

DOI: 10.5281/zenodo.12426648

PERCEIVED EXPERTISE AND TRUSTWORTHINESS IN SHAPING NEWS-SOURCE PREFERENCE WITHIN EGYPTIAN DIGITAL BLOOD DONATION CAMPAIGNS: A DUAL-PROCESS AND CREDIBILITY-BASED ACCOUNT

Ahmed kamal Ali^{1*}, Ali Sayed Mohamed², Mamdouh Abdallah Abdellatif³, Haitham Gouda Moayad⁴

¹ Imam Mohammad Ibn Saud Islamic University (IMSIU), Saudi Arabia

² Imam Mohammad Ibn Saud Islamic University (IMSIU), Saudi Arabia

³ Beni-Suef University, Egypt

⁴ Imam Mohammad Ibn Saud Islamic University (IMSIU), Saudi Arabia

Received: 16/11/2025

Accepted: 11/04/2026

Corresponding Author: Ahmed kamal Ali

ABSTRACT

Digital blood-donation campaigns have become an important tool for mobilizing public participation in healthcare systems. However, the cognitive factors shaping audiences' preferences for news sources within these campaigns remain insufficiently examined. This study develops and tests a structural model integrating Source Credibility Theory and Dual-Process Theory to analyze how perceived expertise, perceived trustworthiness, and cognitive processing style influence news-source preference in digital blood-donation communication. Using a cross-sectional survey, data were collected from 400 undergraduate students across four Egyptian public universities (Zagazig, Ain Shams, Assiut, and Beni-Suef). The data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with bootstrapping (5,000 subsamples). The results show that perceived expertise ($\beta = 0.412, p < 0.001$) and perceived trustworthiness ($\beta = 0.338, p < 0.001$) significantly and positively influence news-source preference, with expertise exerting the stronger effect. Analytical cognitive processing significantly strengthens these relationships, whereas heuristic processing does not show significant moderating effects. The model explains 68.1% of the variance in news-source preference. The findings highlight that the influence of credibility cues varies according to audiences' cognitive processing orientation, offering theoretical insights into digital persuasion and practical guidance for designing cognitively informed digital health campaigns.

KEYWORDS: Perceived Expertise; Perceived Trustworthiness; Source Credibility; Cognitive Processing Style; Dual-Process Theory; News-Source Preference; Digital Health Communication.

1. INTRODUCTION

Digital health communication campaigns increasingly unfold inside platformized media environments, where audiences encounter public-health messages through social feeds, search, and algorithmically curated recommendations rather than via linear, institution-controlled channels (Shin, 2022). In such settings, the influence of health campaigns is not determined by exposure alone; it is shaped by how people evaluate and choose among competing information sources—official institutions, journalists, influencers, and peer users—each vying for attention and epistemic legitimacy within digitally saturated spaces (Hemp, 2009; Shin, 2022). Recent scholarship on mediatized communication environments further indicates that patterns of social interaction within digital platforms significantly shape how information circulates and how audiences negotiate credibility and authority within networked media ecosystems (Barry *et al.*, 2024).

Credibility-centered dynamic becomes especially consequential for blood-donation campaigns, where participation depends on trust-sensitive judgments about safety, medical competence, and institutional integrity (Hovland & Weiss, 1951). At a systems level, global monitoring continues to underscore persistent disparities in blood availability and the fragility of blood-supply infrastructures, reinforcing the strategic importance of communication that can mobilize voluntary donation while sustaining public confidence (World Health Organization, 2022). At a media level, digital platforms have become visible arenas for donation appeals and donor narratives, making “campaign effectiveness” partly a function of how donation is framed, socially validated, and circulated online (Eltewacy *et al.*, 2024; Ramondt *et al.*, 2025). In addition, research examining psychological engagement with social media environments suggests that online interaction processes—including social comparison and affective responses—can shape how individuals perceive and interpret information encountered on digital platforms (Abdellatif, 2022).

In Egypt, blood-donation campaigning is anchored in national public-health governance. The Egyptian Ministry of Health and Population (MoHP) periodically implements nationwide blood donation initiatives—across governorates—aimed at expanding voluntary donor registration and stabilizing supply chains linked to national transfusion services (Egyptian Ministry of Health and Population, 2026). Within platformized communication environments, however,

institutional persuasion is complicated by the plurality of sources and the velocity of circulation. Citizens encounter blood-donation prompts not only through official portals, but also through news coverage, social media reposts, and user-generated testimonies—conditions that intensify credibility-based filtering when deciding which source to rely upon (Dellarocas, 2003; Hemp, 2009).

A growing body of research suggests that social-media ecosystems can support donation mobilization by enabling peer-to-peer diffusion, visibility of pro-social norms, and rapid circulation of calls-to-action; yet these benefits remain contingent on credibility perceptions and perceived authenticity of both source and content (Jenkins *et al.*, 2020; Elteuacy *et al.*, 2024; Ramondt *et al.*, 2025). Recent research on digital news engagement also demonstrates that credibility perceptions play a critical role in shaping news-sharing behavior and information diffusion across social media networks (Moayad *et al.*, 2026). These contingency matters because digital health content is frequently evaluated through heuristic cues (e.g., “who posted it,” “how professional it looks,” “how widely it is shared”) rather than through systematic scrutiny of evidence—especially under conditions of time pressure and information overload (Hemp, 2009; Shin, 2022). In other words, in platformized environments, audiences may treat credibility signals as functional substitutes for direct verification, thereby making source choice a core mechanism through which campaigns succeed or fail (Hovland & Weiss, 1951; Jenkins *et al.*, 2020).

Within classic source credibility scholarship, perceived expertise (competence, knowledge, professional authority) and perceived trustworthiness (honesty, integrity, benevolence) constitute foundational evaluative dimensions that shape persuasive acceptance and downstream behavioral tendencies (Hovland & Weiss, 1951; Hovland *et al.*, 1953). In contemporary digital contexts—where algorithmic curation structures visibility and where competing actors co-produce the informational environment—these dimensions may also shape news-source preference: which institutional or media actors audiences treat as reliable carriers of campaign appeals (Shin, 2022). Furthermore, recent research examining the integration of social media analytics within media organizations indicates that digital data environments increasingly influence editorial decision-making processes and information prioritization in news production (Moayad *et al.*, 2024). From a broader theoretical perspective,

transformations in the digital news ecosystem have also prompted renewed scholarly attention to the evolving role of journalism within networked and platformized communication environments (Mohamed et al., 2026).

Yet, despite the policy significance of voluntary blood donation initiatives in Egypt, empirical research has not sufficiently specified how perceived expertise and perceived trustworthiness—operating under different cognitive conditions—structure audiences' preferences for campaign-related news sources in the context of digitally mediated, credibility-competitive environments (Jenkins et al., 2020; Elteawy et al., 2024; Ramondt et al., 2025). Accordingly, this study examines how perceived expertise and perceived trustworthiness shape Egyptian audiences' preference for news sources when encountering digital blood-donation campaigns linked to MoHP initiatives, while positioning source choice as a central pathway of campaign influence in platformized public-health communication (Egyptian Ministry of Health and Population, 2026; Shin, 2022). By coupling source credibility theory with contemporary insights on algorithmic credibility and digitally saturated information processing, the study aims to advance a persuasion-centered understanding of how credibility is constructed, prioritized, and translated into source selection within high-stakes public-health campaigns (Hovland & Weiss, 1951; Hemp, 2009; Shin, 2022).

