beliefs, social endorsement, time spent on the platform, and lastly, how individuals in Greece and Portugal respond to the fake news phenomenon. The research, conducted between February and April 2023, employs a mixed-methods approach, combining quantitative and qualitative analyses. A self-administered questionnaire in English was distributed to 220 individuals in Greece and Portugal using Google Forms.

The identified factors influencing the perception of information authenticity on Instagram have significant implications for user behavior and the overall digital information landscape. The recognition of key post characteristics, such as emotive language, underscores the importance of content quality in building user trust. The comparative analysis between Greeks and the Portuguese reveals distinctions in the significance attributed to certain post characteristics, trust in information sources, and engagement with Instagram. Greeks exhibit a lesser concern for specific post characteristics when identifying fake news and demonstrate a higher trust in content from friends on social media, emphasizing their increased engagement with news on Instagram. Furthermore, Greeks tend to spend more time on Instagram and engage in immediate fact-checking more frequently than the Portuguese, indicating a notable divergence in their responses to fake news. These findings underscore the nuanced dynamics influencing user behavior on Instagram, shedding light on cultural variations and engagement patterns that contribute to the interpretation of information credibility. Understanding these variations is crucial for content creators, social media platforms, and policymakers to tailor strategies that resonate with diverse user preferences and foster a more informed online environment.

**KEYWORDS:** beliefs, culture, fake news, Greece, ideology, influencers, Instagram, media literacy, post characteristics, Portugal, social environment

# CONTENTS

<b>LIST OF GRAPHS</b> .....	5
<b>1.INTRODUCTION &amp; LITERATURE REVIEW</b> .....	7
Post characteristics- Unraveling the Elements of Fake News Appeal.....	7
Influencers and celebrity endorsement.....	8
Beliefs in Information Behavior.....	9
Trust in information sources.....	9
Time spent and engagement on Instagram.....	11
Cultural context.....	11
Response to fake news in Greece and Portugal.....	12
<b>2.METHODOLOGY &amp; RESEARCH DESIGN</b> .....	20
<b>3. ANALYSIS &amp; FINDINGS</b> .....	22
DEMOGRAPHICS.....	22
STATISTICAL ANALYSIS.....	23
<b>4.RESULTS, DISCUSSION &amp; IMPLICATIONS</b> .....	44
<b>5. CONCLUSIONS &amp; FUTURE RESEARCH</b> .....	46
<b>REFERENCES</b> .....	48

## LIST OF GRAPHS

### TABLES

Table 1. Key findings of the articles included
Table 2: Descriptive demographic data on respondents.
Table 3 Distribution of Gender Frequencies by Country.
Table 4: Cronbach's Alpha Coefficients Assessing the Internal Consistency Reliability of Post Characteristics
Table 5: Median, Mode and Interquartile Ranges of Post Characteristics
Table 6: Analysis of the Mann-Whitney U test investigating how post characteristics influence the credibility of fake news in Greece and Portugal.
Table 7: Chi square test, testing for significant association between the country of origin and the influencer/celebrity.
Table 8: Analysis of the Mann-Whitney U test investigating the variables influencing the credibility of fake news in both Greece and Portugal.
Table 9: Median mode and interquartile range of the questions related to beliefs with 1=" Very likely" and 5=" Very unlikely".
Table 10: Distribution of Trust Levels in News from Personal Connections Compared to Verified Accounts on Instagram. (I am more likely to trust news shared by personal connections rather than verified accounts on Instagram: 1=Strongly disagree and 5=strongly agree)
Table 11: Chi square regarding trust in information shared by family members/friends compared to other sources on social media and the country of origin.
Table 12: Shapiro-Wilk test of Normality.
Table 13: Spearman Correlation Test regarding time spent on Instagram.
Table 14: Median, Mode, Interquartile range of the variables related to time spent on Instagram.
Table 15: Cultural barriers per country

### CHARTS

Chart 1: Level of education distribution by country.
Chart 2: Political ideology distribution by country.
Charts 3a, 3b, 3c: Visualization of the results of the Mann-Whitney U test investigating the variables influencing the credibility of fake news by country
Chart 4: Influencer or celebrity endorsements to news
Chart 5: News Shared by Personal Connections over Verified Accounts on Instagram question.
Charts 6a, 6b, 6c, 6d: Likert scale, where 1 corresponds to "Never," 2 to "Occasionally," 3 to "Sometimes," 4 to "Often," and 5 to "Always. (6a,6b) and 1 indicates "No," 2 represents "Maybe," and 3 signifies "Yes." (6c, 6d)
Charts 7a, 7b: Visualization of the results of the Mann-Whitney U Test regarding trust in friends compared to other sources and frequency of sending a direct message on Instagram.

Chart 8: Motivation to share via Instagram by country where 1= Personal beliefs and interest, 2= Current events, 3= Social impact/Importance of the topic, 4= Entertainment and social engagement.
Chart 9: Time spent on Instagram daily by country.
Chart 10a: Frequency of coming across new where 1 corresponds to "Never," 2 to "Rarely," 3 to "Occasionally," 4 to "Somewhat frequently," and 5 to "Very frequently."
Chart 10b: Time spent of platform where "Less than 30 minutes" corresponds to 1, "30 minutes to 1 hour" to 2, "1-2 hours" to 3, "2-4 hours" to 4, and "More than 4 hours" to 5
Chart 10c: The likelihood to mute accounts where "Very Unlikely" is assigned the value of 1, "Somewhat Unlikely" is 2, "Neutral/Undecided" is 3, "Somewhat Likely" is 4, and "Very Likely" is 5.
Chart 10d: Frequency of engagement in discussions or debates about news topics on Instagram using a Likert scale, where "Never" corresponds to 1, "Rarely" to 2, "Occasionally" to 3, "Frequently" to 4, and "Very Frequently" to 5.
Chart 10e: Likelihood to read and engage with news articles or information where "Very Unlikely" is assigned the value of 1, "Somewhat Unlikely" is 2, "Neutral/Undecided" is 3, "Somewhat Likely" is 4, and "Very Likely" is 5.
Chart 11: Engagement with news content on Instagram by country.
Chart 12a: Confidence in identifying fake news on Instagram where 1 represents "Very Confident" and 5 represents "Not at all."
Chart 12b: Fact-checking habits where "Always" corresponds to 1, "Frequently" to 2, "Sometimes" to 3, "Rarely" to 4, and "Never" to 5.
Chart 12c: Openness to considering different viewpoints where "Not Open" is assigned the value of 1, "Somewhat Open" to 2, and "Very Open" to 3.
Chart 12d: Level of interest in attending workshops or educational programs on media literacy and fake news prevention for Instagram users, using a Likert scale where "Very Interested" is assigned the value of 1, and "Not at all" is assigned the value of 5.
Chart 12e: Formal education on media literacy chart where "No, and I have not pursued education on the topic" assigned the value of 1, "No, but I have self-educated on the topic" assigned the value of 2, "Yes, some education/training" assigned the value of 3, and "Yes, extensive education/training" assigned the value of 4.
Chart 12f: Likelihood of reporting or flagging suspicious or fake news content on Instagram using a Likert scale, where "Very Unlikely" is assigned the value of 1, "Somewhat Unlikely" is 2, "Neutral/Undecided" is 3, "Somewhat Likely" is 4, and "Very Likely" is 5.
Chart 13: Fast check behavior by country.

## FIGURES

Figure 1: Research Topics of this paper: Factors that affect the credibility of fake news on Instagram.
Figure 2: The research process
Figure 3: Categorization of Post Characteristics

# 1. INTRODUCTION & LITERATURE REVIEW

Fake news on social media represents a growing and concerning phenomenon in the contemporary digital information landscape. An increasing number of individuals are turning to social media not just for socializing but also for accessing, generating, and distributing news and political content (Weeks et al, 2017). To ascertain the true essence of fake news, we rely on Lazer et al.'s (2018) definition, which characterizes fake news as fabricated information that imitates the form of news media content but differs in organizational process and intent.

Social media platforms, serving as conduits for politically charged disinformation (Benkler, Faris, & Roberts, 2018; Burkhardt, 2017), can have profound consequences, influencing public opinion, shaping political discourse, disrupting financial markets serving as a tool for malicious activities and potentially even impacting the democratic process. Despite their impact, the study of Instagram's role in disseminating such information has been limited. To address this issue, we will delve into the impact of crucial factors on the credibility of fake news on Instagram.

## **Post characteristics- Unraveling the Elements of Fake News Appeal**

The landscape of fake news is marked by a myriad of tactics employed to enhance its appeal and reach on social media platforms. One such strategy involves the use of sensational titles and the deliberate leveraging of structural elements, as observed by Luo et al. (2021). Extending this understanding, Freeman et al. (2020: 219–220) delve into the intricacies of trust-building mechanisms, emphasizing **professional language**, references to reputable organizations, and the incorporation of trusted brands on websites. Conversely, the unreliability of **poorly edited content or messages with errors** becomes apparent, casting doubts on their credibility, as noted by Vorelová and Masaryk (2019). Therefore, the quality of content, whether well-crafted or marred by editing issues, significantly influences users' perceptions and engagement.

Delving into nuanced factors influencing the credibility of fake news, Bryanov and Vziatyshva (2021) shed light on contextual elements, emphasizing **likes, comments, emotional language, format, and source credibility**. Munger et al. (2018) contribute by underscoring the complexity with insights into **engaging headlines and clickbait** techniques. Ali et al. (2022) further elaborate on the role of Facebook "**likes**," noting their impact on perceived credibility, where higher numbers enhance believability. On social media, Delmazo and Valente (2018) stress again the interconnected significance of **likes, reactions, comments**, and shares, forming a web of elements crucial in shaping the overall believability of news content. Information about news sources (and authors) can serve as a robust signal of credibility and identifying an **author's** past associations with fake news and considering the number of authors involved in a news article can play a crucial role in detecting fake news (Sitaula et al 2020). Lastly, the nature of bias in fake news can influence how **likely it is to be shared**, with a particularly notable effect when the bias aligns with the audience's **pre-existing viewpoints** (Corbu et al, 2021). The effectiveness of correcting fake news depends on **timing**. Ideally, individuals should not come across misinformation initially, as

exposure to even a single fake headline enhances its perceived truthfulness (Brashier et al, 2021).

Given this, the research delves into specific post characteristics, encompassing attention-grabbing headlines, clickbait, anonymous authors, provocative language, low engagement metrics, content conflicting with personal beliefs, official language usage, emotional language, lack of a credible source, posts with viral potential, poor grammar or spelling, and the timing of the post.

Delving deeper into our specific research question (RQ1) concerning how users perceive the importance of various post characteristics in identifying fake news, our hypothesis (H1) introduces a cross-cultural dimension. We anticipate that these perceptions are influenced by the country, suggesting that cultural nuances play a role in shaping the understanding of fake news credibility.

So, we will investigate RQ1:

**RQ1: How do Instagram users perceive the importance of the Instagram post characteristics in identifying fake news on Instagram?**

More specifically, we will test the following hypothesis H1:

**H1: The Instagram users' perception of Instagram post characteristics related to fake news depends on the users' country.**

## **Influencers and celebrity endorsement**

In the landscape of social media, influencers, defined as individuals who independently leverage digital media to shape public perception (Freberg, Graham, McGaughey, & Freberg, 2011), hold significant sway. Their reach extends to diverse segments of the population, including those that might be isolated or inaccessible through traditional means (Lotito et al., 2021). This amplification effect is particularly pronounced on Instagram, where influencers, often celebrities or public figures, play a pivotal role in disseminating information.

The presence of influencers accelerates the spread of content across social networks, contributing to the rapid dissemination of information. Consumers highly value the actions and statements of influencers, granting them substantial influence in shaping public opinion. However, the impact of influencers is nuanced, as revealed by Shin et al. (2022). Their study found that fake news gains more credibility when endorsed by individuals within one's close connections rather than by celebrities.

This dynamic highlights the intricate interplay between influencers, celebrities, and personal connections in the credibility of information on Instagram. In essence, the credibility of information on Instagram is not solely dependent on the reach of influencers but is also influenced by the relational context within one's social network.

So, we will investigate RQ2:

**RQ2: How does the country of Instagram users affect trust in content on the platform, examining trust in influencer/celebrity posts and the degree of trust in news from personal connections versus other sources?**



More specifically, we will test the following hypotheses H2a and H2b to delve into the influence of influencers and verified accounts on the trust on Instagram posts by users:

**H2a: The likelihood to trust an Instagram post by an influencer/celebrity depends on the country of the Instagram user.**

**H2b: The degree of trusting news articles or information shared on Instagram by friends depend on the country of the Instagram user.**

## **Beliefs in Information Behavior**

Beliefs and ideology play a pivotal role in shaping users' perceptions of fake news, influencing their sharing behaviors, as highlighted in the study conducted by Kim and Dennis (2019). People tend to engage more with posts that align with their existing beliefs, a phenomenon observed by Bessi (2016). The literature, including works by Ditto et al. (2019), Fessler et al. (2017), Guess et al. (2019), Rini (2017), Shin and Thorson (2017), and Van der Linden et al. (2020), underscores the relationship between political ideology and the belief and spread of (fake) news. This connection is integral to understanding the complex interplay between beliefs, ideology, and political orientation in the context of information dissemination on platforms like Instagram.

Furthermore, Flintham et al. (2018) suggest that individuals tend to invest more effort in discerning the truth when their personal or professional interests are at stake. This insight adds depth to the understanding of how users critically evaluate information, particularly when their beliefs or interests are implicated.

In essence, the hypotheses (H3a, H3b, and H3c) reflect my exploration into the relationship between users' beliefs, ideology, and their online behaviors.

So, we will investigate RQ3:

**RQ3: How does the country of Instagram users shape the relationship between their beliefs and online behavior, including sharing, fact-checking, and resharing content on the platform?**

More specifically, we will test the following hypotheses:

**H3a: Instagram users' country affects the likelihood to share content on Instagram that contradicts their ideological beliefs.**

**H3b: Instagram users' country affects the likelihood to fact-check news articles or information on Instagram that supports their ideological beliefs.**

**H3c: Instagram users' country affects the probability of users resharing content on Instagram that supports their ideological beliefs without fact-checking it.**

## **Trust in information sources**

The influence of friends and family emerges as a pivotal factor in shaping the believability of news. Users often demonstrate a greater tendency to receive news story links through recommendations from friends and family on social platforms, underscoring the significant role of personal connections in the information-sharing process (García-Perdomo et al., 2018).

The opinions and sharing behaviors within one's close network can wield substantial influence on individuals' perceptions of news authenticity and contribute to the dissemination of misinformation or fake news. A high number of endorsements from familiar sources, including family and friends, can diminish initial skepticism, leading individuals to automatically trust unfamiliar online information, potentially overriding their own instincts or firsthand knowledge (Metzger et al., 2010; Metzger and Flanagin, 2013). Notably, friends have a considerable influence on individuals' propensity to distribute misleading information, thereby amplifying the spread of fake news (Bansal & Weinschenk, 2020).

Young adults, driven by their willingness to share news, can play a significant role in the dissemination of fake news, surpassing the reliance on social media accounts of journalists or official news outlets for accessing news content (Leeder, 2019). This trend is particularly pronounced in countries like Greece and Portugal, where social networks play a significant role in daily life.

The motivation to share posts or news on Instagram is also multifaceted. People engage in expressive actions, such as posting, commenting, liking, and interacting with politicians through live sessions and direct messages, driven by a need to make clear arguments about public issues and gather relevant information (Kwon, H., 2020). Teens, in particular, share content with the aim of "informing others" about topics that interest or captivate them, as indicated by various studies (Figueira & Oliveira, 2017; Loos et al., 2018; Notley et al., 2017; Sbardella, 2017; Tickle, 2018; Wineburg et al., 2016). Moreover, individuals seek social approval, share content with emotional significance, express party and ideological beliefs, and desire to inform their "friends" for entertainment purposes, adding complexity to the motivations behind content sharing on Instagram (Bright, 2016; Lee & Ma, 2012; Duffy et al., 2019; Harber & Cohen, 2005; Marwick, 2018; Uscinski et al., 2016; Galeotti, 2019; Acerbi, 2019; Tandoc, 2019; Tandoc et al., 2018b; Waruwu et al., 2020).