2. LITERATURE REVIEW

2.1 Credibility Reconstruction in Platformized Health Campaigns

Credibility has historically occupied a central position in persuasion scholarship, particularly in communicative contexts characterized by epistemic asymmetry, uncertainty, and perceived risk (Hovland & Weiss, 1951; Hovland et al., 1953). In classical mass-mediated environments, epistemic authority was institutionally anchored: professional gatekeeping, editorial hierarchies, and regulatory norms functioned as structural guarantors of informational legitimacy (Shoemaker & Vos, 2009). Under such broadcast logics, audiences rarely needed to independently negotiate credibility, as institutional affiliation itself signaled reliability.

Platformization fundamentally reconfigures this architecture of authority. In digitally networked ecosystems, credibility is no longer structurally embedded but interactively reconstructed (van Dijck et al., 2018). Algorithmic infrastructures redistribute visibility, social metrics signal popularity, and diverse actors—including state institutions, journalists, influencers, and peer users—co-produce

the informational environment (Shin, 2022). Consequently, epistemic authority becomes mediated: it is not simply possessed but performed, displayed, and algorithmically amplified. Trust, in this configuration, is no longer exclusively institutional but mediated through interface cues, engagement signals, and perceived authenticity.

This shift is especially consequential in digital health campaigns. Public-health communication—particularly in domains such as blood donation—operates under conditions of heightened vulnerability and moral responsibility. Participation requires individuals to reconcile bodily risk, institutional trust, and collective obligation. When campaign messages circulate across social feeds rather than through singular official channels, audiences encounter a plurality of credibility claims competing within the same perceptual field. Under such conditions, credibility must be cognitively reconstructed rather than institutionally assumed.

Dual-process theories offer a foundational explanation for how this reconstruction unfolds. The Elaboration Likelihood Model (ELM) posits that persuasion operates through either a central route, involving systematic cognitive elaboration, or a peripheral route, in which judgments rely on heuristic signals such as source expertise and trustworthiness (Petty & Cacioppo, 1986). In high-stakes but cognitively constrained environments—where attention is fragmented and informational abundance prevails—peripheral cues often guide evaluative judgments prior to substantive content assessment.

The Heuristic-Systematic Model (HSM) similarly contends that individuals default to heuristic processing when cognitive resources are limited or when motivational thresholds are unmet (Chaiken, 1980; Chaiken et al., 1989). Platformized communication environments structurally intensify such conditions: algorithmic ranking compresses attention spans, social endorsement metrics simulate consensus, and visual-professional cues substitute for institutional familiarity (Sundar, 2008; Shin, 2022). In these contexts, credibility signals operate as cognitive shortcuts, enabling rapid source triage amid informational overload (Hemp, 2009).

Crucially, emerging scholarship suggests that credibility operates not only at the level of persuasion outcomes but at an earlier, pre-elaborative stage of source prioritization (Metzger & Flanagin, 2013; Pennycook & Rand, 2019). Before individuals evaluate message content, they implicitly answer a prior question: *Which source merits epistemic investment?* This attentional gatekeeping function

becomes particularly salient in digitally saturated public-health campaigns, where multiple actors disseminate overlapping appeals.

In blood-donation campaigns specifically, perceived expertise (competence, medical knowledge, institutional capability) and perceived trustworthiness (honesty, benevolence, integrity) may structure this hierarchy of source selection. Rather than merely influencing attitude change, these credibility dimensions may determine which actors are cognitively elevated as legitimate carriers of health appeals. Under conditions of cognitive constraint, audiences may evaluate “who is speaking” before engaging with “what is being said.”

Thus, credibility in platformized health campaigns should be conceptualized as a dynamic mechanism of epistemic ordering—one that shapes not only persuasion but the very architecture of source preference within mediatized public spheres. This reconceptualization positions perceived expertise and perceived trustworthiness as foundational antecedents of news-source preference, particularly in digitally mediated blood-donation campaigns where trust and participation are structurally intertwined.

2.2 Mediatized Trust, Algorithmic Visibility, and Cognitive Filtering

Digital infrastructures further complicate credibility dynamics by embedding source evaluation within algorithmic visibility systems. Shin (2022) argues that algorithmic curation influences not only exposure but also perceptions of legitimacy, as users infer credibility from ranking, repetition, and platform endorsement cues. In this sense, trust becomes mediatized—constructed through platform-mediated indicators rather than through direct institutional authority.

Simultaneously, information overload intensifies reliance on heuristic evaluation strategies. Hemp (2009) shows that cognitively saturated audiences tend to substitute rapid source-based judgments for systematic evidence evaluation. Dual-process models support this interpretation: under conditions of limited cognitive capacity, peripheral cues—such as perceived expertise or trustworthiness—exert stronger influence (Petty & Cacioppo, 1986; Chaiken, 1980).

Recent health communication research corroborates these mechanisms. Jenkins *et al.* (2020) identify authenticity and perceived expertise as critical predictors of trust in digital health content. (Eltewacy *et al.*, 2024; Ramondt *et al.*, 2025) demonstrate that media publicity enhances

willingness to donate blood via improved reputation perception. Yet, these studies conceptualize credibility primarily as an antecedent to intention or behavior. They do not sufficiently theorize credibility as a determinant of source preference, nor do they account for how cognitive processing styles may condition the weight assigned to credibility cues during source selection.

Thus, while mediatized trust has been documented, its role in structuring competitive source hierarchies within digital public health campaigns remains underdeveloped.

2.3 Expertise and Trustworthiness as Dynamic Credibility Signals

Across communication domains, perceived expertise and perceived trustworthiness remain the most robust dimensions of source credibility. Expertise reflects judgments of competence and domain-specific knowledge; trustworthiness reflects perceived honesty and benevolence (Hovland & Weiss, 1951).

Marketing and endorsement research consistently confirm their predictive power. Erdogan (1999) identifies expertise as central to endorsement effectiveness. Till and Busler (1998) demonstrate that congruence between endorser expertise and product domain strengthens persuasion. Kamins (1990) emphasizes relational match-up mechanisms that shape credibility perceptions. More recently, influencer scholarship shows that expertise and authenticity operate relationally within digitally networked environments (Kim, 2020; Wellman, 2023).

However, in digitally competitive health campaign contexts, credibility may operate at an earlier stage than persuasion outcomes. Before attitudes or intentions are formed, audiences must decide which source to attend to and rely upon. Despite extensive validation of expertise and trustworthiness as predictors of persuasion, empirical research has not sufficiently modeled their role in structuring source hierarchies within public health campaigns.

This gap is particularly salient in blood-donation campaigns, where institutional actors coexist with alternative communicators and where credibility judgments may determine whether official health authorities are prioritized over other voices.

2.4 Competitive Source Environments and the Pre-Elaborative Stage of Persuasion

The digitization of word-of-mouth has reconfigured public communication environments

into arenas of credibility pluralism (Dellarocas, 2003). User-generated content, peer sharing, and social endorsement mechanisms amplify certain messages while attenuating others. Gretzel (2006) and Yoo and Gretzel (2011) show that consumer-generated media significantly reshape trust dynamics and brand perceptions.

In health campaigns, such dynamics create competitive source environments in which official appeals, media reports, influencer narratives, and peer testimonies circulate simultaneously. Under these conditions, persuasion may be preceded by a pre-elaborative stage: audiences first determine which source to treat as epistemically legitimate before engaging in deeper message evaluation.

Yet, despite theoretical recognition of this stage, empirical scholarship rarely positions source preference as a central outcome variable in public health communication research. Instead, studies tend to move directly from credibility to intention, overlooking the intermediate cognitive process through which credibility influences source prioritization.

In the Egyptian context of digital blood-donation campaigns—where Ministry of Health initiatives operate within platformized ecosystems—the absence of research examining how perceived expertise and trustworthiness shape source preference under varying cognitive conditions represents a substantive theoretical and empirical gap.

3. THEORETICAL FRAMEWORK

3.1 *Credibility as Reconstructed Epistemic Authority in Platformized Health Campaigns*

Source credibility theory posits that persuasion depends fundamentally on audiences' perceptions of the communicator's expertise and trustworthiness (Hovland & Weiss, 1951; Hovland et al., 1953). Expertise reflects judgments of domain-specific competence and knowledge, whereas trustworthiness captures perceptions of honesty, integrity, and benevolent intent. In legacy broadcast systems, these credibility dimensions were institutionally stabilized through professional gatekeeping structures that embedded epistemic authority within hierarchical media organizations (Shoemaker & Vos, 2009).

However, platformized communication environments fundamentally reconfigure this architecture. In digitally networked ecosystems, communicative visibility is distributed across heterogeneous actors—government institutions, journalists, influencers, and peer users—within

algorithmically curated infrastructures (van Dijck et al., 2018; Shin, 2022). Under such conditions, epistemic authority is no longer structurally secured but perceptually negotiated. Credibility must therefore be cognitively reconstructed through mediated signals rather than assumed through institutional affiliation (Metzger, 2007; Metzger & Flanagin, 2013).

This transformation is especially consequential in digital public health campaigns, where communicative legitimacy intersects with perceived risk and institutional responsibility. In the context of blood-donation initiatives, audiences encounter overlapping appeals from ministries, news outlets, and socially circulated narratives. Participation decisions require trust-sensitive judgments regarding medical competence and institutional integrity. Thus, perceived expertise and perceived trustworthiness operate not merely as persuasive enhancers but as markers of epistemic legitimacy in competitive communicative fields.

Yet credibility judgments do not exert uniform influence across audiences. Their cognitive activation depends on how individuals process information within digitally saturated environments. This necessitates integration with dual-process theories of persuasion.

3.2 *Dual-Process Cognition as the Mechanism of Credibility Activation*

While source credibility theory clarifies why expertise and trustworthiness matter, dual-process frameworks explain how and under what cognitive conditions these dimensions shape evaluative outcomes.

Dual-process theory converges conceptually with the Elaboration Likelihood Model (ELM) and related central-peripheral formulations of persuasion. Although these models originate from distinct intellectual traditions, they share a foundational assumption: human judgment operates through two qualitatively different modes of cognitive processing. The ELM distinguishes between a central route involving effortful elaboration of message arguments and a peripheral route in which individuals rely on heuristic cues—such as source credibility—when cognitive capacity or motivation is limited (Petty & Cacioppo, 1986). Broader dual-process accounts similarly differentiate between analytic, reflective processing and intuitive, cue-based processing (Evans & Stanovich, 2013). Despite terminological variation—central versus peripheral, systematic versus heuristic, analytic versus experiential—the theoretical architecture remains aligned: cognitive

effort determines the relative weight assigned to credibility cues.

The Heuristic-Systematic Model (HSM) further refines this logic by emphasizing that individuals conserve cognitive effort under situational constraints, defaulting to heuristic processing when elaboration is costly or unnecessary (Chaiken, 1980; Chaiken et al., 1989). Heuristic reliance thus represents an adaptive mechanism for navigating informational complexity rather than a purely biased response.

Platformized digital infrastructures intensify precisely the conditions under which heuristic processing becomes likely. Algorithmic ranking privileges salience and engagement (DeVito, 2017), curated social flows fragment attention (Thorson & Wells, 2016), and interface-level cues—verification badges, follower counts, professional aesthetics, and engagement metrics—operate as readily accessible credibility heuristics (Sundar, 2008). Under informational overload (Hemp, 2009), such cues frequently substitute for systematic evaluation. In these contexts, credibility functions as an epistemic shortcut that guides rapid source triage.

Importantly, dual-process models emphasize cognitive heterogeneity. Individuals differ in their propensity for analytical versus intuitive processing. Analytically oriented individuals are more likely to treat expertise and institutional competence as diagnostic indicators of informational legitimacy. In contrast, heuristic processors may infer legitimacy from familiarity, visual professionalism, or algorithmic prominence (Shin, 2022). Thus, credibility effects are cognitively contingent rather than universally fixed.

Applied to digitally mediated blood-donation campaigns, this framework suggests that perceived expertise and perceived trustworthiness influence source prioritization differentially depending on processing orientation. The same credibility cue may function as a deeply evaluated diagnostic signal for some individuals and as a surface-level heuristic for others.

3.3 News-Source Preference as a Pre-Elaborative Epistemic Sorting Process

Platformized communication environments alter the temporal logic of persuasion. Unlike legacy broadcast systems—where institutional authority was structurally embedded through pre-publication gatekeeping—digital interfaces foreground source-level cues at the moment of exposure (Dellarocas, 2003; Metzger, 2007). Consequently, audiences often engage in implicit source triage before substantive

message elaboration occurs.

Under informational competition and cognitive constraint, individuals cannot systematically process all available blood-donation appeals. Instead, they allocate cognitive resources selectively by prioritizing sources perceived as epistemically legitimate. News-source preference thus represents a pre-elaborative epistemic sorting mechanism that determines which communicative actors are granted serious cognitive investment.

Within this framework, perceived expertise and perceived trustworthiness operate as criteria of epistemic admission rather than solely as predictors of attitude formation. Dual-process theory further implies that this sorting process is moderated by cognitive orientation: analytically inclined individuals differentiate sources based on diagnostic credibility attributes, whereas heuristic processors rely more heavily on salient or surface cues (Petty & Cacioppo, 1986; Chaiken, 1980; Shin, 2022).

Conceptualized in this manner, news-source preference constitutes: A credibility-based mechanism of epistemic ordering; A cognitively moderated evaluative outcome; A pre-persuasion stage conditioning downstream campaign influence.

By integrating source credibility theory with dual-process cognition in platformized health communication, the present framework advances a persuasion-centered account in which credibility structures cognitive access before shaping attitudes or behavioral intentions. This theoretical integration directly underpins the moderated structural relationships proposed in the study's conceptual model.

4. HYPOTHESES

Building on source credibility theory, perceived expertise and trustworthiness represent the two core dimensions through which audiences evaluate the informational authority and reliability of communication sources (Hovland & Weiss, 1951; Ohanian, 1990). In digital health communication contexts—particularly those involving risk-sensitive issues such as blood donation—credibility cues are expected to play a central role in shaping audience preferences for news sources.

Perceived expertise signals domain competence and informational authority, increasing the likelihood that audiences consider a source epistemically reliable and worthy of attention (Jenkins et al., 2020). Accordingly:

H1: Perceived expertise is positively associated with audiences' preference for news sources in digital blood-donation campaigns.

In parallel, perceived trustworthiness reflects judgments about the honesty and integrity of the source. Within health-related communication environments, trustworthiness functions as a critical evaluative cue that reinforces reliance on sources perceived as credible and institutionally reliable (Hovland et al., 1953; Metzger, 2007). Thus:

H2: Perceived trustworthiness is positively associated with audiences' preference for news sources in digital blood-donation campaigns.