So, we will investigate RQ4:

**RQ4: How does the country of Instagram users influence trust in content from personal connections, sharing behavior, and what motivates individuals to share on Instagram?**

More specifically, we will test the following hypotheses:

**H4a: Instagram users' country affects individuals' trust in news articles or information shared by their friends on Instagram.**

**H4b: Instagram users' country affects trust in information shared by family members/friends on social media more than information from other sources.**

**H4c: Instagram users' country affects the frequency people share news/posts with friends on Instagram via direct message**

**H4d: Instagram users' country influences the likelihood of encountering fake or misleading information from family members or friends on social media.**

## Time spent and engagement on Instagram

Excessive time spent on social media platforms, particularly for users actively engaged in politics, can expose them to a higher volume of false or unreliable content, as noted by Halpern et al. (2019). The duration of time invested by users on Instagram emerges as a significant factor influencing the credibility of news content. This connection between time spent on social media platforms and the consumption of fake news is consistent with findings related to platforms like Facebook and Google. Nelson and Taneja (2018) revealed a positive correlation between the duration of time spent on these platforms and the consumption of fake news. Diehl et al. (2016) further emphasized that prolonged social media use can influence individuals' political beliefs, particularly when exposed to influential figures expressing specific views.

Active participation on social media platforms also tends to reinforce individuals' existing beliefs, contributing to heightened polarization (Diehl, 2016). This phenomenon aligns with the illusory-truth effect, a psychological concept suggesting that repeated exposure makes statements seem more accurate (Dechêne et al., 2010; Hasher et al., 1977). The cumulative effect of prolonged exposure and active engagement on social media platforms underscores the importance of considering users' time investment as a key factor in understanding their susceptibility to misinformation and the potential impact on their beliefs and attitudes.

As for Hypothesis H5, it posits that the country of residence may impact the time spent on the platform, subsequently affecting the likelihood of encountering news, muting specific content, the frequency of engagement, and the overall inclination to interact with the information encountered. This hypothesis adds an additional layer of complexity to the interplay between social media usage, exposure to information, and users' behaviors.

So, we will investigate RQ5:

**RQ5: How does time spent on Instagram affect the individuals' behavior regarding fake news?**

More specifically, we will test the following hypotheses:

**H5a: Instagram users' country affects time spent on Instagram every day.**

**H5b: Instagram users' country affects the frequency of encountering news on Instagram.**

**H5c: Instagram users' country affects the likelihood to unfollow or mute accounts sharing fake news.**

**H5d: Instagram users' country affects the frequency to engage in discussions or debates about news topics on Instagram.**

**H5e: Instagram users' country affects the likelihood to read and engage with news articles or information shared on Instagram.**

## Cultural context

Defining culture is exceptionally challenging. According to Hofstede (1994: 5), "[Culture] is the collective programming of the mind which distinguishes the members of one group or category of people from another." Although Portugal and Greece have

cultures with distinct features, they also share commonalities due to their Mediterranean roots. In cultures that prioritize truth and collective well-being, individuals may be more prone to believe and share content, including fake news, that aligns with collective values (Gupta et al., 2023). This dynamic is influenced by a commitment to sharing resources seen as beneficial to the group, contributing to the dissemination of potentially unreliable information.

So, we will investigate RQ6:

**RQ6: What are the cultural barriers, such as language barriers, stereotypes, and trust in authorities, regarding news sources on Instagram in Greece and Portugal.**

More specifically, we will test the following hypothesis:

**H6: Qualitative analysis reveals unique cultural barriers, influencing news perceptions on Instagram in Greece and Portugal.**

## **Response to fake news in Greece and Portugal**

Addressing the challenge of fake news requires comprehensive and multifaceted responses. Effective solutions may involve enhancing media literacy education to equip individuals with critical thinking skills, promoting fact-checking initiatives, and fostering a culture of responsible sharing and information verification on social media platforms.

In the effort of combating fake news, Greeks take an assertive approach, relying on personal web research for story credibility verification and actively participating in preventive measures against misinformation spread on social media (Mavridis, 2018). Despite the availability of fact-checker websites, Greek users, when identifying fake news on social media, often rely on personal identity assessment rather than turning to fact-checking software (Mavridis, 2018). On the contrary, the Portuguese exhibit a keen awareness of the extensive impact of fake news, emphasizing their attentive internet use (Lima-Quintanilha et al., 2019). Interestingly, despite this understanding, they maintain trust in news sources while remaining vigilant about the distinct attributes of the phenomenon.

Examining media literacy practices in Greece and Portugal reveals distinct characteristics. Portugal, with its population demonstrating relatively high trust in journalistic news content in 2019, grapples with increasing concerns about fake or illegitimate online content (Baptista et al., 2021). In contrast, Greece's media practices tend to present conversations as news, prioritizing opinions over data in their reports (Patrona, 2018). This landscape suggests a divergence in approaches, with Portugal emphasizing trust in journalism while grappling with concerns about misinformation. Meanwhile, Greece leans towards opinion-centric media practices and a reliance on personal identity assessment in the context of fake news on Instagram.

Shifting the focus to education, media literacy and information literacy are deemed pivotal skills (Soltanifar et al., 2017). Actively promoting open-minded thinking emerges as a crucial strategy in the ongoing battle against fake news (Mirhoseini et al., 2023). These findings underscore the importance of tailoring interventions to the unique

cultural and media landscapes of each country, as evidenced by the divergent responses and approaches in Greece and Portugal.

The hypotheses under H7a provide a comprehensive framework for exploring and comparing how individuals in Greece (GR) and Portugal (PT), respond to the challenge of fake news.

So, we will investigate RQ7:

**RQ7: How does the country of Instagram users (Portugal and Greece) influence their media literacy behaviors and responses to fake news on the platform?**

More specifically, we will test the following hypotheses:

**H7a: Instagram users' country affects their confidence in identifying fake news on Instagram.**

**H7b: Instagram users' country affects their frequency of fact-checking before sharing news on Instagram.**

**H7c: Instagram users' country affects their openness to considering different viewpoints or news sources.**

**H7d: Instagram users' country affects their formal education or training on media literacy.**

**H7e: Instagram users' country affects their likelihood to report or flag suspicious content on Instagram.**

**H7f: Instagram users' country affects their interest in attending workshops or educational programs on media literacy for Instagram users.**

This comparative analysis between Greece and Portugal adds a cross-cultural dimension, recognizing the diverse landscapes that influence the perception and dissemination of fake news. Specifically, in the existing body of research on the spread and credibility of fake news on social media platforms, there is a notable absence of a comparative analysis between European countries, especially Greece and Portugal. Despite the shared historical and cultural roots reflected in their Mediterranean cultures, a significant gap exists in the literature concerning how these nations respond to the challenges posed by misinformation. This research aims to bring valuable insights to the broader discourse on information credibility and media literacy within the European context.



Figure 1: Research Topics of this paper: Factors that affect the credibility of fake news on Instagram.

## Findings

ARTICLES	FINDINGS	METHODOLOGY	RESEARCH QUESTIONS OR HYPOTHESIS	COUNTRY-PARTICIPANT S- Social media platform
<p>Altay, Hacquin, &amp; Mercier, (2022)</p>	<p>Sharing fake news is reputationally costly and people appear to take these costs into account.</p> <p>People’s general reluctance to share fake news is in part due to reputational concerns.</p> <p>Some fake news might be shared because they are entertaining or because they serve a phatic function, in which cases sharers would not expect to be judged harshly based on the accuracy of the news.</p> <p>Some fake news relate to conspiracy theories and recent work shows people high in need for chaos—people who might not care much about how society sees them—are particularly prone to sharing such news.</p> <p>A few people appear to be so politically partisan that the perceived reputational gains of sharing politically congruent news, even fake, might outweigh the consequences for their epistemic reputation.</p>	<p>4 experiments: In the 1st experiment, a negative impact on trust was anticipated when sharing one real news story after three fake news stories. The 2<sup>nd</sup> experiment replicated the first, focusing on political news. The 3rd experiment involved participants stating the payment they would require to share various fake news stories. The 4<sup>th</sup> experiment replicated the third with new materials and included real news alongside fake news.</p>	<ul style="list-style-type: none"> <li>• H1: A good reputation is more easily lost than gained</li> <li>• H2: A good reputation is more easily lost than gained, even if the fake news is politically congruent</li> <li>• H3: Sharing fake news should be costly</li> <li>• H4: Sharing fake news should be costlier when one’s reputation is at stake</li> <li>• H5: Sharing fake news should appear costly for most people, even when the fake news stories are politically congruent</li> <li>• H6: Sharing fake news should appear costlier when reputation is on the line, even when the fake news stories are politically congruent</li> </ul> <p>H7: Sharing fake news should be costlier than sharing real news when one’s reputation is at stake</p>	<p>3656-online participants from the United States.</p>
<p>Apuke, &amp; Omar (2021)</p>	<p>Altruism was found to be a strong predictor of fake news sharing related to COVID-19.</p> <p>Information sharing is the second-highest predictor of sharing fake news pertaining to COVID-19 pandemic, with socialization gratification being the third and information seeking the fourth.</p> <p>Sharing of news content was not seen as an act of entertainment at the time of the pandemic.</p>	<p>Online survey using Google forms</p>	<ul style="list-style-type: none"> <li>• H1: Altruism gratification will be positively related to sharing fake news pertaining to COVID-19 pandemic.</li> <li>• H2: Entertainment gratification will be positively related to sharing fake news pertaining to COVID-19 pandemic.</li> <li>• H3: Socialization gratification will be positively related to sharing fake news pertaining to COVID-19 pandemic.</li> <li>• H4: Pass time gratification will be positively related to sharing fake news pertaining to COVID-19 pandemic.</li> <li>• H5: Information seeking gratification will be positively related to sharing fake news pertaining to COVID-19 pandemic.</li> </ul> <p>H6: Information sharing gratification will be positively related to sharing fake news pertaining to COVID-19 pandemic.</p>	<p>Nigeria - 385 participants- Various social media platforms</p>
<p>Baptista, Correia, Gradim, &amp; Piñeiro-Naval (2021)</p>	<p>Study shows a link between political ideology and belief in (fake) news.</p> <p>Right-wing individuals tend to accept and spread fake news more, regardless of its political alignment.</p> <p>Factors like age, digital news literacy, and psychological aspects influence fake news judgment.</p>	<p>Online questionnaire distributed via email, Facebook, and various associations in mainland Portugal. The questionnaire comprised three sections covering demographic information, exposure to fake and real</p>	<ul style="list-style-type: none"> <li>• Investigates how an individual's political ideology and demographic factors influence their inclination to believe and propagate fake news.</li> </ul>	<p>Portugal-712- Facebook</p>

	Older and less educated participants are more likely to believe and share fake news.	headlines, and the identification of participants' ideological stance on the left–right political spectrum.		
Balakrishnan, Ng, & Rahim (2021)	Altruism, Ignorance and Entertainment were found to significantly and positively affect fake news sharing behavior whilst Availability/Effort, Pass Time and Fear of missing out were insignificant.	Research model from questionnaire survey	<ul style="list-style-type: none"> <li>• H1: Technology positively affects fake news sharing</li> <li>• H2: Entertainment positively affects fake news sharing</li> <li>• H3: Ignorance positively affects fake news sharing</li> <li>• H4: Altruism positively affects fake news sharing</li> <li>• H5: Fear of missing out positively affects fake news sharing</li> <li>• H6: Pass time positively affects fake news sharing</li> </ul>	Malaysia- 869 participants
Baptista, & Gradim (2020)	<p>Fake news uses different tactics to grab the reader's attention, including how the title is presented and the language used in the article. This language is designed to be simple, emotional, and persuasive.</p> <p>Creators of fake news aim for virality from the start, choosing topics, language, titles, and images strategically.</p> <p>A false story is much more likely to go viral than a real one.</p> <p>Empirical findings on demographic dimensions and fake news consumption are not unanimous. Belief in fake news is strongly linked to motivational factors involving party, political, and ideological affiliations.</p>	Google Scholar database between the period 2016 and 2020.	<ul style="list-style-type: none"> <li>• Q1: Does fake news spread quickly on social media because it explores aspects that are attractive to the user/reader?</li> <li>• Q2: What are the main motivations for sharing fake news on social media?</li> <li>• Q3: How do demographic and political aspects relate to the belief and dissemination of fake news?</li> <li>• Q4: Who are fake news consumers?</li> </ul>	
Bringula, Catacutan-Bangit, Garcia, Gonzales, & Valderama (2022)	<p>Regularly checking their Instagram accounts makes users more likely to fall for fake news, especially since there's no fact-checking.</p> <p>Sharing a friend's post increases the risk because they all seem to share the same opinions.</p> <p>Liking a post from a political party makes users more vulnerable to fake news.</p> <p>More than half of the participants admit they've been fooled by fake news at least once.</p>	Research questionnaire	<ul style="list-style-type: none"> <li>• H1: Students' ICT access in terms of device ownership, type of Internet access, and Internet access location do not predict susceptibility to fake news.</li> <li>• H2: Students' fake news exposures in terms of frequency of Facebook, Instagram, Twitter use, frequency of YouTube visit, of social media usage for politics updates, satisfaction from the information received and the perceived prevalence of fake news does not predict students' susceptibility to fake news.</li> <li>• H3: Students' level of awareness on political issues in terms of knowledge, perceived importance, and amount of time dedicated does not predict students' susceptibility to fake news.</li> <li>• H4: Students' confirmation bias does not predict susceptibility to fake news in terms of sharing, liking or reacting to the posts of their friends, unknown people or political parties.</li> <li>• H5: Students' level of trust toward news sharers, such as political posts of friends, a</li> </ul>	Philippines – 693 participants-

			<p>respected person, political parties, and an unknown person does not predict susceptibility to fake news.</p> <ul style="list-style-type: none"> <li>• H6: Fact-checking strategies of the students in terms of searching the Internet through Google, seeking the opinion of teachers, of experts, of authorities, of friends, of family members, searching for materials in the library, consulting print newspapers, online newspapers, and fact-checking websites do not predict their susceptibility to fake news.</li> </ul>	
Bronstein, Pennycook, Bear, Rand, & Cannon (2019)	<p>Belief in fake news is associated with delusion-like ideation, dogmatism, and religious fundamentalism, but these factors do not correlate with belief in real news and are negatively correlated with dogmatism.</p> <p>Delusion-like ideation, dogmatism, religious fundamentalism, and belief in fake news are all negatively correlated with analytic and actively open-minded thinking.</p> <p>Analytic and actively open-minded thinking is positively correlated with belief in real news.</p> <p>Fake news discernment is negatively correlated with delusion-like ideation, dogmatism, and religious fundamentalism, while positively correlated with actively open-minded and analytic thinking.</p>	<p>Study 1: Examined Cognitive Reflection Test, delusion-like ideation, open-mindedness, dogmatism, religious fundamentalism. Participants assessed headlines on Facebook (real and fake, ideologically balanced).</p> <p>Study 2: Included CRT, news evaluation task (like Study 1), and other individual measures from Study 1, presented randomly.</p>		United States- Study 1: n = 502, Study 2: n = 446
Bryanov, K., & Vziatysheva, V. (2021)	<p>Generally, people tend to perceive information conveyed by others as reliable and accept it as true.</p> <p>The examined evidence on individuals' perceptions of the overall credibility of fake news versus real news, as well as their ability to distinguish between the two, presents a somewhat conflicting picture.</p> <p>In most studies where people were exposed to both real and fake news, the evidence suggests that they were generally better than chance at telling them apart.</p> <p>Due to limited attention and cognitive resources, people often use simple rules like bandwagon and celebrity endorsements, topic relevance, or presentation format to judge credibility efficiently.</p> <p>Alignment with prior beliefs tends to boost credibility perceptions.</p>	Systematic scoping review.	<ul style="list-style-type: none"> <li>• RQ1: What factors have been found to predict individuals' belief in fake news and their capacity to discern between false and real news?</li> <li>• RQ2: What interventions have been found to reduce individuals' belief in fake news and boost their capacity to discern between false and real news?</li> </ul>	-
Burbach, Halbach, Ziefle, & Calero Valdez (2019, June)	There is a link between user personality and social media behavior. Results varied from previous studies, highlighting the	Online questionnaire (SurveyMonkey) and an agent-based model.	<ul style="list-style-type: none"> <li>• It investigates the dissemination of regular and fake news in online social networks.</li> </ul>	Germany- 164 participants



	need for more comprehensive research with diverse samples.			
Duffy, Tandoc, & Ling (2020)	<p>Participants share news stories for various reasons, including staying connected with friends, finding the news entertaining, or eliciting feelings of outrage. They also shared stories with high emotional content, perceived usefulness in informing, warning, helping, or protecting loved ones, and relevance to their friends who would receive it.</p> <p>People share news in order to enhance social cohesion</p> <p>Older opinion leaders were less critical in sharing stories, while younger participants were more circumspect.</p>	Qualitative research into news sharing of 109 articles and then 12 one-hour focus groups of people in 2016 and 2017	<ul style="list-style-type: none"> <li>• RQ1 How do recipients react when they get fake news through their social network?</li> <li>• RQ2 How do sharers react when they disseminate news which their social network subsequently identifies as being fake?</li> <li>• RQ3 How does sharing news affect social relationships when the news shared is identified as fake?</li> <li>• RQ4 How does the social reaction to people who have either shared or received news that turned out to be fake change the way they subsequently read and share news?</li> </ul>	Singapore 88 participants
Guess, Lerner, Lyons, Montgomery, Nyhan, Reifler, & Sircar (2020)	Limited digital media literacy contributes significantly to individuals' susceptibility to believing misinformation encountered on the internet.	Two-wave panel surveys with a media literacy intervention in the United States and two in India during politically charged periods around national elections.	<ul style="list-style-type: none"> <li>• The main research hypotheses evaluate whether the media literacy intervention reduces belief in false news stories (hypothesis 1 [H1]), increases belief in mainstream news content (H2), and improves respondents' ability to distinguish between them (H3).</li> </ul>	India online survey n1:3273 n2:1369 and face-to-face n1: 3744 and n2:2695-United States n1=4907, n2=4283
Guess, Nagler, & Tucker (2019)	<p>Sharing links from fake news domains occurs much less frequently than sharing links in general.</p> <p>Republicans were more likely to share stories from fake news domains compared to Democrats.</p> <p>Individuals who frequently share content overall were less inclined to share articles from domains known for spreading fake news with their friends.</p> <p>Individuals over 65 shared seven times more fake news articles than the youngest age group.</p>	Panel survey in three waves.		Facebook users, United States 1 <sup>st</sup> wave: 3500 respondents 2 <sup>nd</sup> : 2635 respondents 3 <sup>rd</sup> : 2628 respondents - Facebook
Gupta, M., Dennehy, D., Parra, C. M., Mäntymäki, M., & Dwivedi, Y. K. (2023)	<p>The more individuals leaned towards conservatism and collectivism, the more their belief in fake news increased significantly.</p> <p>Statistically significant difference between the fake news believability tendencies of Americans and Indian</p>	Pilot survey to assess the readability and clarity of 17 fake news scenarios	<ul style="list-style-type: none"> <li>• H1: Conservatism will lead to greater fake news believability.</li> <li>• H2: Collectivism will lead to greater fake news believability.</li> </ul>	US and India- 526 participants- WhatsApp
Kim, & Dennis (2019)	<p>Source reputation ratings influenced the believability of articles</p> <p>Users are more likely to read, like, post supporting comments, and share articles that they agree with</p>	Participants completed a 15-minute survey with 12 politically diverse Facebook-style headlines. Efforts, such as using a gender-neutral poster name, aimed to minimize biases in headline-specific effects.	<ul style="list-style-type: none"> <li>• H1: Users are more likely to believe an article that aligns with their pre-existing beliefs on the topic</li> <li>• H2: Users are less likely to believe an article that is presented in a source-highlighted format than one presented in a headline-highlighted format</li> <li>• H3: The source-highlighted format will increase the effect of source reputation on an article's believability.</li> <li>• H4: Source reputation ratings will directly affect the believability of articles, such that</li> </ul>	United States - 445 participants

			<p>lower source reputation ratings will lead to lower believability of articles from that source</p> <ul style="list-style-type: none"> <li>• H5: Users are more likely to choose to a) read, b) like, c) comment on, and d) share an article that aligns with their pre-existing beliefs about the topic.</li> <li>• H6: Users are more likely to choose to a) read, b) like, c) comment on, and d) share an article when they believe it to be true.</li> </ul>	
Luo, Hancock, & Markowitz (2022)	<p>Deception bias: average credibility score significantly below the midpoint of the scale;</p> <p>Detection accuracy across two studies significantly better/not significantly worse than chance.</p> <p>Health news detected more accurately than science news, but less accurately than political news; no effects of veracity on detection accuracy.</p> <p>Number of likes increased the perceived credibility of both real and fake headlines.</p> <p>Likes by friends did not increase perceived credibility.</p>	<p>Study 1: Participants randomly exposed to real and fake news headlines on Facebook in politics, health, or science; measuring outcomes.</p> <p>Study 2: Participants randomly exposed to true and fake headlines in politics, science, or health on Facebook, with variations in likes from friends or users; measuring outcomes.</p>	<ul style="list-style-type: none"> <li>• H1: Participants will rate news headlines in social media as credible more often, independent of the headline's actual veracity</li> <li>• H2: Participants will judge real news headlines more accurately than fake news headlines.</li> <li>• H3: A high number of likes will lead to higher message credibility of news headlines than a low number of likes, regardless of actual news veracity.</li> <li>• H4: Friend-generated likes will lead to higher message credibility of news headlines than user-generated likes, regardless of the actual news veracity</li> <li>• H5: A high number of likes will (a) increase detection accuracy for real news and (b) decrease detection accuracy for fake news.</li> <li>• H6: Friend-generated likes will (a) increase detection accuracy for real news and (b) decrease detection accuracy for fake news</li> </ul>	736 participants - Facebook
Martel, Pennycook, & Rand (2020)	<p>Increased emotionality is associated with increased belief in fake news.</p> <p>It suggests that it is more about the failure to engage in analytic thinking and an overreliance on emotion than ideological motivation.</p>	<p>Study 1 explores how emotions impact judging real and fake news. It tests if strong emotions lead to believing fake news and difficulty distinguishing real from fake. Study 2 goes further, manipulating how people use emotion or reason in evaluating news to see if it affects judging fake news and telling real from fake.</p>	<ul style="list-style-type: none"> <li>• It examines the role of emotion in susceptibility to believing fake news.</li> </ul>	4293 participants via Amazon Mechanical Turk-Facebook
Moravec, Minas, & Dennis (2018)	<p>Users were more likely to believe news headlines they wanted to be true.</p> <p>Participants more likely to believe headlines to be credible when they aligned with the user's political beliefs</p> <p>Users do not spend less time when the headline is aligned with beliefs and the fake news flag did not reduce the credibility of headlines aligned with beliefs</p> <p>Social media users are poor at separating fake news from real news</p>	<p>Participants assessed the credibility of 50 fact-based news headlines covering 10 US political topics, with 40 headlines intentionally ambiguous and 10 control headlines designed to be more clearly true.</p>	<ul style="list-style-type: none"> <li>• H1: Social media users will be no better than chance at identifying if a headline is true or false.</li> <li>• H2a: Social media users will exhibit decreased desynchronization in the upper alpha band in the frontal cortex when seeing a headline that aligns with their beliefs.</li> <li>• H2b: Social media users will spend less time considering a headline aligned with their beliefs.</li> <li>• H2c: Social media users will perceive a headline aligned with their beliefs as being more credible.</li> <li>• H3a: Social media users will exhibit increased desynchronization in the upper alpha band in frontal cortex when seeing a fake news flag on a headline aligned with their beliefs.</li> <li>• H3b: Social media users will spend more time when seeing a fake news flag on a headline aligned with their beliefs.</li> </ul>	United States -83 participants-Facebook

			<ul style="list-style-type: none"> <li>• H3c: Social media users will perceive headlines aligned with their beliefs that are flagged as fake as being less credible.</li> </ul>	
Nazari, Oruji, & Jamali (2022)	<p>Young adults usually spent between 15 minutes and two hours per day reading news.</p> <p>Tehran's youth use social media for news but doubt its credibility, considering factors like Instagram page type. Despite skepticism, they use strategies such as cross-referencing and self-education to identify fake news, emphasizing the news source as the key factor.</p>	Generic qualitative approach with semi-structured interviews.	<ul style="list-style-type: none"> <li>• H1 What kind of news do young adults usually consume and what kind of news attracts them?</li> <li>• H2 What sources do young adults use in order to get news?</li> <li>• H3 What perception do young adults have about fake news and how do they deal with fake news?</li> </ul>	Iran-41 participants
Rampersad, & Althiyabi (2020)	<p>While there is some evidence to suggest that demographic factors may influence the acceptance of fake news, it is weak. Out of three demographic categories, age has the greatest effect on the acceptance of fake news, compared to the other two, education and gender.</p> <p>Culture has a strong and significant indirect effect, although not a direct determinant of fake news acceptance</p> <p>Comprehensibility has a direct effect on the acceptance of fake news</p>	Quantitative study on fake news spread via WhatsApp among Saudi students abroad, considering demographics and culture.	<ul style="list-style-type: none"> <li>• H1: Age positively impacts on the acceptance of fake news.</li> <li>• H2: Gender positively influences the acceptance of fake news.</li> <li>• H3: Education positively impacts the acceptance of fake news.</li> <li>• H4: Culture positively influences the acceptance of fake news.</li> <li>• H5: Comprehensibility positively influences the acceptance of fake news</li> <li>• H6: Comprehensibility mediates the relationship between age and the acceptance of fake news.</li> <li>• H7: Comprehensibility mediates the relationship between gender and the acceptance of fake news.</li> <li>• H8: Comprehensibility mediates the relationship between education and the acceptance of fake news.</li> <li>• H9: Comprehensibility mediates the relationship between culture and the acceptance of fake news.</li> <li>• H10: Acceptance positively influences intention to use</li> </ul>	Saudi Arabia- 107 participants- WhatsApp
Van Der Linden (2022)	People may fall for misinformation due to social media distractions and inattention to accuracy. The politicized nature of public-health issues indicates that individuals share misinformation to align with socio-political beliefs and identity.	Examining the existing body of literature.	<ul style="list-style-type: none"> <li>• H1: What factors make people susceptible to misinformation?</li> <li>• H2: How does misinformation spread in social networks?</li> <li>• H3: Can we inoculate or immunize people against misinformation?</li> </ul>	

Table 1: Key characteristics of previous articles.

To date, limited scholarly attention has been devoted to comprehensively dissecting the multifaceted factors that influence the proliferation of fake news across differing cultural and political landscapes. Existing research questions often overlook crucial areas such as post characteristics, representing dimensions that have not been directly addressed. While the predominant focus lies on platforms like Facebook or WhatsApp, it is essential to acknowledge the significance of diversity in social media and investigate the unique dynamics of Instagram. Notably, research on fake news on Instagram remains underexplored in Portuguese and Greek contexts, with existing studies mostly centered on the United States and other countries.

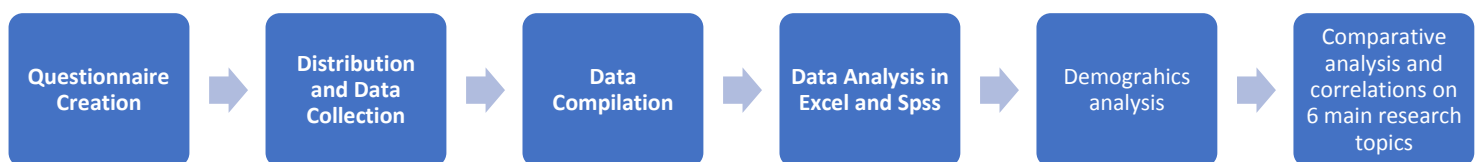
## 2. METHODOLOGY & RESEARCH DESIGN

We designed and distributed a self-administered questionnaire in English to individuals in Portugal and Greece, garnering a total of 220 responses between February and April 2023. The inclusion criteria were having an Instagram account and being born or raised in either Portugal or Greece. Out of the 220 responses, 211 were deemed valid, and 9 cases presented issues. Notably, no data was missing as participants were required to respond to all questions, and the questionnaire assured complete anonymity and data confidentiality.

The questionnaire included 3-point and 5-point Likert-scale items, multiple-choice queries, and open-ended questions. The questionnaire included demographic questions and items related to participants' perceptions of post characteristics, trust in news sources, political views and beliefs, cultural context time spent on Instagram, and responses to fake news.

The research employed a multifaceted methodology to investigate factors influencing individuals' perceptions and behaviors related to Instagram news consumption. An analysis of descriptive statistics was applied to show the demographic characteristics of the study participants. Various steps were taken in the analysis following Rampersad (2019) and Balakrishnan et al. (2021). The quantitative variables are presented as Median, Mode and Interquartile range, and the categorical variables are presented as frequencies and percentages. Cronbach Alpha (CA) was used to assess the internal consistency reliability. We used non parametric tests such as the Kruskal-Wallis Test and the Mann-Whitney U Test to investigate differences between political ideology and origin. Time Spent and Frequency of Fake News (RQ3) included a Shapiro-Wilk test, Spearman's rank correlation, and Mann-Whitney U tests to explore the relationship between time spent on Instagram, news engagement, and differences in time spent by country. In order to verify if there was a significant relationship between some of the observed variables, the chi-square test was also used. All of these statistical analyses were conducted using the Statistical Package for the Social Sciences (IBM SPSS 29.0.1.0). In all statistical analyses, significance values of  $p < 0.05$  were considered.

Figure 2: The research process



Regarding the post characteristics we try to investigate their role in assessing the likelihood of a post being fake or trustworthy. Participants were asked how much these characteristics affect whether they trust a post or not, using a 5-point Likert type scale, where “1” indicates “It must be Real” as highly believable news” and “5” indicates “It must be fake “as not at all believable.