Beyond these direct effects, audience evaluations of credibility may vary according to cognitive processing style. Dual-process models of persuasion suggest that analytically oriented individuals engage in deeper evaluation of message attributes, assigning greater diagnostic weight to credibility cues, whereas heuristic processors rely more heavily on simplified or peripheral signals (Petty & Cacioppo, 1986; Chaiken, 1980; Shin, 2022). Therefore:

H3: Cognitive processing style moderates the relationships between perceived expertise and trustworthiness and news-source preference, such that these relationships are stronger among analytically oriented individuals than among heuristically oriented individuals.

5. METHOD

5.1 Sample and Context

To test the proposed moderated structural model, we surveyed undergraduate students enrolled in public universities across Egypt. The sampling strategy was designed to capture geographic heterogeneity in digital media exposure patterns, institutional trust orientations, and engagement with national public health campaigns, particularly blood-donation initiatives led by the Ministry of Health and Population (MoHP).

Four public universities were purposively selected to represent Egypt's principal regional clusters: Zagazig University (Delta region); Ain Shams University (Greater Cairo metropolitan region); Assiut University (Southern Upper Egypt); Beni-Suef University (Northern Upper Egypt). These institutions collectively serve large and socio-demographically diverse student populations, increasing the likelihood of exposure to nationally disseminated digital blood-donation campaigns. The multi-site design enhances contextual variability and strengthens the external validity and regional representativeness of the findings within the Egyptian higher-education environment.

The focus on university students was theoretically grounded. Young adults represent one of the most digitally connected segments of Egyptian society and

constitute a primary target audience for digital health communication campaigns. University students are also active consumers, interpreters, and evaluators of online news content, making them particularly suitable for examining credibility-based news-source preference under platformized media conditions.

Data collection was conducted online between October and December 2025 using a stratified convenience sampling technique. Stratification was applied across universities and academic disciplines to ensure variability in educational background and cognitive orientation. The research team coordinated with faculty members and student representatives to distribute the survey link through official academic mailing lists and university-affiliated digital platforms.

Approximately 1,200 students were invited to participate across the four institutions. To reduce the likelihood of common method bias (CMB), respondents were informed that data collection complied with internationally recognized ethical standards guaranteeing anonymity and confidentiality (Podsakoff et al., 2012). No personally identifiable information was recorded, and participants were explicitly informed that the survey contained no right or wrong answers. The study was conducted in accordance with internationally recognized ethical principles governing research involving human participants. Participation was voluntary, informed consent was obtained electronically prior to survey completion, and respondents retained the right to withdraw at any stage without penalty.

A total of 432 responses were obtained. Following data screening for incomplete submissions and patterned responses, 400 valid questionnaires were retained for statistical analysis. This final sample size satisfies methodological recommendations for PLS-SEM involving latent constructs and moderation effects (Hair et al., 2022). According to statistical power guidelines (Cohen, 2013), a sample of 400 is sufficient to detect medium-sized interaction effects with adequate statistical power.

5.2 Measures

Consistent with the theoretical framework integrating Source Credibility Theory (Hovland & Weiss, 1951; Hovland et al., 1953) and Dual-Process Theory (Evans & Stanovich, 2013; Petty & Cacioppo, 1986), all constructs were operationalized using previously validated measurement instruments grounded in established communication and cognitive psychology scholarship. The data were analyzed using Partial Least Squares Structural

Equation Modeling (PLS-SEM). All items were measured using five-point Likert-type scales ranging from 1 (*Strongly disagree*) to 5 (*Strongly agree*), a response format widely recommended for latent-variable modeling and PLS-SEM applications (Hair *et al.*, 2022).

All measurement instruments were originally developed in English based on established theoretical and empirical traditions in source credibility and dual-process cognition research. The instruments were translated into Arabic using the back-translation procedure (Brislin, 1970) to ensure semantic equivalence and conceptual consistency across languages.

5.2.1 Perceived Expertise (PE)

Perceived expertise was measured using an adapted version of the expertise dimension of the Source Credibility Scale originally introduced by Hovland and Weiss (1951) and later operationalized in multi-item format by Ohanian (1990). The expertise construct reflects judgments of competence, domain-specific knowledge, and professional authority attributed to a communication source. In the context of digital blood-donation campaigns, items were contextualized to reflect evaluations of health-related informational authority. Sample items included: "This news source is knowledgeable about health issues"; "This source has expertise in medical matters"; "This source is competent in discussing blood-donation topics". The expertise dimension represents the cognitive component of credibility and has demonstrated robust predictive validity in persuasion and endorsement research (Hovland *et al.*, 1953; Ohanian, 1990). Within the present model, perceived expertise functions as a central epistemic cue influencing news-source preference.

5.2.2 Perceived Trustworthiness (PT)

Perceived trustworthiness was assessed using adapted items derived from the trustworthiness dimension of classical Source Credibility Theory (Hovland *et al.*, 1953) and subsequent online credibility operationalizations (Metzger, 2007). Trustworthiness captures perceptions of honesty, integrity, sincerity, and reliability attributed to the source. In digital public health contexts characterized by uncertainty and perceived risk, trustworthiness reflects whether audiences believe that the source acts transparently and in the public interest. Sample items included: "I consider this source to be trustworthy"; "This source provides honest information"; "This source is reliable when discussing public health issues". Prior research

demonstrates that perceived trustworthiness significantly predicts acceptance of health-related communication under conditions of informational ambiguity (Metzger, 2007; Jenkins *et al.*, 2020). In the current study, trustworthiness represents the affective-evaluative dimension of credibility influencing epistemic prioritization.

5.2.3 Cognitive Processing Style (CPS)

Cognitive processing style was operationalized using an adapted short-form version of the Rational-Experiential Inventory (REI) developed by Epstein *et al.* (1996), grounded in dual-process models of cognition (Evans & Stanovich, 2013). The REI conceptualizes cognitive style as comprising two orthogonal dimensions: Rational (analytical, deliberative) processing and Experiential (intuitive, heuristic) processing.

Analytical processing items capture systematic evaluation tendencies and reflective reasoning. Sample items included: "I prefer to analyze information carefully before forming a judgment"; "I evaluate evidence before deciding whether to believe news". Heuristic processing items capture intuitive, rapid, and cue-driven judgments. Sample items included: "I rely on my intuition when judging news credibility"; "I often make quick judgments about information online."

The REI has demonstrated strong psychometric properties across diverse cultural contexts and remains one of the most widely validated instruments in dual-process research (Epstein *et al.*, 1996; Evans & Stanovich, 2013). In the moderated structural model, CPS was treated as a continuous latent construct, with higher composite scores indicating stronger analytical orientation.

5.2.4 News-Source Preference (NSP)

News-source preference was conceptualized as a latent construct capturing epistemic prioritization, the degree to which individuals systematically favor news sources when encountering digital blood-donation campaign content. Items were adapted from established measures of media trust and source evaluation (Kohring & Matthes, 2007; Metzger, 2007) and contextualized to reflect competitive information environments. Sample items included: "I prefer to rely on official health authorities for blood-donation information"; "When multiple sources report on blood donation, I choose the most credible one"; "I prioritize institutional sources over other online voices". Unlike general attitude or behavioral intention measures, NSP captures source-selection tendencies within platformized ecosystems where

epistemic authority is negotiated rather than institutionally imposed.