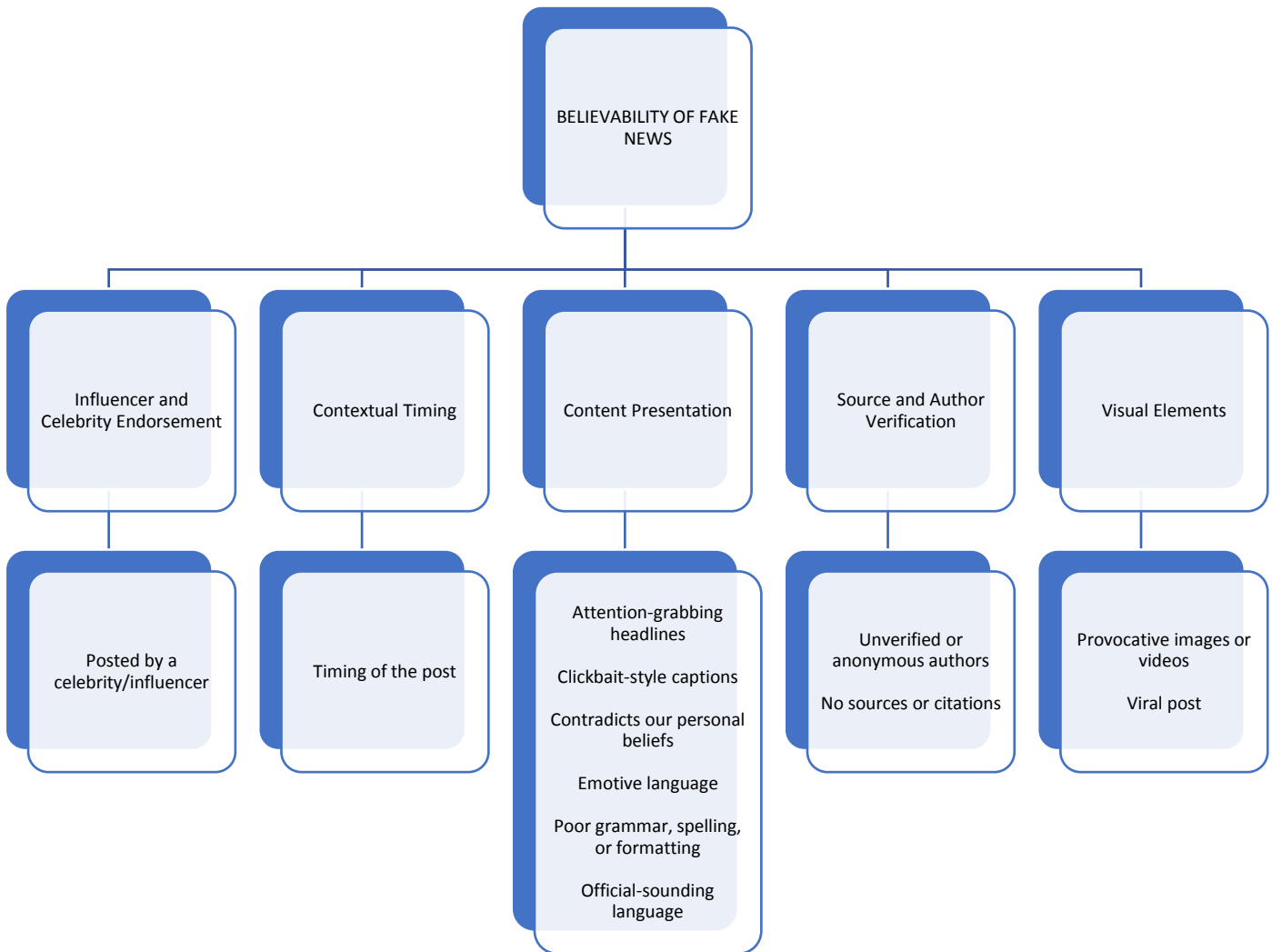


Figure 3: Categorization of Post Characteristics

### 3. ANALYSIS & FINDINGS

#### DEMOGRAPHICS

The study includes a sample of 211 individuals, with 107 being Portuguese and 104 being Greek. As shown in Table 2, it mostly comprises individuals within the 18-24 age range, representing the youth demographic. Regarding gender 38.39% were females, 61.61% males. Among females, 42.31% Greek, 34.58% Portuguese; among males, 57.69% Greek, 65.42% Portuguese (Table 3). In both countries, the majority of the sample is composed of males.

Descriptive data on respondents.				
Category	Group/Sub-Group	Respondents		
		n	%	
Country of origin	Greece	104	49.29	
	Portugal	107	50.71	
Age	12-17 years old.	5	2.37	
	18-24 years old.	164	77.73	
	25-34 years old.	37	17.54	
	35-44 years old.	5	2.37	
Gender	Female	81	38.39	
	Male	130	61.61	
Education	High School	97	45.97	
	Trade School	1	0.47	
	Bachelor's Degree	80	37.91	
	Master's Degree	22	10.43	
	Ph.D. or higher	2	0.95	
	Prefer not to say	9	4.27	
Political view	Apolitical	3	1.42	
	Prefer not to say	46	21.80	
	Very Liberal	33	15.64	
	Slightly Liberal	40	18.96	
	Moderate	60	28.44	
	Slightly Conservative	20	9.48	
	Very Conservative	9	4.27	

Table 2: Descriptive demographic data on respondents.

Count of What is your gender?	Female	Male
Greece	42.31%	57.69%
Portugal	34.58%	65.42%

Table 3: Distribution of Gender Frequencies by Country.

The analysis indicates that there are notable differences in the distribution of educational levels between Greece and Portugal as shown in Chart 1. Portugal has a higher percentage of respondents with Bachelor's Degrees, while Greece has a higher percentage with High School education. Analysis of the Mann-Whitney U test shows that there is statistically significant difference between the education by country.

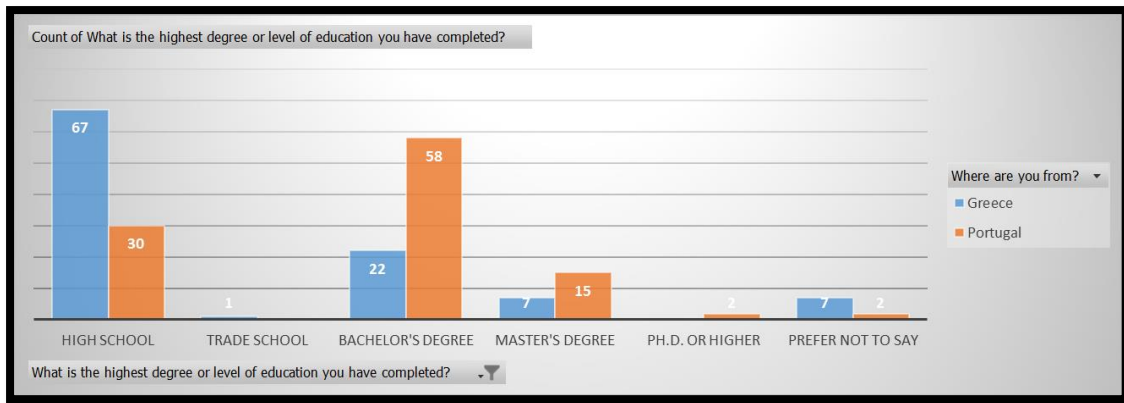


Chart 1: Distribution of educational levels per country.

Regarding political view, in both Portugal and Greece, the largest group of respondents identified as "Moderate" suggesting that a significant portion of the respondents in both countries may have centrist or moderate political beliefs (Chart 2).

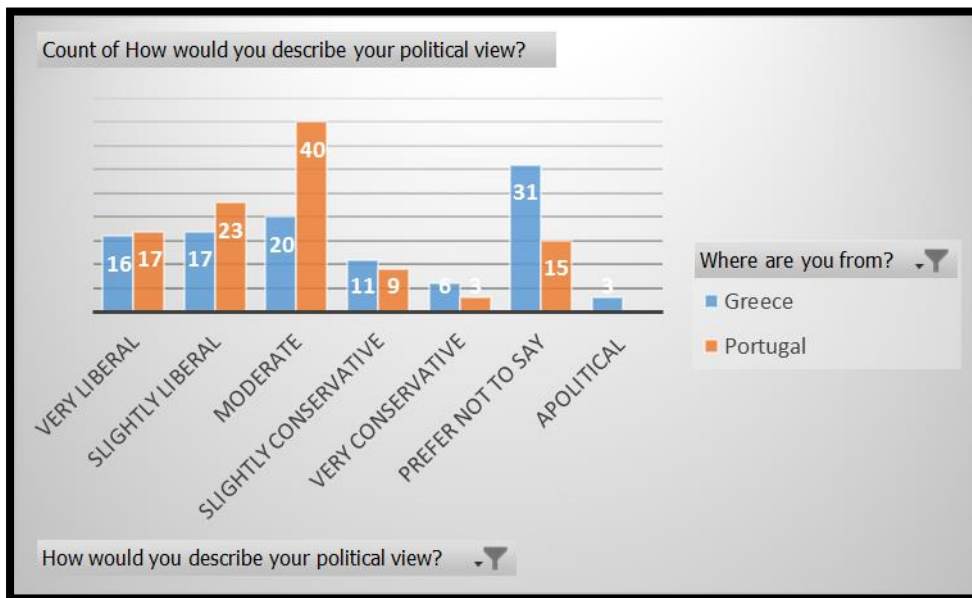


Chart 2: Political ideology distribution by country

## STATISTICAL ANALYSIS

### *H1 POST CHARACTERISTICS*

First of all, we check for consistency and reliability of the 12 post's characteristics with Cronbach alpha value. As shown in Table 4 the Cronbach's alpha of 0.815 is indicative of strong internal consistency. It suggests that the 12 items in the scale are strongly interconnected and consistently measure a shared underlying construct, specifically, the factors influencing the credibility of news.

Reliability Statistics	
Cronbach's A	N of Items
0.815	12

Table 4: Cronbach's Alpha Coefficients Assessing the Internal Consistency Reliability of Post Characteristics

After testing for consistency, we present the descriptive statistics as median (ME), interquartile range (IR) and mode (M).

The identified analysis variables are as follows:

- Attentiongrabbingheadlines (Headlines): Importance of captivating headlines in spotting fake news.
- Clickbait (Captions): Significance of clickbait-style captions in fake news identification.
- authors (Author Verification): The role of verified/authentic authors versus unverified/anonymous ones.
- ProvocativeIV (Provocative Content): Influence of provocative images or videos on detecting fake news.
- Lowlikescomments (Engagement Level): Significance of low likes or comments in identifying fake news.
- Againstbeliefs (Belief Contradiction): Importance of content contradicting personal beliefs in fake news assessment.
- offlanguage (Official Language): The impact of official-sounding language on fake news evaluation.
- emlanguage (Emotive Language): The role of emotive language in identifying fake news.
- Nosources (Source/Citation Absence): Significance of no sources or citations in fake news detection.
- Viral (Popularity): Importance of a post going viral in the context of fake news.
- Poorgsf (Poor Grammar/Spelling/Formatting): The impact of poor grammar, spelling, or formatting on fake news credibility.
- TimingPost (Post Timing): Influence of post timing (e.g., during elections or crises) on fake news assessment.

Statistics												
	Attentiongrabbingheadlines	Clickbait	authors	ProvocativeIV	Lowlikescomments	Againstbeliefs	offlanguage	emlanguage	Nosources	Viral	Poorgsf	TimingPost
Me	3.00	4.00	4.00	4.00	3.00	3.00	3.00	3.00	4.00	3.00	4.00	3.00
M	3	4	4	4	3	3	3	3	4	3	4	3
IR	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	2.00	0.00	2.00	1.00

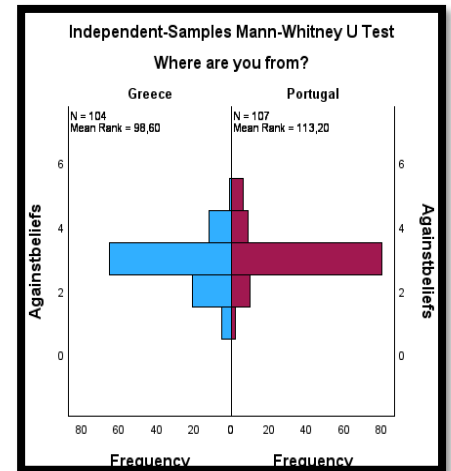
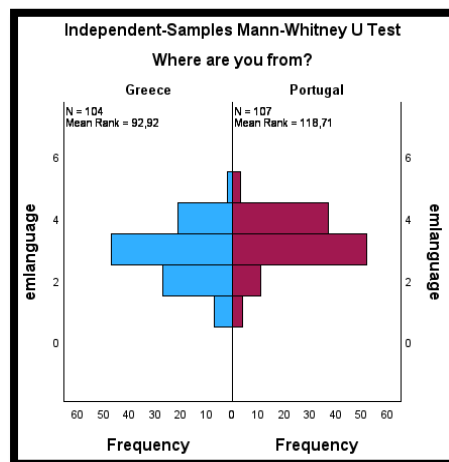
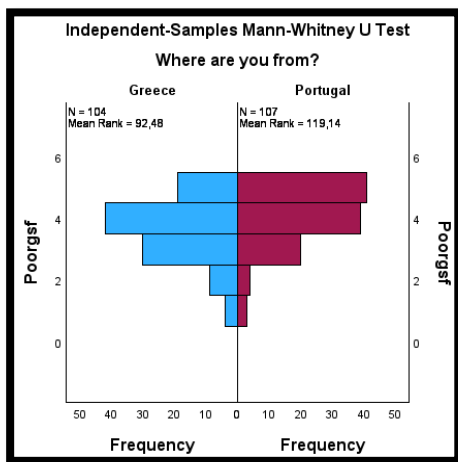
Table 5: Median, Mode and Interquartile Ranges of Post Characteristics

The post's characteristics vary in their perceived prevalence, with some having higher central tendencies (medians) and varying levels of spread in the middle 50% of responses (IQR).. "Clickbait", "authors", "ProvocativeIV", "NoSources" and "Poorgsf" (Me=4.00) are perceived as relatively more prevalent, as indicated by their higher median values. Respondents tend to consider these features to a greater extent when evaluating the authenticity of information . The median scores reveal the middle



values for each characteristic, with attention-grabbing headlines, low likes/comments, and timing of posts having a median score of 3, indicating a moderate perception. The interquartile range provides insights into the spread of the data, indicating that the assessments for most characteristics have a relatively narrow range, emphasizing the consistency in perceptions. "Viral" and "TimingPost," where the IQR is 2.00, suggest relatively wider variability in the perceptions of these characteristics among the participants. (Table 5).

In order to examine the differing perceptions of post characteristics between Portugal (PT) and Greece (GR), we employed the Mann-Whitney U test (Table 6). The results of the tests between Greece and Portugal reveal interesting patterns and revealed generally consistent perceptions of various factors influencing the identification of fake news on Instagram. For the variables "AgainstBeliefs," "Emotlanguage," and "PoorGrSpFor," the p-values are below the significance level of 0.05, (0.034, 0.01 and <0.001 respectively) suggesting cultural differences in assessing credibility when faced with conflicting beliefs and varied reactions to emotive language. Additionally, the linguistic quality of content emerged as a significant factor, with participants from Greece and Portugal differing in their evaluation of posts with poor grammar, spelling, or formatting. Evidence shows that Portuguese's mean rank is higher in all three cases, indicating that Portuguese attribute greater significance to the specified post characteristics as indicators of fake news compared to individuals from Greece (Charts 3a, 3b, 3c).



Charts 3a, 3b, 3c: Visualization of the results of the Mann-Whitney U test investigating the variables influencing the credibility of fake news by country

Hypothesis Test Summary				
	Null Hypothesis	Test	Sig. <sup>a,b</sup>	Decision
1	The distribution of AttentionGrabbingHeadlines is the same across categories of Where are you from?.	Independent-Samples Mann-Whitney U Test	.974	Retain the null hypothesis.
2	The distribution of Clickbait is the same across categories of Where are you from?.	Independent-Samples Mann-Whitney U Test	.646	Retain the null hypothesis.
3	The distribution of AnonymousAuthors is the same across categories of Where are you from?.	Independent-Samples Mann-Whitney U Test	.062	Retain the null hypothesis.
4	The distribution of Provocativelanguage is the same across categories of Where are you from?.	Independent-Samples Mann-Whitney U Test	.615	Retain the null hypothesis.
5	The distribution of LowNumberLikesCom is the same across categories of Where are you from?.	Independent-Samples Mann-Whitney U Test	.165	Retain the null hypothesis.
6	The distribution of AgainstBeliefs is the same across categories of Where are you from?.	Independent-Samples Mann-Whitney U Test	.034	Reject the null hypothesis.
7	The distribution of OfficialLanguage is the same across categories of Where are you from?.	Independent-Samples Mann-Whitney U Test	.104	Retain the null hypothesis.
8	The distribution of Emotlanguage is the same across categories of Where are you from?.	Independent-Samples Mann-Whitney U Test	.001	Reject the null hypothesis.
9	The distribution of NoSource is the same across categories of Where are you from?.	Independent-Samples Mann-Whitney U Test	.142	Retain the null hypothesis.
10	The distribution of ViralPost is the same across categories of Where are you from?.	Independent-Samples Mann-Whitney U Test	.052	Retain the null hypothesis.
11	The distribution of PoorGrSpFor is the same across categories of Where are you from?.	Independent-Samples Mann-Whitney U Test	.001	Reject the null hypothesis.
12	The distribution of TimingPost is the same across categories of Where are you from?.	Independent-Samples Mann-Whitney U Test	.448	Retain the null hypothesis.

a. The significance level is .050  
b. Asymptotic significance is displayed.