5.3 Data Analysis

Data analysis was conducted using multivariate statistical procedures aligned with the study's predictive and theory-testing objectives. The analytical procedures comprised descriptive statistics to summarize sample characteristics and variable distributions, correlation analysis to examine bivariate associations among study constructs, and Structural Equation Modeling (SEM) to evaluate the hypothesized direct and moderated relationships within the proposed conceptual model. The analytical strategy emphasized the estimation of direct effects of perceived expertise and perceived trustworthiness on news-source preference, the assessment of moderation effects of cognitive processing style, and the examination of the relative contributions of credibility dimensions and cognitive orientation in explaining variance in news-source preference.

5.3.1 Measurement Model Analysis

Table 1 reports the assessment of indicator reliability, internal consistency reliability, and convergent validity. Indicator reliability was evaluated using standardized factor loadings. As shown in the table, all measurement items exceeded the recommended threshold of 0.70 (Hair et al., 2022), indicating satisfactory indicator reliability.

The construct **Perceived Expertise** demonstrated strong measurement properties. Factor loadings ranged from 0.856 to 0.883, confirming adequate item reliability. Internal consistency reliability was

established, with Cronbach's alpha (0.934) and Composite Reliability (CR = 0.936) surpassing recommended cutoff values. Convergent validity was supported by the Average Variance Extracted (AVE = 0.745), which exceeded the 0.50 criterion (Fornell & Larcker, 1981).

Similarly, **Perceived Trustworthiness** exhibited acceptable reliability and validity. All indicators loaded strongly on their respective construct (0.849–0.877). Reliability metrics were within acceptable levels (Cronbach's alpha = 0.913; CR = 0.916). The AVE value (0.732) further confirmed convergent validity.

For **Cognitive Processing Style**, both the analytical and heuristic subdimensions demonstrated satisfactory measurement performance. Analytical processing items yielded factor loadings between 0.841 and 0.868 (Cronbach's alpha = 0.906; CR = 0.909; AVE = 0.716), and heuristic processing items loaded between 0.863 and 0.878 (Cronbach's alpha = 0.877; CR = 0.893; AVE = 0.737), confirming adequate indicator reliability and convergent validity for both dimensions.

News-Source Preference indicators also demonstrated satisfactory measurement performance. Factor loadings ranged between 0.844 and 0.872, indicating robust indicator reliability. The construct demonstrated strong internal consistency reliability (Cronbach's alpha = 0.928; CR = 0.931). Convergent validity was confirmed (AVE = 0.729). Overall, the measurement model satisfies established reliability and convergent validity criteria, supporting the adequacy of the constructs for subsequent structural model evaluation.

Table 1: Factor loadings

	Items	Factor Loadings	Cronbach's alpha	CR	AVE
Perceived Expertise	PE1	0.871	0.934	0.936	0.745
	PE2	0.856			
	PE3	0.883			
	PE4	0.868			
	PE5	0.879			
Perceived Trustworthiness	PT1	0.862	0.913	0.916	0.732
	PT2	0.849			
	PT3	0.877			
	PT4	0.854			
Cognitive Processing Style (Analytical)	CPS_A1	0.854	0.906	0.909	0.716
	CPS_A2	0.841			
	CPS_A3	0.868			
	CPS_A4	0.859			
Cognitive Processing Style (Heuristic)	CPS_H1	0.863	0.877	0.893	0.737
	CPS_H2	0.878			
	CPS_H3	0.871			
News-Source Preference	NSP1	0.858	0.928	0.931	0.729
	NSP2	0.844			
	NSP3	0.872			
	NSP4	0.861			
	NSP5	0.853			

5.3.2 Discriminant Validity Assessment

Discriminant validity was evaluated using the Heterotrait-Monotrait ratio (HTMT), following the methodological recommendations of Henseler et al. (2015). As presented in Table 2, the HTMT values were examined against the conservative threshold of 0.85 and the more liberal criterion of 0.90.

The HTMT values between all construct pairs fall below the conservative threshold of 0.85, indicating satisfactory discriminant validity across all pairs. The highest observed HTMT value was recorded between Perceived Expertise and News-Source Preference (HTMT = 0.824), which remains below the 0.85 threshold, suggesting that although the constructs are conceptually related through the credibility-

preference pathway, they remain empirically distinguishable. The HTMT value between Perceived Expertise and Perceived Trustworthiness (HTMT = 0.791) similarly falls well below both thresholds, confirming that the two credibility dimensions capture distinct evaluative facets.

The HTMT values involving Cognitive Processing Style (both analytical and heuristic dimensions) and other constructs are comparatively lower (ranging from 0.489 to 0.761), further confirming that the moderation construct is empirically separable from the credibility predictors and the outcome variable. Overall, the results provide full support for discriminant validity across all construct pairs in the measurement model.

Table 2: Values of HTMT

	PE	PT	CPS_A	CPS_H	NSP
Perceived Expertise (PE)	–				
Perceived Trustworthiness (PT)	0.791	–			
CPS - Analytical	0.724	0.683	–		
CPS - Heuristic	0.612	0.648	0.543	–	
News-Source Preference (NSP)	0.824	0.813	0.761	0.534	–

5.3.3 Discriminant Validity (Fornell-Larcker Criterion)

Discriminant validity was further assessed using the Fornell-Larcker criterion (Fornell & Larcker, 1981), which requires that the square root of the Average Variance Extracted (AVE) for each construct exceeds its correlations with all other constructs. This assessment ensures that each latent variable represents a distinct conceptual construct within the measurement model.

As reported in Table 3, the diagonal elements represent the square roots of AVE. Perceived Expertise exhibited a square root of AVE of 0.863, which exceeded its correlations with all other constructs, including its highest correlation with News-Source Preference ($r = 0.771$), indicating

satisfactory discriminant validity. Similarly, Perceived Trustworthiness demonstrated a square root of AVE of 0.856, exceeding its highest inter-construct correlation with News-Source Preference ($r = 0.759$), confirming adequate construct distinctiveness.

The Cognitive Processing Style dimensions – both analytical ($\sqrt{\text{AVE}} = 0.846$) and heuristic ($\sqrt{\text{AVE}} = 0.858$) – exhibited square roots of AVE that exceeded all corresponding inter-construct correlations. News-Source Preference also demonstrated satisfactory Fornell-Larcker performance, with its square root of AVE (0.854) exceeding all off-diagonal correlations. Collectively, the Fornell-Larcker results corroborate the HTMT findings and confirm adequate discriminant validity for all constructs in the measurement model.

Table 3: Fornell-Larcker

	PE	PT	CPS_A	CPS_H	NSP
Perceived Expertise (PE)	0.863				
Perceived Trustworthiness (PT)	0.734	0.856			
CPS - Analytical	0.671	0.628	0.846		
CPS - Heuristic	0.558	0.594	0.489	0.858	
News-Source Preference (NSP)	0.771	0.759	0.706	0.481	0.854

5.3.4 Coefficient of Determination (R² and Adjusted R² Analysis)

The coefficient of determination (R²) and adjusted R² were examined to evaluate the explanatory power of the structural model. As presented in Table 4, the R² value for News-Source Preference was 0.681, with an

adjusted R² of 0.679. This result indicates that the exogenous constructs – perceived expertise, perceived trustworthiness, and their interactions with cognitive processing style – collectively explain approximately 68.1% of the variance in news-source preference. According to established methodological guidelines (Chin, 1998; Hair et al., 2022), R² values

exceeding 0.67 are considered substantial, suggesting a high level of predictive accuracy and strong explanatory capability of the model.