Table 6: Analysis of the Mann-Whitney U test investigating how these post characteristics influence the credibility of fake news in both Greece and Portugal.

## H2: Influencers and celebrity endorsement

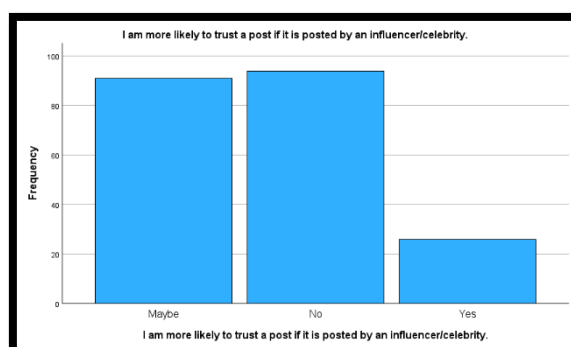


Chart 4: Influencer or celebrity endorsements to news

The survey results show a predominant inclination towards skepticism, with a majority of participants voting “no” indicating a reluctance to trust posts solely based on

**influencer or celebrity endorsements.** A minority of participants expressed uncertainty with “maybe,” and only a few respondents affirmed trust with a “yes.”(Chart 4)

In order to test if participants from Greece and Portugal believe the news more when posted by influencers, chi square test was conducted. The results, with p-value 0.359, suggest that there is no significant association between nationality and the likelihood of trusting posts from influencers or celebrities (Table 7).

<b>Chi-Square Tests</b>			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	2,051 <sup>a</sup>	2	.359
Likelihood Ratio	2.064	2	.356
N of Valid Cases	211		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 12,82.

Table 7: Chi square test, testing for significant association between the country of origin and the influencer/celebrity.

### Hypothesis Test Summary

	Null Hypothesis	Test	Sig. <sup>a</sup> b	Decision
1	The distribution of How likely are you to fact-check news articles or information that supports your ideological beliefs? is the same across categories of Where are you from?.	Independent-Samples Mann-Whitney U Test	.717	Retain the null hypothesis.
2	The distribution of How likely are you to reshare content on Instagram that supports your ideological beliefs without fact-checking it? is the same across categories of Where are you from?.	Independent-Samples Mann-Whitney U Test	.781	Retain the null hypothesis.
3	The distribution of How likely are you to share content on Instagram that contradicts (are against) your ideological beliefs? is the same across categories of Where are you from?.	Independent-Samples Mann-Whitney U Test	.647	Retain the null hypothesis.
4	The distribution of How important is the value of truth and accuracy in your culture? is the same across categories of Where are you from?.	Independent-Samples Mann-Whitney U Test	.286	Retain the null hypothesis.
5	The distribution of How confident are you in your ability to identify fake news on Instagram? is the same across categories of Where are you from?.	Independent-Samples Mann-Whitney U Test	.268	Retain the null hypothesis.
6	The distribution of How interested are you in attending workshops or educational programs on media literacy and fake news prevention for Instagram users? is the same across categories of Where are you from?.	Independent-Samples Mann-Whitney U Test	.190	Retain the null hypothesis.
7	The distribution of Influencercelebrity is the same across categories of Where are you from?.	Independent-Samples Mann-Whitney U Test	.918	Retain the null hypothesis.
8	The distribution of PCoverVerifiedAcc is the same across categories of Where are you from?.	Independent-Samples Mann-Whitney U Test	.369	Retain the null hypothesis.
9	The distribution of FastCheck is the same across categories of Where are you from?.	Independent-Samples Mann-Whitney U Test	.004	Reject the null hypothesis.
10	The distribution of TrustFriends is the same across categories of Where are you from?.	Independent-Samples Mann-Whitney U Test	.943	Retain the null hypothesis.
11	The distribution of FriendsvsSources is the same across categories of Where are you from?.	Independent-Samples Mann-Whitney U Test	.013	Reject the null hypothesis.
12	The distribution of FriendsDM is the same across categories of Where are you from?.	Independent-Samples Mann-Whitney U Test	.038	Reject the null hypothesis.
13	The distribution of MisleadingFriends is the same across categories of Where are you from?.	Independent-Samples Mann-Whitney U Test	.071	Retain the null hypothesis.
14	The distribution of OpenToDif is the same across categories of Where are you from?.	Independent-Samples Mann-Whitney U Test	.444	Retain the null hypothesis.
15	The distribution of SharingCulture is the same across categories of Where are you from?.	Independent-Samples Mann-Whitney U Test	.209	Retain the null hypothesis.
16	The distribution of TimeSpent is the same across categories of Where are you from?.	Independent-Samples Mann-Whitney U Test	.005	Reject the null hypothesis.

17	The distribution of ComeAcrossFN is the same across categories of Where are you from?.	Independent-Samples Mann-Whitney U Test	.750	Retain the null hypothesis.
18	The distribution of LikelyToEngage is the same across categories of Where are you from?.	Independent-Samples Mann-Whitney U Test	.093	Retain the null hypothesis.
19	The distribution of FreqToEngage is the same across categories of Where are you from?.	Independent-Samples Mann-Whitney U Test	.038	Reject the null hypothesis.
20	The distribution of LikelyToMute is the same across categories of Where are you from?.	Independent-Samples Mann-Whitney U Test	.811	Retain the null hypothesis.
21	The distribution of LikelyToReport is the same across categories of Where are you from?.	Independent-Samples Mann-Whitney U Test	.838	Retain the null hypothesis.
22	The distribution of FormalEduc is the same across categories of Where are you from?.	Independent-Samples Mann-Whitney U Test	.685	Retain the null hypothesis.

a. The significance level is .050.

b. Asymptotic significance is displayed.

Table 8: Analysis of the Mann-Whitney U test investigating the variables influencing the credibility of fake news in both Greece and Portugal.

***Trust in personal connections over verified accounts.***

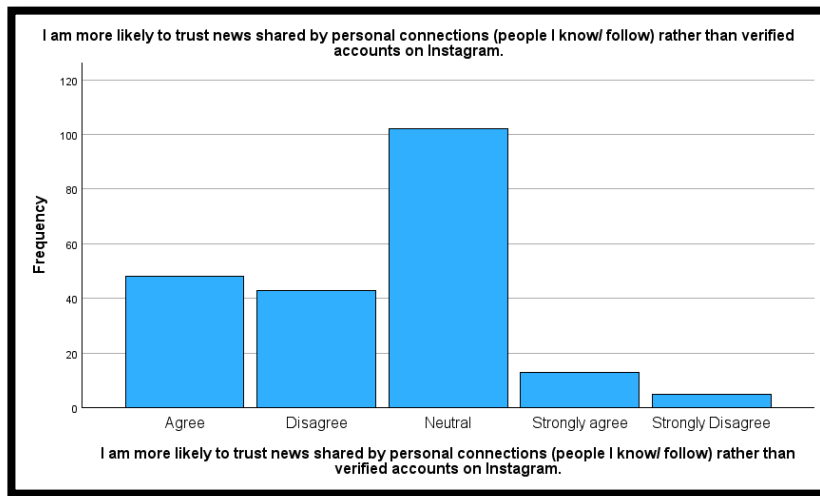


Chart 5: News Shared by Personal Connections over Verified Accounts on Instagram question.

From the chart above we observe that while more respondents tend to express agreement with trusting news shared by personal connections over verified Instagram accounts, a significant proportion remains neutral on the matter.

Based on the results of the Mann-Whitney U Test and p-value of 0.369 in Table 8, we cannot reject the null hypothesis suggesting that there is no significant difference in the distribution of trust in news shared by personal connections versus verified accounts on Instagram between people from Portugal and Greece.

***H3: Beliefs in Information Behavior***

	How likely are you to fact-check news articles or information that supports your ideological beliefs?	How likely are you to reshare content on Instagram that supports your ideological beliefs without fact-checking it?	How likely are you to share content on Instagram that contradicts (are against) your ideological beliefs?
<b>Median</b>	2.00	4.00	4.00
<b>Mode</b>	2	5	5
<b>Interquartile range</b>	1.00	2.00	2.00

Table 9: Median mode and interquartile range of the questions related to beliefs with 1=“ Very likely” and 5=“ Very unlikely”.

The median of 2.00 and a mode of 2 for the first question reveal a central tendency indicating a likelihood to fact-check, with a moderate spread (interquartile range of 1.00) suggesting some variability in attitudes. In the second question, the median of 4.00 and a mode of 5 indicate a prevailing inclination to reshare without fact-checking content that supports their beliefs, with a moderate interquartile range of 2.00 showcasing varied attitudes. Similarly, the third question's median of 4.00 and a mode of 5 point to a central tendency of reluctance to share opposing views, with a moderate interquartile range of 2.00 highlighting diverse attitudes within the surveyed population.

The outcomes of the Independent-Samples Mann-Whitney U Tests comparing individuals from Portugal (PT) and Greece (GR) across the three questions related to their likelihood of fact-checking news, resharing content without fact-checking, and sharing content contradicting their ideological beliefs revealed no significant differences in the distribution of responses between the two countries. With p-values of 0.717, 0.781, and 0.647 for each respective question, the retention of the null hypothesis suggests that any observed variations in responses are likely due to random chance rather than a meaningful disparity between the surveyed populations in Portugal and Greece (Table 8).

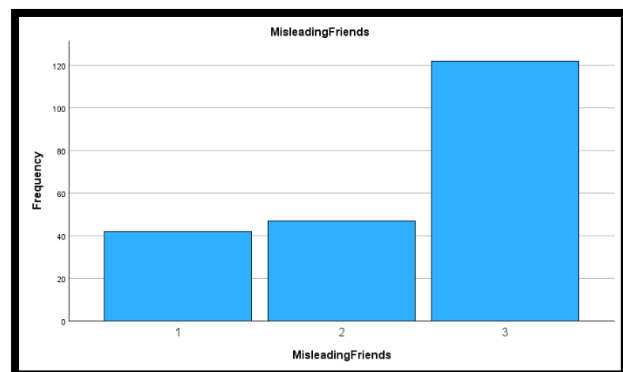
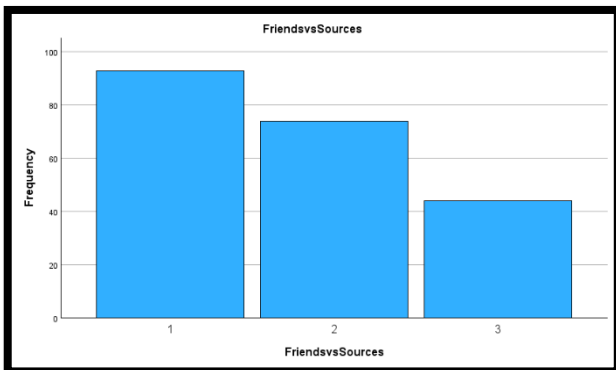
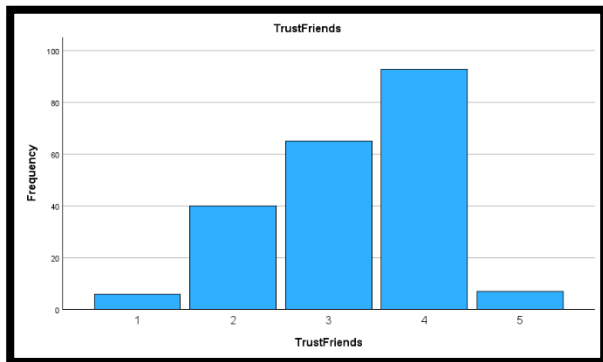
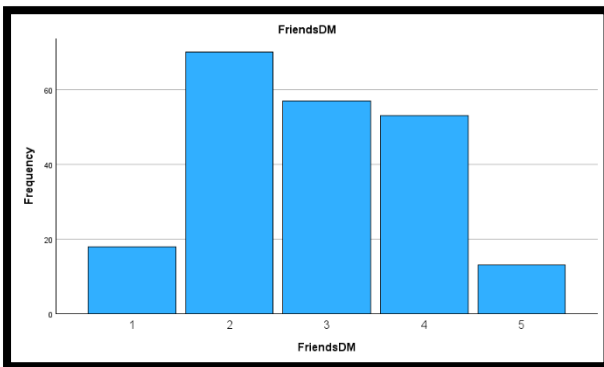
***H4 Trust in information sources***

While a moderate inclination towards valuing personal connections is predominant, based on the table below, a notable portion expresses preferences towards verified accounts. Individuals may weigh the credibility of information sources differently based on personal connections or official verification which contradicts to people believing more in personal connections as suggested by García-Perdomo et al (2018).

PCoverVerifiedAcc					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	5	2.4	2.4	2.4
	2	43	20.4	20.4	22.7
	3	102	48.3	48.3	71.1
	4	48	22.7	22.7	93.8
	5	13	6.2	6.2	100.0
	Total	211	100.0	100.0	

Table 10: Distribution of Trust Levels in News from Personal Connections Compared to Verified Accounts on Instagram. (I am more likely to trust news shared by personal connections rather than verified accounts on Instagram: 1=Strongly disagree and 5=strongly agree)

*Trust in news shared by friends across countries*



Charts 6a, 6b, 6c, 6d: Likert scale, where 1 corresponds to "Never," 2 to "Occasionally," 3 to "Sometimes," 4 to "Often," and 5 to "Always." (6a,6b) and 1 indicates "No," 2 represents "Maybe," and 3 signifies "Yes." (6c, 6d)

The descriptive analysis suggests that there is a notable frequency of sharing misleading information with friends on social media. While individuals vary in how often they share news/posts with friends, many trust information from their friends on social

media, with a substantial portion trusting friends more than other sources. (Charts 6a, 6c)

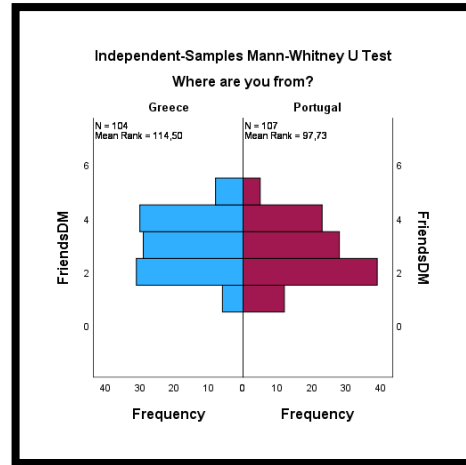
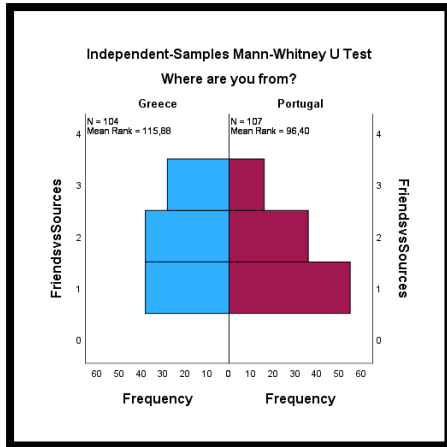
The comparative analysis indicates that trust in news shared by friends does not vary significantly between the two countries based on this test. (Table 8, Mann-Whitney U Test, p-value=0.943) indicating that the bond of friendship may be perceived similarly in terms of information credibility across different cultural backgrounds. However, there is statistically significant association (p-value=0.041, chi square test, Table 11) between the trust in information shared by family members/friends compared to other sources on social media and the country of origin. The mean ranks further support this, with a higher mean rank for Greece (115.88) compared to Portugal (96.4), suggesting a higher level of trust in social media content from personal connections in the Greek sample. This suggests that cultural or contextual factors may play a role in shaping individuals' preferences for certain sources of information within these distinct national contexts. Similarly, the observed difference in the frequency of sharing news through direct messages (FriendsDM) suggests that individuals from Greece and Portugal engage differently in the private sharing of information with friends (Table 8, Mann-Whitney U Test, p-value = 0.038). The mean ranks further support this, with a higher mean rank for Greece (114.5) compared to Portugal (97.73), suggesting a higher frequency of sharing news/posts via direct message in the Greek sample. Cultural, social, or technological factors specific to each country might influence the willingness or frequency with which individuals share news through direct messages, revealing distinct communication patterns in the social media landscape. Lastly, individuals in both countries face a similar likelihood of encountering misleading content from their social circles, emphasizing a common vulnerability to misinformation within friend networks (Table 8, Mann-Whitney U Test, p-value=0.071).

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	6,393 <sup>a</sup>	2	.041
Likelihood Ratio	6.451	2	.040
N of Valid Cases	211		

a. 0 cells (.0%) have expected count less than 5. The minimum

Table 11: Chi square regarding trust in information shared by family members/friends compared to other sources on social media and the country of origin.





Charts 7a, 7b: Visualization of the results of the Mann-Whitney U Test regarding trust in friends compared to other sources and frequency of sending a direct message on Instagram.

**Motivation to share on Instagram**

When asked about the motivation to share with friends in both countries, respondents predominantly cited **social impact and the importance of a topic as their main reasons for sharing content with friends**. Following closely behind were personal beliefs, indicating a tendency to share content aligning with individual values. Additionally, entertainment emerged as a significant motivation, suggesting a desire to share content for enjoyment. Lastly, the mention of current events underscored the importance of timely and relevant information in the decision-making process (Chart 8).

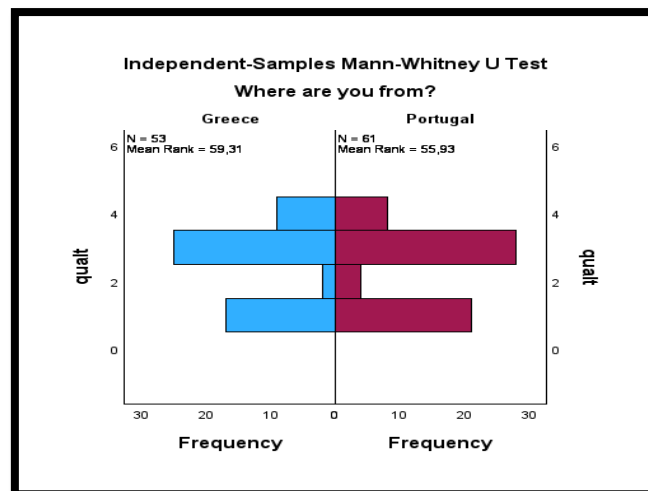


Chart 8: Motivation to share via Instagram by country where 1= Personal beliefs and interest, 2= Current events, 3= Social impact/Importance of the topic, 4= Entertainment and social engagement.

### *H5 Time spent and behavior regarding fake news*

Based on the results of the Shapiro-Wilk test (Table 12), we reject the null hypothesis affirming the absence of normality in the variables ( $p$ -value  $< 0.01$ ). Given this, the Spearman's rank correlation test is deemed appropriate for assessing correlation. (Table 13) The findings from this analysis reveal that as time spent on Instagram increases, confidence in discerning fake news also tends to increase, though the relationship is not very strong. **Users who engage more with Instagram may develop a sense of familiarity with the platform, contributing to increased confidence in distinguishing fake news.** Also, on average, younger individuals tend to spend more time on Instagram. Country also affects the time spent on the platform. **Individuals who spend more time on Instagram are more likely to frequently share news or posts with their friends via direct message.** The strength of the positive association (0.241) indicates a moderate correlation. There is a positive and strong association between the **time individuals spend on Instagram and the frequency with which they come across news articles or information (0.352), their likelihood to read and engage with news articles or information on the platform (0.276) and their frequency of engaging in discussions or debates about news topics on the platform (0.250).**

#### **Tests of Normality**

	Kolmogorov-Smirnov <sup>a</sup>		Shapiro-Wilk	
	Statistic	Sig.	Statistic	Sig.
How likely are you to fact-check news articles or information that supports your ideological beliefs?	.199	.000	.892	.000
How likely are you to reshare content on Instagram that supports your ideological beliefs without fact-checking it?	.172	.000	.886	.000
How likely are you to share content on Instagram that contradicts (are against) your ideological beliefs?	.242	.000	.831	.000
How important is the value of truth and accuracy in your culture?	.252	.000	.809	.000
How confident are you in your ability to identify fake news on Instagram?	.263	.000	.870	.000
How interested are you in attending workshops or educational programs on media literacy and fake news prevention for Instagram users?	.165	.000	.908	.000
Country	.342	.000	.636	.000
Gender	.397	.000	.619	.000
Age	.454	.000	.602	.000
Influencercelebrity	.284	.000	.772	.000
PCoverVerifiedAcc	.254	.000	.886	.000
FastCheck	.223	.000	.878	.000
TrustFriends	.264	.000	.858	.000
FriendsvsSources	.283	.000	.778	.000
FriendsDM	.208	.000	.903	.000
MisleadingFriends	.363	.000	.706	.000
OpenToDif	.313	.000	.736	.000
SharingCulture	.293	.000	.772	.000
TimeSpent	.189	.000	.882	.000
ComeAcrossFN	.199	.000	.886	.000
LikelyToEngage	.210	.000	.898	.000
FreqToEngage	.220	.000	.876	.000

LikelyToMute	.424	.000	.573	.000
LikelyToReport	.212	.000	.879	.000
FormalEduc	.239	.000	.869	.000

a. Lilliefors Significance Correction

Table 12: Shapiro-Wilk test of Normality.

		FastCheck Beliefs	ReshareWo FastCheck	ShareAgainst	Confident	InterestWorkshops	Gender
TimeSpent	Correlation Coefficient	0.002	<b>0.162</b>	<b>0.155</b>	0.127	<b>0.247</b>	<b>0.255</b>
	Sig. (2-tailed)	0.976	0.019	0.024	0.065	0.000	0.000
		Country	Familyvsources	FamilyFrtrust	Celebrity	FreqShare	InfoMisleading
TimeSpent	Correlation Coefficient	<b>0.190</b>	<b>0.144</b>	0.109	0.071	<b>0.230</b>	-0.055
	Sig. (2-tailed)	0.006	0.037	0.114	0.308	0.001	0.430
		PCoverVerifiedAcc	OpenToDif	Sharing	FreqArticles	ComeAcrossFN	LikelyToEngage
TimeSpent	Correlation Coefficient	0.060	0.065	0.023	<b>0.330</b>	-0.037	<b>0.262</b>
	Sig. (2-tailed)	0.387	0.349	0.740	0.000	0.595	0.000
		LikelyToMute	FreqEngage	SpendingVulnerability	FastCheck	ReportOrFlag	FormalEduc
TimeSpent	Correlation Coefficient	-0.086	<b>0.241</b>	0.052	-0.022	0.057	<b>0.157</b>
	Sig. (2-tailed)	0.214	0.000	0.448	0.754	0.411	0.022

Table 13: Spearman Correlation Test regarding time spent on Instagram.

**Variables regarding time spent on Instagram by country**

Conducting the Mann-Whitney U test (Table 8) implies that there is a statistically significant difference in the time spent on Instagram between Greece and Portugal (p-value=0.005). The higher mean rank for Greeks (117.27) compared to the Portuguese (95.04) suggests that on average, **Greeks spend more time on Instagram than the Portuguese** participants in the study (Chart 9).

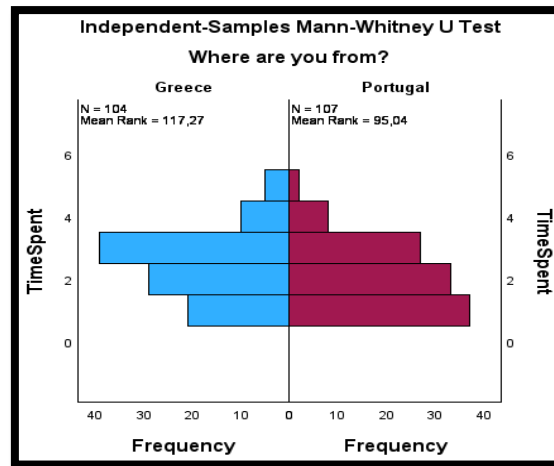
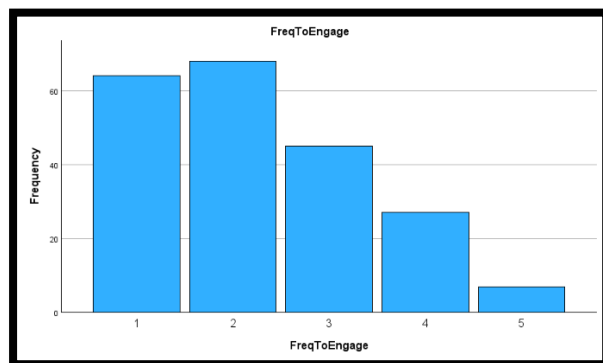
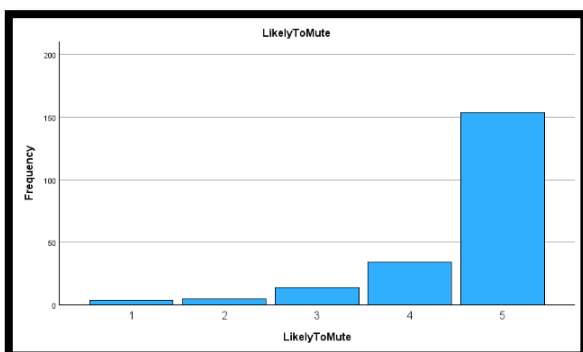
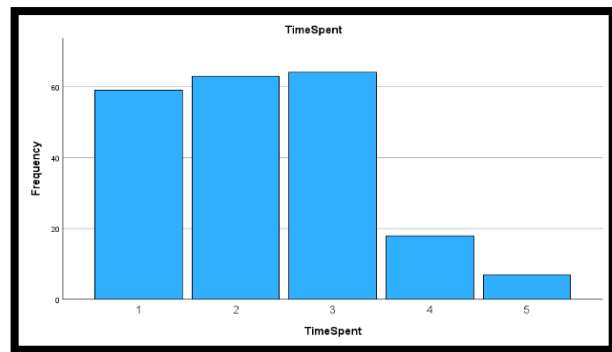
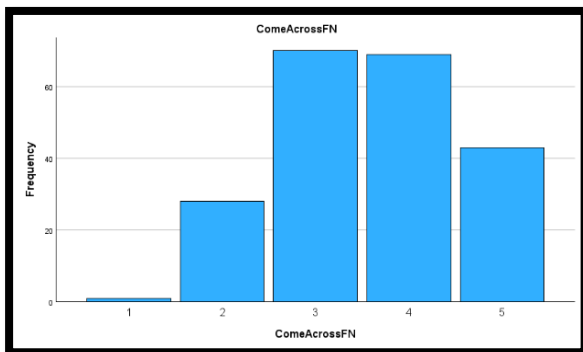


Chart 9: Time spent on instagram daily by country



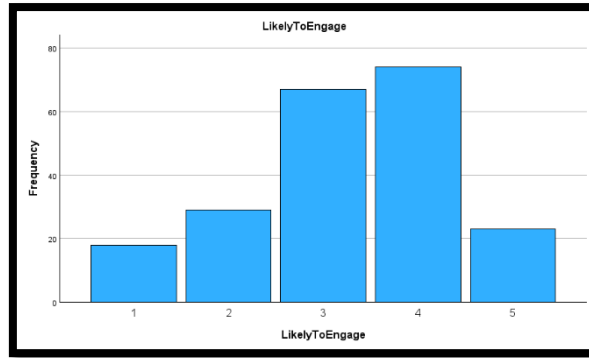


Chart 10a: Frequency of coming across new where 1 corresponds to "Never," 2 to "Rarely," 3 to "Occasionally," 4 to "Somewhat frequently," and 5 to "Very frequently."

Chart 10b: Time spent of platform where "Less than 30 minutes" corresponds to 1, "30 minutes to 1 hour" to 2, "1-2 hours" to 3, "2-4 hours" to 4, and "More than 4 hours" to 5

Chart 10c: The likelihood to mute accounts where "Very Unlikely" is assigned the value of 1, "Somewhat Unlikely" is 2, "Neutral/Undecided" is 3, "Somewhat Likely" is 4, and "Very Likely" is 5.

Chart 10d: Frequency of engagement in discussions or debates about news topics on Instagram using a Likert scale, where "Never" corresponds to 1, "Rarely" to 2, "Occasionally" to 3, "Frequently" to 4, and "Very Frequently" to 5.

Chart 10e: Likelihood to read and engage with news articles or information where "Very Unlikely" is assigned the value of 1, "Somewhat Unlikely" is 2, "Neutral/Undecided" is 3, "Somewhat Likely" is 4, and "Very Likely" is 5.

	ComeAcrossFN	TimeSpent	LikelyToEngage	LikelyToMute	FreqToEngage
Median	4	2	3	5	2
Mode	3	3	4	5	2
Interquartile range	1	2	1	1	2

Table 14: Median, Mode, Interquartile range of the variables related to time spent on Instagram.

The majority of respondents often come across news articles on Instagram. The typical participant in the study spends between 30 minutes to 1 hour on Instagram, with the most common response being 1-2 hours. The interquartile range suggests that the middle 50% of respondents spend between 30 minutes to 2 hours on the platform, highlighting a moderate level of engagement among the study population. They are likely to engage with news articles, more likely to mute content. They engage in discussions or debates about news topics on Instagram, with occasionally being both the median and the mode.

For the comparative analysis we conduct again the Mann-Whitney U test (Table 8). Examining the frequency of encountering news articles or information on Instagram remains consistent for individuals in both countries (p-value=0.750). The likelihood of unfollowing or muting accounts that share fake news or misinformation on remains consistent for individuals in both countries (p-value=0.811). Also both groups appear to share comparable tendencies in their likelihood to engage with misinformation on Instagram (p-value=0.093). However, cultural or contextual factors related to country of origin may influence their engagement with news content on Instagram (p-value=0.038) with Greeks tending to have higher ranks (114.5 compared to 97.74) and, consequently, engage with news more often (Chart 11).

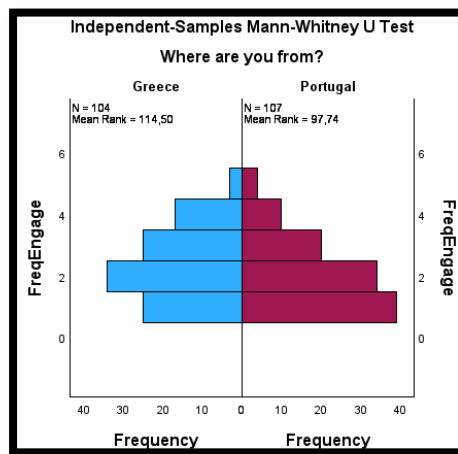


Chart 11: Engagement with news content on Instagram by country.