The minimal difference between R² and adjusted R² further indicates model stability and confirms that the explanatory power is not artificially inflated by the inclusion of non-contributory predictors. This consistency suggests that the structural model maintains robustness without significant estimation bias. Overall, the findings demonstrate that the moderated structural model exhibits substantial explanatory power, underscoring the joint predictive contributions of credibility perceptions and cognitive processing orientation in determining news-source preference within digital blood-donation campaign environments.

Table 4: R-square adjusted

	R-square	R-square adjusted
News-Source Preference	0.681	0.679

6. RESULTS

Figure 1 presents the structural model, illustrating the hypothesized relationships among Perceived Expertise, Perceived Trustworthiness, Cognitive Processing Style, and News-Source Preference. The figure displays the standardized path coefficients, reflecting the magnitude and direction of the structural relationships, including the direct effects of the credibility dimensions and the moderation interactions introduced by cognitive processing orientation.

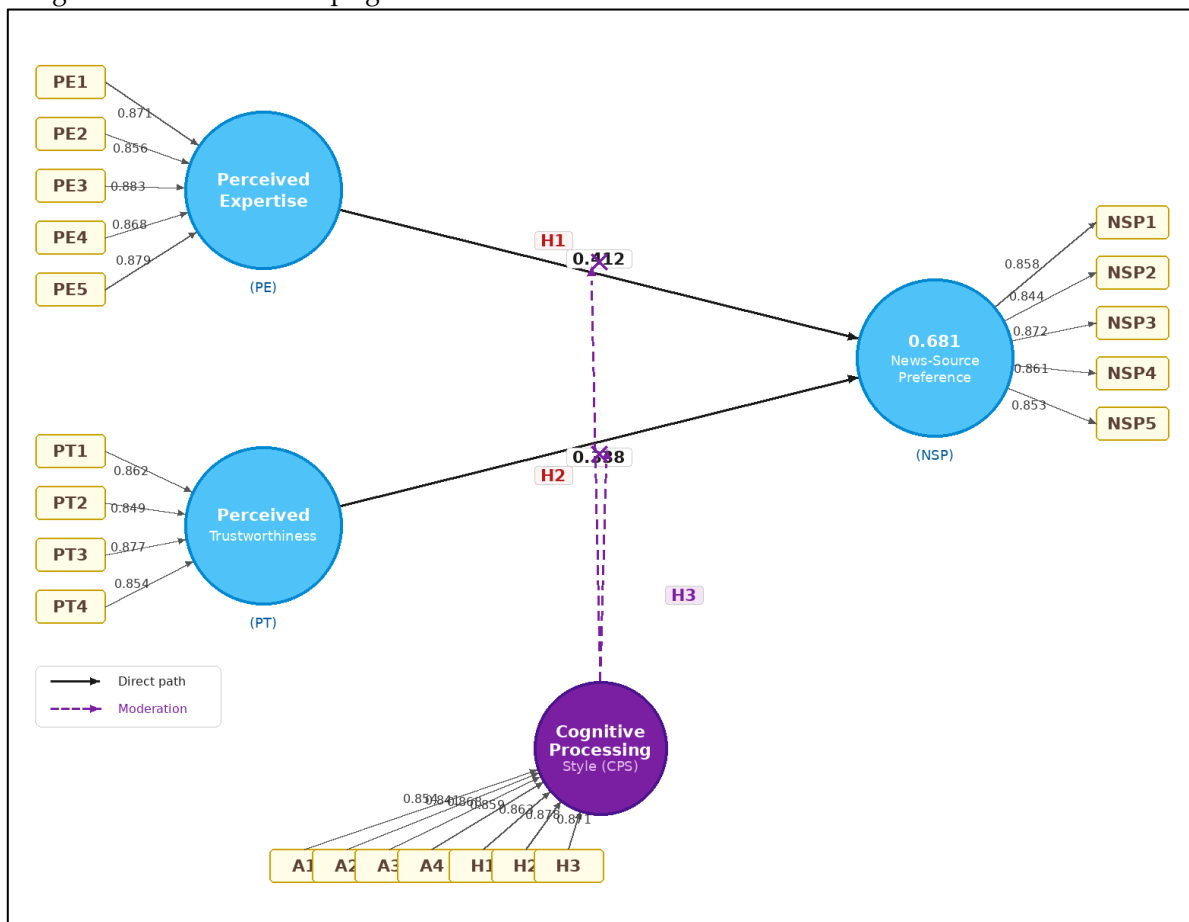


Figure 1. Structural Model with Standardized Path Coefficients

As shown, Perceived Expertise exhibits a strong positive path toward News-Source Preference, indicating a substantial direct predictive relationship. Perceived Trustworthiness similarly demonstrates a meaningful positive path, confirming the independent contribution of the affective-evaluative credibility dimension. The interaction terms involving Cognitive Processing Style – particularly the analytical dimension – reveal positive moderation effects, suggesting that

analytical orientation amplifies the influence of credibility perceptions on source prioritization. In contrast, the heuristic processing interaction terms do not achieve statistical significance, indicating a limited moderation contribution within the structural framework. The R² value associated with News-Source Preference reflects that the model explains a substantial proportion of variance, highlighting the overall explanatory capability of the proposed moderated model.

Table 5: Structural Path Coefficients

Hypo.	Relationships	Standardized Beta	Standard Error	T-Statistic	P-Values	Decision
H1	Perceived Expertise → News-Source Preference	0.412	0.051	8.078	0.000	Supported
H2	Perceived Trustworthiness → News-Source Preference	0.338	0.058	5.828	0.000	Supported
H3a	PE × CPS (Analytical) → News-Source Preference (Interaction Effect)	0.187	0.049	3.816	0.000	Supported
H3b	PT × CPS (Analytical) → News-Source Preference (Interaction Effect)	0.163	0.053	3.075	0.002	Supported
H3c	PE × CPS (Heuristic) → News-Source Preference (Interaction Effect)	0.041	0.068	0.603	0.547	Unsupported
H3d	PT × CPS (Heuristic) → News-Source Preference (Interaction Effect)	0.037	0.071	0.521	0.602	Unsupported

Note. Standardized Beta = standardized path coefficient; Standard Error and T-Statistic obtained through bootstrapping with 5,000 subsamples (two-tailed). P-Values < 0.05 indicate statistical significance. H3a–H3d represent the moderation sub-hypotheses under H3 for analytical and heuristic processing dimensions respectively. Supported = $p < 0.05$; Unsupported = $p \geq 0.05$.

The structural relationships were assessed by examining the standardized path coefficients (β), standard errors, t-statistics, and significance levels obtained through the bootstrapping procedure (5,000 subsamples, two-tailed). As presented in Table 5, the results reveal differential predictive and moderation effects across the hypothesized structural relationships.

The findings indicate that Perceived Expertise exerts a strong and statistically significant direct effect on News-Source Preference ($\beta = 0.412$, $t = 8.078$, $p < 0.001$). This result suggests a substantial predictive contribution, highlighting the dominant explanatory role of expertise-based epistemic cues in guiding source prioritization within digital blood-donation campaign contexts. H1 is fully supported.

Similarly, Perceived Trustworthiness demonstrated a statistically significant positive effect on News-Source Preference ($\beta = 0.338$, $t = 5.828$, $p < 0.001$). Although comparatively lower in magnitude than the expertise effect, the trustworthiness path confirms the independent affective-evaluative contribution of perceived honesty and institutional reliability in shaping epistemic source preferences. H2 is supported.