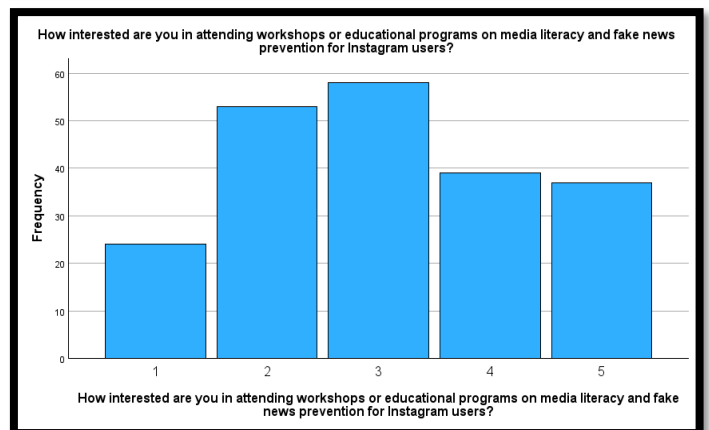
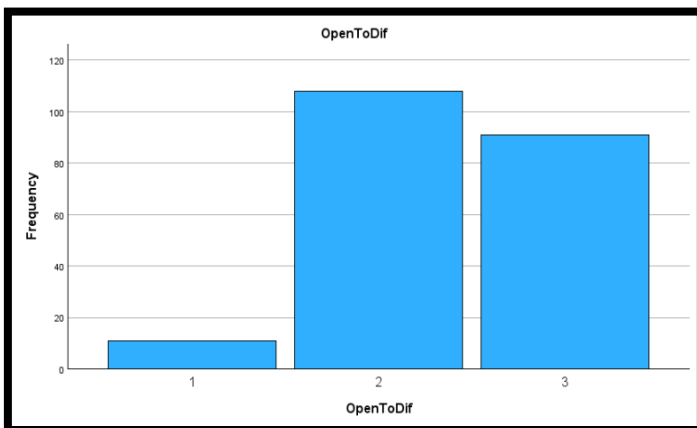
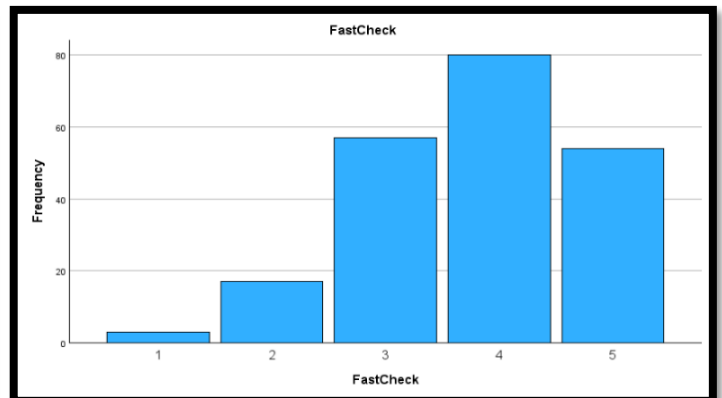
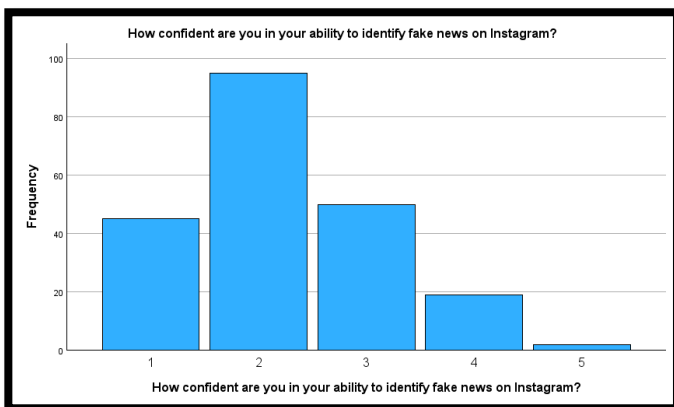
**RQ5: Cultural barriers per country**

Greece	Portugal
<b>Trust in Authorities:</b>	<b>Trust in Authorities:</b>
Several respondents express skepticism and low trust in authorities, suggesting a concern about manipulation and biased reporting.	Similar to Greece, there is a theme of mistrust in authorities, including concerns about government control of media.
<b>Stereotypes:</b>	<b>Stereotypes:</b>
Stereotypes are highlighted as a prevalent cultural barrier, influencing how people perceive and interpret information.	Stereotypes are identified as a barrier, affecting people's openness to new opinions or viewpoints.
<b>Media Literacy:</b>	<b>Media Control and Populism:</b>
There is a mention of low media literacy skills, making it challenging for individuals to critically evaluate news sources for credibility and accuracy.	Issues related to media control by the government and the spread of populist information are raised.
<b>Political Corruption:</b>	<b>Language Barriers:</b>
Political corruption is identified as a barrier, impacting the reliability of news sources.	Language barriers are noted, particularly among elderly individuals, potentially limiting access to information.

Table 15 Cultural barriers per country

The comparative analysis between Greece and Portugal was conducted based on open-ended responses from a questionnaire. Respondents' answers were categorized and examined for key themes related to trust in authorities, stereotypes, media literacy, and political corruption (Table 15). In both countries, a common thread of skepticism and low trust in authorities underscores shared concerns about potential manipulation and biased reporting. The prevalence of stereotypes emerges as a cultural barrier impacting individuals' openness to new opinions in both nations. While Greece emphasizes challenges in media literacy, particularly low skills hindering critical evaluation, Portugal raises broader issues related to media control and the spread of populist information. Greece identifies political corruption as a barrier affecting news source reliability, whereas Portugal highlights language barriers, especially among the elderly, impacting access to information. These insights provide a nuanced understanding of the unique challenges each country faces in fostering a media-literate and well-informed public.

***H6 Response to fake news in Greece and Portugal***



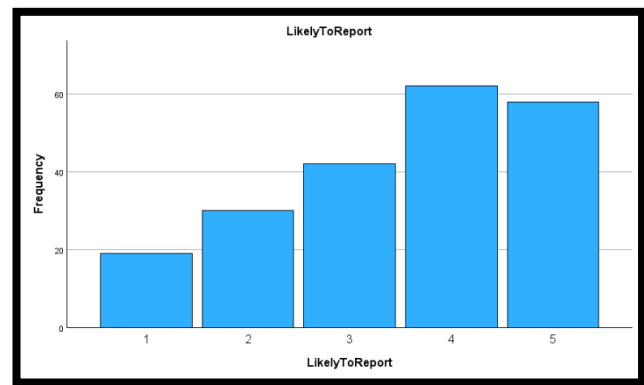
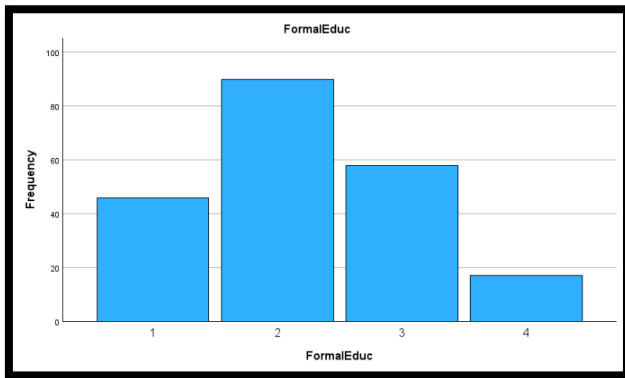


Chart 12a: Confidence in identifying fake news on Instagram where 1 represents "Very Confident" and 5 represents "Not at all."

Chart 12b: Fact-checking habits where "Always" corresponds to 1, "Frequently" to 2, "Sometimes" to 3, "Rarely" to 4, and "Never" to 5.

Chart 12c: Openness to considering different viewpoints where "Not Open" is assigned the value of 1, "Somewhat Open" to 2, and "Very Open" to 3.

Chart 12d: Level of interest in attending workshops or educational programs on media literacy and fake news prevention for Instagram users, using a Likert scale where "Very Interested" is assigned the value of 1, and "Not at all" is assigned the value of 5.

Chart 12e: Formal education on media literacy chart where "No, and I have not pursued education on the topic" assigned the value of 1, "No, but I have self-educated on the topic" assigned the value of 2, "Yes, some education/training" assigned the value of 3, and "Yes, extensive education/training" assigned the value of 4.

Chart 12f: Likelihood of reporting or flagging suspicious or fake news content on Instagram using a Likert scale, where "Very Unlikely" is assigned the value of 1, "Somewhat Unlikely" is 2, "Neutral/Undecided" is 3, "Somewhat Likely" is 4, and "Very Likely" is 5.

The majority of respondents expressed moderate confidence (mode= 2) in their ability to identify fake news and were open to different perspectives at a moderate level as well (mode= 2). A significant portion of respondents (42.7%) reported having a moderate level of formal education. There appears to be a trend suggesting that individuals with higher formal education levels tend to have higher confidence in identifying fake news. This is evident from the higher percentages in the high and very high confidence levels among respondents with high formal education. The data indicates a range of fact-checking practices among respondents, with a significant portion demonstrating a commitment to verifying information before sharing it on Instagram. Lastly, there is a positive inclination among respondents towards both reporting fake news and participating in educational programs focused on media literacy. (Charts 12a-12f)

In this part, we conducted Man-Whitney U test to assess how these two countries respond to fake news. While the level of confidence in identifying fake news appears similar between the two countries (p-value=0.268), a significant divergence is observed in the frequency of immediate fact-checking with Greeks tending to have higher ranks



(117.66 compared to 94.66, Chart 13) and, consequently, fast check more often (p-value=0.004). Additionally, there is absence of a significant association between formal education or training on media literacy between the countries (p-value=0.685) and individuals from both countries demonstrate similar levels of receptiveness to diverse perspectives. (p-value=0.444) Table 8

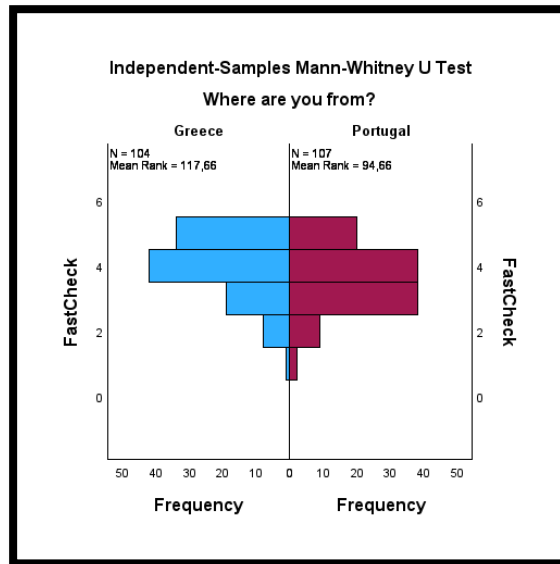


Chart 13: Fast check behavior by country.

Interestingly, the parallel levels of interest in attending media literacy workshops or programs (p-value=0.19) and the comparable likelihood of reporting suspicious or fake news content on Instagram (p-value=0.838) in both countries suggest a commonality in the public's engagement with media literacy initiatives and efforts to combat misinformation.

## Summary – Valuable findings

TOPICS	RESULTS
<b>Post characteristics</b>	People tend to consider the post characteristics: Clickbait, Anonymous Authors, Provocative Language, No Sources and Poor grammar, spelling or formation to a greater extent when evaluating the authenticity of information
<b>Influencer and celebrity endorsements</b>	There is reluctance to trust posts solely based on influencer or celebrity endorsements. More respondents tend to express agreement with trusting news shared by personal connections over verified Instagram accounts.
<b>TRUST IN INFORMATION SOURCES</b>	More respondents tend to express agreement with trusting news shared by personal connections over verified Instagram accounts. Social impact and the importance of a topic are the top main reasons for sharing content. Many respondents trust information from their friends on social media, with a substantial portion trusting friends more than other sources.
<b>INSTAGRAM USAGE &amp; ENGAGEMENT</b>	Users who engage more with Instagram may develop a sense of familiarity with the platform, contributing to increased confidence in distinguishing fake news. Individuals who spend more time on Instagram are more likely to frequently share news or posts with their friends via direct message. The time people spend on Instagram correlate with how often they encounter news articles or information (0.352), their inclination to read and engage with such content on the platform (0.276), and their frequency of participating in discussions or debates about news topics on the platform (0.250).

TOPICS	COMPARATIVE ANALYSIS
<b>POST CHARACTERISTICS</b>	Greeks attribute less significance to the following post characteristics: "AgainstBeliefs," "Emotlanguage," and "PoorGrSpFor" when identifying fake news compared to the Portuguese.
<b>TRUST IN INFORMATION SOURCES</b>	Greeks tend to trust content from friends on social media more, as seen in their higher mean rank, while also sharing news or posts through direct messages more frequently.
<b>INSTAGRAM USAGE &amp; ENGAGEMENT</b>	Greeks spend more time on Instagram than the Portuguese. Greeks tend to have higher ranks (114,5 compared to 97,74) and engage with news more often.

<b>RESPONSE TO FAKE NEWS</b>	Greeks tend to engage in immediate fact-checking more than the Portuguese, indicating a significant divergence in the frequency of this practice.
------------------------------	---

## 4. RESULTS, DISCUSSION & IMPLICATIONS

The examination of Instagram as a platform for information dissemination, particularly in the context of fake news, provides valuable insights into user perceptions and behaviors across different cultural landscapes. With a particular focus on cross-cultural comparisons between Greek and Portuguese users, the research sought to unravel the nuances that influence trust, engagement, and interaction within the Instagram community. From prevalent post features to the impact of influencers, this exploration aims to provide a comprehensive understanding of the factors that shape the digital landscape on Instagram.

The analysis of Instagram users' perceptions of post characteristics reveals varying perceptions among respondents. Certain features, such as "No Sources," "Poorgsf," and "Viral," are perceived as relatively more prevalent, suggesting that users consider these when evaluating information authenticity. Cultural differences, especially in assessing information against personal beliefs and sensitivity to emotive language, emerge from the Mann-Whitney U test between Greece and Portugal. Portuguese participants attribute higher significance to specific post characteristics, indicating a greater sensitivity to indicators of fake news compared to individuals from Greece. Moreover, the widespread skepticism toward influencer or celebrity endorsements was a shared sentiment, with respondents across both nations displaying reluctance to trust content solely based on such endorsements. The chi-square test underscored the absence of a significant association between nationality and trust in influencer-driven content, emphasizing a universal skepticism. Regarding future implications, the strong internal consistency (Cronbach's alpha of 0.815) of the 12 post characteristics underscores the reliability of the measurement scale, providing a robust foundation for future studies in this domain. The identification of characteristics like "NoSource," "Poorgsf," and "Viral" as relatively more prevalent suggests targeted intervention areas. Strategies to enhance media literacy should emphasize these specific characteristics, recognizing the varying perceptions among respondents. Policymakers and educators should consider these nuances in designing interventions that resonate with the specific perceptions and concerns of individuals in each country. Furthermore, the emphasis placed by Portuguese respondents on linguistic quality suggests a focus on language skills in media literacy education.

The study's findings indicate consistent patterns across respondents from Portugal and Greece, revealing a general inclination towards fact-checking, a tendency to reshare content without verification when it aligns with personal beliefs, and a reluctance to share information contradicting ideological views. For policymakers, educators, and organizations seeking to combat misinformation and enhance media literacy, the results emphasize the importance of tailored interventions. Implementing educational programs that foster critical thinking and encourage fact-checking practices, particularly in the context of resharing content on social media platforms, is crucial. Despite a general inclination towards valuing personal connections, a significant portion expresses preferences for verified accounts. This nuanced perspective challenges the notion that individuals inherently trust personal connections more than official verifications. The distribution of trust levels in news from personal connections doesn't exhibit significant variation between Greece and Portugal, emphasizing a

consistent pattern in valuing information shared by friends across these countries. However, statistically significant associations between trust in information from family members/friends and the country of origin imply that cultural or contextual factors play a role in shaping preferences for certain sources within distinct national contexts. The country of origin, however, doesn't seem to significantly impact individuals' preferences for trusting personal connections over verified accounts, suggesting a shared pattern in the perceived credibility of these sources across Greece and Portugal. Aligning with the additional theory that social connections significantly influence the spread of fake news, the analysis supports the idea that friends play a substantial role in shaping individuals' trust in news on Instagram. This is particularly pronounced in Greece and Portugal, where social networks have a significant impact on daily life. The motivations behind sharing content with friends, as revealed in the analysis, underscore the importance of social impact, the importance of a topic, personal beliefs, entertainment, and current events. These motivations align with the broader understanding that social connections play a pivotal role in shaping individuals' information-sharing behaviors.