Regarding the moderation hypothesis (H3), Cognitive Processing Style demonstrated differential moderating effects depending on processing orientation. The interaction of Perceived Expertise × Analytical Processing significantly predicted News-Source Preference ($\beta = 0.187$, $t = 3.816$, $p < 0.001$; H3a), and the interaction of Perceived Trustworthiness × Analytical Processing was similarly significant ($\beta = 0.163$, $t = 3.075$, $p = 0.002$; H3b). These findings indicate that analytically oriented individuals assign greater diagnostic weight to credibility attributes during source evaluation, amplifying the effects of both expertise and

trustworthiness perceptions on news-source preference. H3a and H3b are supported.

In contrast, neither the Perceived Expertise × Heuristic Processing interaction ($\beta = 0.041$, $t = 0.603$, $p = 0.547$; H3c) nor the Perceived Trustworthiness × Heuristic Processing interaction ($\beta = 0.037$, $t = 0.521$, $p = 0.602$; H3d) achieved statistical significance. Although the relationships are directionally positive, the effects failed to reach conventional significance levels, indicating that heuristic processing orientation does not meaningfully amplify the credibility-preference relationships in the present sample. H3c and H3d are unsupported, suggesting that heuristic processors may rely on more generalized or surface-level cues in source selection rather than systematically differentiating sources based on expertise or trustworthiness attributes.

Overall, the results provide partial support for H3. Analytical processing orientation significantly moderates the effects of both credibility dimensions on news-source preference, whereas heuristic processing does not exert a statistically reliable moderation effect within this digitally mediated, health communication context.

7. DISCUSSION

The findings of this study provide empirical support for an integrated source credibility-dual-process account of news-source preference in digital blood-donation campaigns. By examining the direct effects of perceived expertise and perceived trustworthiness alongside the moderating role of cognitive processing style, the study advances a cognitively contingent model of epistemic source prioritization within platformized Egyptian health communication environments. These results also align with broader scholarship on mediatized digital communication, which highlights how social

interaction patterns within online platforms influence the circulation and evaluation of information in contemporary networked media ecosystems (Barry et al., 2024).

7.1 Perceived Expertise as a Dominant Epistemic Signal

The strong positive effect of perceived expertise on news-source preference ($\beta = 0.412$, $p < 0.001$) confirms the foundational proposition of Source Credibility Theory that perceived domain competence constitutes the primary cognitive criterion through which audiences evaluate informational sources (Hovland & Weiss, 1951; Ohanian, 1990). In the context of digital blood-donation campaigns – characterized by heightened health risk salience and institutional responsibility – expertise functions as a key criterion of epistemic admission, granting systematic cognitive attention to sources perceived as medically competent and institutionally authoritative (Metzger, 2007). This finding is consistent with prior research demonstrating the persistent salience of expertise-based credibility signals even within algorithmically curated digital environments (Shin, 2022; Metzger & Flanagin, 2013). It also resonates with emerging research suggesting that credibility perceptions significantly shape patterns of information diffusion and news engagement across social media platforms (Moayad et al., 2026).

7.2 Perceived Trustworthiness as an Independent Evaluative Dimension

The significant positive effect of perceived trustworthiness ($\beta = 0.338$, $p < 0.001$) corroborates the theoretical distinction between the cognitive and affective-evaluative dimensions of source credibility (Hovland et al., 1953). The comparatively lower magnitude of the trustworthiness coefficient relative to expertise suggests that cognitive assessments of domain competence may exert greater anchoring influence on source prioritization than affective assessments of honesty and institutional integrity within this context. Nevertheless, trustworthiness contributes unique and independent predictive variance beyond expertise, underscoring its structural role as a stabilizing evaluative cue in risk-sensitive digital health communication (Metzger, 2007; Jenkins et al., 2020). In the Egyptian media landscape – where institutional trust has been historically variable – perceived trustworthiness may represent a particularly consequential evaluative dimension, consistent with van Dijck et al.'s (2018) argument that epistemic authority in

platformized environments must be actively earned rather than structurally assumed. Moreover, the role of trust perceptions in digital environments is closely linked to broader patterns of social interaction and psychological engagement on social media platforms (Abdellatif, 2022).

7.3 Analytical Processing as a Credibility Amplifier

The moderation analyses reveal that analytical processing orientation significantly amplifies the effects of both perceived expertise (H3a: $\beta = 0.187$, $p < 0.001$) and perceived trustworthiness (H3b: $\beta = 0.163$, $p = 0.002$) on news-source preference. Analytically oriented individuals treat credibility attributes as substantive diagnostic indicators of informational legitimacy, deploying them as focal evaluative criteria that actively structure source-selection decisions. This finding is consistent with the Elaboration Likelihood Model's prediction that credibility cues acquire greater persuasive weight under conditions of high elaboration (Petty & Cacioppo, 1986), and extends this logic to the pre-persuasive stage of source-level epistemic prioritization – a theoretical contribution of particular significance in information-saturated platformized environments where source triage necessarily precedes message elaboration (Hemp, 2009). In addition, contemporary research indicates that the growing integration of social media analytics within media institutions increasingly shapes how information is prioritized and disseminated in digital news ecosystems (Moayad et al., 2024).

7.4 Heuristic Processing and the Limits of Credibility Activation

In contrast, heuristic processing orientation did not significantly moderate the credibility-preference relationships (H3c: $\beta = 0.041$, $p = 0.547$; H3d: $\beta = 0.037$, $p = 0.602$). This null finding suggests that heuristic processors may rely on structurally different source-selection pathways – particularly interface-level signals such as algorithmic prominence, verification badges, follower counts, and visual authority cues – rather than on evaluated expertise and trustworthiness attributes (Sundar, 2008; Shin, 2022). Under the Heuristic-Systematic Model, heuristic processors conserve cognitive effort by defaulting to salient, readily accessible cues rather than engaging in deeper attributional credibility assessment (Chaiken, 1980). These dynamics are consistent with broader transformations in the digital news environment, where journalism increasingly operates within algorithmically mediated

communication systems that shape how information is encountered and interpreted by audiences (Mohamed et al., 2026). This interpretation has direct implications for campaign design: for heuristic audience segments, platform-level visibility strategies and social endorsement amplification may be necessary complements to credibility-based messaging in order to achieve effective source preference.

7.5 Theoretical and Practical Contributions

Theoretically, this study advances a moderated credibility–preference model that specifies the cognitive boundary conditions under which source credibility dimensions exert differential effects on epistemic source prioritization. By demonstrating that processing orientation moderates source-level preference – not merely message-level attitudes – the study positions news-source preference as a distinct pre-persuasive stage in the digital health communication process. Practically, the findings underscore the need for audience-segmented campaign strategies: analytically oriented audiences respond to substantive expertise and trustworthiness signals, while heuristically oriented audiences require platform-level visibility interventions to activate source preference through alternative cognitive pathways.

7.6 Limitations and Directions for Future Research

Several limitations should be noted. The reliance on a university student sample constrains generalizability to broader population segments, including older adults and lower-education groups. The cross-sectional design precludes causal inference, and reverse causation – whereby prior source preferences shape retrospective credibility assessments – cannot be excluded. The operationalization of Cognitive Processing Style as a stable dispositional construct may not fully capture situational processing variability, and future research employing experimental priming or experience-sampling designs could address this

limitation more sensitively. Additionally, the study did not examine downstream persuasive outcomes such as behavioral intention or actual blood-donation behavior; future research should trace the complete persuasion pathway from source selection through to behavioral response. Finally, the study was conducted within a specific Egyptian university context spanning four public universities (Zagazig University, Ain Shams University, Assiut University, and Beni-Suef University). Cross-national comparative research examining whether the moderated credibility–preference relationships replicate in other Arab or culturally distinct contexts would meaningfully advance the generalizability of the proposed framework.