Despite the absence of a statistically significant correlation between the frequency of encountering fake news and the overall time spent on Instagram, a noteworthy positive correlation emerges between the time spent on the platform and the likelihood to read, engage with, and share news articles or information. This correlation suggests that as individuals invest more time on Instagram, they exhibit a heightened inclination to actively consume and share news content, fostering a more dynamic engagement with information. Greeks, on average, spend more time on Instagram than their Portuguese counterparts, signifying a potential cultural or contextual influence on social media usage patterns. Targeting educational initiatives towards younger demographics can be particularly effective in shaping responsible social media behavior and fostering critical thinking skills. The positive correlation between time spent and active engagement with news content aligns with the notion that prolonged exposure can influence individuals' information-seeking behaviors. The positive correlation between time spent on Instagram and increased confidence in discerning fake news underscores the potential impact of social media literacy education.

While both Greece and Portugal grapple with the same challenges to access diverse and reliable news sources within their community, each country faces unique hurdles. In Greece, political corruption is identified as a specific cultural obstacle, impacting the reliability of news sources and this underscores the role of political context and integrity in shaping the perception of news. In contrast, Portugal faces language barriers, particularly among elderly individuals, which can limit access to accurate news. These unique challenges highlight the importance of considering country-specific nuances in understanding the cultural dynamics that influence news consumption on Instagram. Engaging communities and involving citizens in the design of anti-corruption measures could foster a sense of collective responsibility in Greece and initiatives to address language barriers, particularly among the elderly in Portugal, are crucial.

## 5. CONCLUSIONS & FUTURE RESEARCH

The article introduces an in-depth exploration of how Instagram users in Greece and Portugal perceive and engage with fake news. It builds upon existing literature by incorporating a comprehensive analysis of post characteristics, influencer impact, beliefs in information behavior, trust in information sources, motivations to share on Instagram, the role of cultural context, and responses to fake news. By uncovering variations in user behavior, trust factors, and motivations between Greece and Portugal, the study provides valuable insights for academics, policymakers, and social media platforms. Our findings, while aligning with previous research on certain dimensions, diverge from conventional perspectives on the intricate relationship between political ideology and fact-checking behaviors.

Specifically, as mentioned by Baptista & Gradim (2020) the analysis supports the idea that post characteristics significantly influence the identification of fake news on Instagram, aligning with the importance of the structure of news. Freeman et al. (2020) noted similar trust-building mechanisms, emphasizing the importance of professional language, references to reputable organizations, and the incorporation of trusted brands on websites. Munger et al. (2018) add depth to our comprehension, emphasizing the significance of captivating headlines and clickbait techniques, aligning with our own observations. This research is also consistent with Vorelová and Masaryk's (2019) study, which emphasizes the lack of reliability in poorly edited content and messages containing errors, raising doubts about their credibility. Shin et al. (2022) highlight the nuanced impact of influencers, suggesting that fake news gains more credibility when endorsed by close connections rather than celebrities. This aligns with our findings, as the survey results indicate a reluctance to trust posts solely based on influencers or celebrities. García-Perdomo et al. (2018) suggest that individuals may weigh the credibility of information sources differently based on personal connections, contradicting the notable portion of individuals expressing preferences towards verified accounts in our study. Both our research and the literature, particularly Halpern et al. (2019) and Nelson and Taneja (2018), highlight a positive correlation between the duration of time spent on social media platforms, including Instagram, and the consumption of fake news. The cumulative effect of prolonged exposure and active engagement on social media platforms underscores the importance of considering users' time investment as a key factor in understanding their susceptibility to misinformation (Halpern et al., 2019; Nelson and Taneja, 2018). Agrees with the need for comprehensive responses, including media literacy education and responsible sharing (Mirhoseini et al., 2023). Both countries demonstrate interest in media literacy workshops and have a comparable likelihood of reporting suspicious content.

To extract maximum value from our results, we recommend leveraging these insights to design tailored media literacy programs, with a particular focus on educational settings. This creates an opportunity for collaborative efforts among social media platforms, policymakers, and educators to develop interventions finely tuned to the cultural and demographic factors influencing fake news consumption in these diverse environments.

Regarding future research, we could further investigate the observed gender differences in the impact of emotional processing on vulnerability to fake news. Explore how

gender-specific interventions or educational programs might address these disparities. We could also explore the dynamic nature of political ideology and its relationship with information processing. Understand how individuals' political views may change over time and the corresponding impact on their engagement with news. Conduct in-depth qualitative analyses is needed to explore cultural barriers in more detail. Understand the underlying reasons behind stereotypes, trust in authorities, and media literacy challenges in both Greece and Portugal.

However, it is crucial to acknowledge certain limitations within our research. The sample size of 211 individuals, comprising 107 Portuguese and 104 Greek participants, may not comprehensively represent the diverse demographics within each country. Overrepresentation of the youth demographic, specifically those aged 18-24, may introduce bias and restrict the generalizability of the findings. The gender distribution, with 38.39% females and 61.61% males, could potentially introduce gender-related biases into the analysis. Also, the reliance on self-reported data introduces potential biases, and the sample size, while substantial, may not fully capture the diversity within the populations studied.

Furthermore, the statistical analysis, while providing valuable insights into the perceived prevalence of post characteristics, does not delve into the qualitative aspects of participants' evaluations. Understanding the motivations and reasoning behind these evaluations could enhance the interpretive depth of the findings. A more in-depth investigation into the psychological and behavioral dimensions could enrich our understanding of how people navigate misinformation. In essence, the predominance of quantitative data might overlook nuanced qualitative perspectives that could enrich our understanding of user behaviors and attitudes.

Lastly, the reliance on an online questionnaire and subsequent data processing in SPSS and Excel, while common in research, introduces the possibility of errors or biases during data entry, potentially impacting result accuracy.

Despite these limitations, our study provides a substantial contribution to the evolving discourse on fake news consumption, offering a foundation for further research and practical interventions.

## REFERENCES

- Ahmed, S., & Rasul, M. E. (2023). Examining the association between social media fatigue, cognitive ability, narcissism and misinformation sharing: cross-national evidence from eight countries. *Scientific Reports*, 13(1), 15416.
- Ali, K., Li, C., Zain-ul-abdin, K., & Zaffar, M. A. (2022). Fake news on Facebook: examining the impact of heuristic cues on perceived credibility and sharing intention. *Internet research*, 32(1), 379-397.
- Arin KP, Mazrekaj D, Thum M. Ability of detecting and willingness to share fake news. *Sci Rep*. 2023 May 5;13(1):7298. doi: 10.1038/s41598-023-34402-6. PMID: 37147456; PMCID: PMC10160725.
- Bago, B., Rand, D. G. & Pennycook, G. Fake news, fast and slow: deliberation reduces belief in false (but not true) news headlines. *J. Exp. Psychol. Gen.* 149, 1608–1613 (2020).
- Balakrishnan, V., Ng, K. S., & Rahim, H. A. (2021). To share or not to share—The underlying motives of sharing fake news amidst the COVID-19 pandemic in Malaysia. *Technology in Society*, 66, 101676.
- Bansal, G., & Weinschenk, A. (2020). Something Real about Fake News: The Role of Polarization and Mindfulness.
- Baptista, J. P., Correia, E. R., Alves, A. G., & Piñeiro-Naval, V. (2021). Partisanship: The true ally of fake news? a comparative analysis of the effect on belief and spread. *Revista Latina de Comunicacion Social*, (79), 23-46.
- Baptista, J. P., Correia, E., Gradim, A., & Piñeiro-Naval, V. (2021). The influence of political ideology on fake news belief: The Portuguese case. *Publications*, 9(2), 23.
- Bessi, A. (2016). Personality traits and echo chambers on facebook. *Computers in Human Behavior*, 65, 319-324.
- Bringula, R. P., Catacutan-Bangit, A. E., Garcia, M. B., Gonzales, J. P. S., & Valderama, A. M. C. (2022). “Who is gullible to political disinformation?”: predicting susceptibility of university students to fake news. *Journal of Information Technology & Politics*, 19(2), 165-179.
- Bryanov, K., & Vziatysheva, V. (2021). Determinants of individuals’ belief in fake news: A scoping review determinants of belief in fake news. *PLoS One*, 16(6), e0253717.
- Burbach, L., Halbach, P., Ziefle, M., & Calero Valdez, A. (2019, June). Who shares fake news in online social networks. In *Proceedings of the 27th ACM conference on user modeling, adaptation and personalization* (pp. 234-242).
- Caramancion, K. M. (2021). The demographic profile most at risk of being disinformed. In *2021 IEEE International IOT, Electronics and Mechatronics Conference (IEMTRONICS)*(pp. 1-7).
- Effron, Daniel A., and Medha Raj. "Misinformation and morality: Encountering fake-news headlines makes them seem less unethical to publish and share." *Psychological science* 31.1 (2020): 75-87.
- Flintham, M., Karner, C., Bachour, K., Creswick, H., Gupta, N., & Moran, S. (2018, April). Falling for fake news: investigating the consumption of news via social media. In *Proceedings of the 2018 CHI conference on human factors in computing systems* (pp. 1-10).



- García-Perdomo, V., Salaverría, R., Brown, D. K., & Harlow, S. (2018). To share or not to share: The influence of news values and topics on popular social media content in the United States, Brazil, and Argentina. *Journalism studies*, 19(8), 1180-1201.
- Guess, A. M., Lerner, M., Lyons, B., Montgomery, J. M., Nyhan, B., Reifler, J., & Sircar, N. (2020). A digital media literacy intervention increases discernment between mainstream and false news in the United States and India. *Proceedings of the National Academy of Sciences*, 117(27), 15536-15545.
- Gupta, M., Dennehy, D., Parra, C. M., Mäntymäki, M., & Dwivedi, Y. K. (2023). Fake news believability: The effects of political beliefs and espoused cultural values. *Information & Management*, 60(2), 103745.
- Han Luo, Meng Cai, Ying Cui, and Chenquan Gan. 2021. Spread of Misinformation in Social Networks: Analysis Based on Weibo Tweets. *Sec. and Commun. Netw.* 2021 (2021).
- Jasko, K., LaFree, G., Piazza, J., & Becker, M. H. (2022). A comparison of political violence by left-wing, right-wing, and Islamist extremists in the United States and the world. *Proceedings of the National Academy of Sciences*, 119(30), e2122593119.
- Kayode-Adedeji, T., & Nwakerendu, I. (2022, April). The Dissemination of fake news on social media: A demographic analysis of audience involvement. In *European Conference on Social Media* (Vol. 9, No. 1, pp. 289-297).
- Kim, A., & Dennis, A. R. (2019). Says who? The effects of presentation format and source rating on fake news in social media. *Mis quarterly*, 43(3), 1025-1039.
- Laura, L. (2020). Gender influence on the perception of celebrity endorsement. *Studia Universitatis Vasile Goldiș, Arad-Seria Științe Economice*, 30(2), 13-23.
- Lotito, Q. F., Zanella, D., & Casari, P. (2021). Realistic aspects of simulation models for fake news epidemics over social networks. *Future Internet*, 13(3), 76.
- Mavridis, G. (2018). Fake news and social media: How Greek users identify and curb misinformation online.
- Moravec, P., Minas, R., & Dennis, A. R. (2018). Fake news on social media: People believe what they want to believe when it makes no sense at all. *Kelley School of Business research paper*, (18-87).
- Nazari, Z., Oruji, M., & Jamali, H. R. (2022). News consumption and behavior of young adults and the issue of fake news. *Journal of Information Science Theory and Practice*, 10(2), 1-16.
- Osmundsen, M., Bor, A., Vahlstrup, P. B., Bechmann, A., & Petersen, M. B. (2021). Partisan polarization is the primary psychological motivation behind political fake news sharing on Twitter. *American Political Science Review*, 115(3), 999-1015.
- Rampersad, G., & Althiyabi, T. (2020). Fake news: Acceptance by demographics and culture on social media. *Journal of Information Technology & Politics*, 17(1), 1-11.
- Shin, I., Wang, L., & Lu, Y. T. (2022). Twitter and endorsed (fake) news: The influence of endorsement by strong ties, celebrities, and a user majority on credibility of fake news during the COVID-19 pandemic. *International Journal of Communication*, 16, 23.

- Vosoughi, S., Roy, D., & Aral, S. (2018). The spread of true and false news online. *science*, 359(6380), 1146-1151.
- Walter, N., Edgerly, S., & Saucier, C. J. (2021). “Trust, Then Verify”: When and Why People Fact-Check Partisan Information. *International Journal of Communication*, 15, 21.
- Wang, S., Pang, M. S., & Pavlou, P. A. (2021). Cure or poison? Identity verification and the posting of fake news on social media. *Journal of Management Information Systems*, 38(4), 1011-1038.
- Weeks, B. E., Ardèvol-Abreu, A., & Gil de Zúñiga, H. (2017). Online influence? Social media use, opinion leadership, and political persuasion. *International journal of public opinion research*, 29(2), 214-239.
- Wu, S., & Resnick, P. (2021, May). Cross-Partisan Discussions on YouTube: Conservatives Talk to Liberals but Liberals Don't Talk to Conservatives. In *Proceedings of the International AAAI Conference on Web and social media* (Vol. 15, pp. 808-819).

# QUESTIONNAIRE

<b>QUESTIONS</b>	<b>Name of variables</b>
<b>Where are you from?</b>	Country
<b>What is your age?</b>	Age
<b>What is your gender?</b>	Gender
<b>What is the highest degree or level of education you have completed?</b>	Education
<b>What is your current employment status?</b>	Employment
<b>How would you describe your political view?</b>	Political view
<b>I am more likely to trust a post if it is posted by an influencer/celebrity.</b>	influencer/celebrity
<b>How much do you trust news articles or information shared by your friends on Instagram?</b>	TrustFriends
<b>How often do you share news/posts with your friends on Instagram via direct message?</b>	FreqShare
<b>Do you trust information shared by your family members/ friends on social media more than information from other sources?</b>	FriendsvsSources
<b>I am more likely to trust news shared by personal connections (people I know/follow) rather than verified accounts on Instagram.</b>	PCoverVerifiedAcc
<b>How often do you share news/posts with your friends on Instagram via direct message?</b>	FriendsDM
<b>Have you ever received or shared information from your family members or friends on social media that you later found out to be fake or misleading?</b>	MisleadingFriends
<b>What motivates you to share news or posts on Instagram?</b>	
<b>How likely are you to fact-check news articles or information that supports your ideological beliefs?</b>	FastCheckBeliefs
<b>How likely are you to reshare content on Instagram that supports your ideological beliefs without fact-checking it?</b>	ReshareWoFastCheck
<b>How likely are you to share content on Instagram that contradicts (are against) your ideological beliefs?</b>	ShareAgainst
<b>How open are you to considering different viewpoints or news sources that challenge your cultural beliefs?</b>	OpenToDif
<b>Are there cultural barriers or challenges to accessing diverse and reliable news sources within your community? (i.e. Language barriers, Stereotypes, Trust in authorities)</b>	
<b>On average, how much time you spend on Instagram every day to get informed?</b>	TimeSpent
<b>When you are on Instagram, how often do you come across news articles or information?</b>	ComeAcrossFN
<b>Have you ever come across fake news or misinformation on Instagram?</b>	
<b>How likely are you to read and engage with news articles or information shared on Instagram?</b>	LikelyToEngage
<b>How frequently do you engage in discussions or debates about news topics on Instagram?</b>	FreqToEngage
<b>How likely are you to unfollow or mute accounts on Instagram that frequently share fake news or misinformation?</b>	LikelyToMute
<b>How confident are you in your ability to identify fake news on Instagram?</b>	Confident
<b>How often do you fact-check news articles or information before sharing them on Instagram?</b>	FastCheck
<b>Have you received any formal education or training on media literacy and evaluating the credibility of news sources?</b>	FormalEduc

<b>How likely are you to report or flag suspicious or fake news content on Instagram?</b>	ReportOrFlag
<b>How interested are you in attending workshops or educational programs on media literacy and fake news prevention for Instagram users?</b>	InterestWorkshops