8. CONCLUSION

The study concludes that perceived expertise and perceived trustworthiness significantly influence audiences' preferences for news sources within digital blood-donation campaigns in Egypt, with expertise emerging as the stronger determinant. The findings also show that analytical cognitive processing strengthens the effects of both expertise and trustworthiness on source preference, whereas heuristic processing does not produce significant moderating effects. These results indicate that news-source preference is shaped not only by the credibility attributes of the source but also by the way audiences cognitively process information.

The study further demonstrates that credibility functions not only at the stage of shaping attitudes but also earlier in the source-selection process, guiding audiences' epistemic prioritization of information sources. Practically, the findings suggest that digital health campaigns should adopt differentiated communication strategies that account for audiences' cognitive diversity. Analytically oriented audiences respond more strongly to evidence-based expertise and transparent credibility cues, whereas heuristically oriented audiences require stronger platform-level visibility signals and social endorsements to enhance source preference and campaign effectiveness.

REFERENCES

- Abdellatif, M. A. M. (2022). The impact of social media on life satisfaction: The mediating role of social comparison, envy and self-esteem. *Information Sciences Letters*, 11(5), 1805–1813. <https://doi.org/10.18576/isl/110536>
- Ayeh, J. K. (2015). Travellers' acceptance of consumer-generated media: An integrated model of technology acceptance and source credibility theories. *Computers in Human Behavior*, 49, 324–334. <https://doi.org/10.1016/j.chb.2014.12.049>
- Barry, W. I. A., Abdellatif, M. A. M., & Moayad, H. G. (2024). Mediatization and patterns of social interaction on social media. *Global Media and Communication*, 20(2), 237–252. <https://doi.org/10.1177/17427665221135094>

- Brislin, R. W. (1970). Back-translation for cross-cultural research. *Journal of Cross-Cultural Psychology*, 1(3), 185–216. <https://doi.org/10.1177/135910457000100301>
- Chaiken, S. (1980). Heuristic versus systematic information processing and the use of source versus message cues in persuasion. *Journal of Personality and Social Psychology*, 39(5), 752–766. <https://doi.org/10.1037/0022-3514.39.5.752>
- Chaiken, S., Liberman, A., & Eagly, A. H. (1989). Heuristic and systematic processing within and beyond the persuasion context. In J. S. Uleman & J. A. Bargh (Eds.), *Unintended thought* (pp. 212–252). Guilford Press.
- Cohen, J. (2013). *Statistical power analysis for the behavioral sciences* (2nd ed.). Routledge.
- Dellarocas, C. (2003). The digitization of word-of-mouth: Promise and challenges of online feedback mechanisms. *Management Science*, 49(10), 1407–1424. <https://doi.org/10.1287/mnsc.49.10.1407.17308>
- DeVito, M. A. (2017). From editors to algorithms: A values-based approach to understanding story selection in the Facebook news feed. *Digital Journalism*, 5(6), 753–773. <https://doi.org/10.1080/21670811.2016.1178592>
- Egyptian Ministry of Health and Population. (2026). *National blood donation initiatives*. <https://www.mohp.gov.eg/SectorServices.aspx?Deptcode=20&&SectorCode=7>
- Eltewacy, N. K., Ali, H. T., Owais, T. A., Ghazal, H., Karim, H., Almheiri, A. S., Naeem, K., Suliman, A., Usman, M., Alhashimi, N., Samara, B., Shalash, M. M., Mane, A. B., Sallam, M., Balqis, B. J., Ahmed, H. O., Banday, S. U., Acharya, B., & Eltewacy, N. K. (2024). Unveiling blood donation knowledge, attitude, and practices among 12,606 university students: A cross-sectional study across 16 countries. *Scientific Reports*, 14, Article 8219. <https://doi.org/10.1038/s41598-024-58284-4>
- Epstein, S., Pacini, R., Denes-Raj, V., & Heier, H. (1996). Individual differences in intuitive-experiential and analytical-rational thinking styles. *Journal of Personality and Social Psychology*, 71(2), 390–405. <https://doi.org/10.1037/0022-3514.71.2.390>
- Evans, J. St. B. T., & Stanovich, K. E. (2013). Dual-process theories of higher cognition: Advancing the debate. *Perspectives on Psychological Science*, 8(3), 223–241. <https://doi.org/10.1177/1745691612460685>
- Flanagin, A. J., & Metzger, M. J. (2000). Perceptions of Internet information credibility. *Journalism & Mass Communication Quarterly*, 77(3), 515–540. <https://doi.org/10.1177/107769900007700304>
- Gretzel, U. (2006). Consumer-generated content: Trends and implications for branding. *e-Review of Tourism Research*, 4(3), 9–11.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2019). *A primer on partial least squares structural equation modeling (PLS-SEM)* (2nd ed.). Sage.
- Hair, J. F., Sarstedt, M., Ringle, C. M., & Gudergan, S. P. (2022). *Advanced issues in partial least squares structural equation modeling*. Sage.
- Hemp, P. (2009). Death by information overload. *Harvard Business Review*, 87(9), 82–89.
- Hovland, C. I., Janis, I. L., & Kelley, H. H. (1953). *Communication and persuasion: Psychological studies of opinion change*. Yale University Press.
- Hovland, C. I., & Weiss, W. (1951). The influence of source credibility on communication effectiveness. *Public Opinion Quarterly*, 15(4), 635–650. <https://doi.org/10.1086/266350>
- Jenkins, E. L., Ilicic, J., Barklamb, A. M., & McCaffrey, T. A. (2020). Assessing the credibility and authenticity of social media content for applications in health communication: Scoping review. *Journal of Medical Internet Research*, 22(7), Article e17296. <https://doi.org/10.2196/17296>
- Kamins, M. A. (1990). An investigation into the “match-up” hypothesis in celebrity advertising: When beauty may be only skin deep. *Journal of Advertising*, 19(1), 4–13. <https://doi.org/10.1080/00913367.1990.10673175>
- Kim, D. Y., & Kim, H. Y. (2021). Trust me, trust me not: A nuanced view of influencer marketing on social media. *Journal of Business Research*, 136, 621–632. <https://doi.org/10.1016/j.jbusres.2021.05.024>
- Kohring, M., & Matthes, J. (2007). Trust in news media: Development and validation of a multidimensional scale. *Communication Research*, 34(2), 231–252. <https://doi.org/10.1177/0093650206298071>
- Metzger, M. J. (2007). Making sense of credibility on the Web: Models for evaluating online information and recommendations for future research. *Journal of the American Society for Information Science and Technology*, 58(13), 2078–2091. <https://doi.org/10.1002/asi.20672>
- Metzger, M. J., & Flanagin, A. J. (2013). Credibility and trust of information in online environments: The use of cognitive heuristics. *Journal of Pragmatics*, 59, 210–220. <https://doi.org/10.1016/j.pragma.2013.07.012>

- Moayad, H. G., Abdellatif, M. A. M., & Mohamed, A. S. (2026). What predicts news-sharing behavior on social media? *Scientific Culture*, 12(4).
- Moayad, H. G., Abdellatif, M. A. M., Mohamed, A. S., & Abdelhafez, A. K. A. (2024). The impact of social media analytics on media institutions' decision effectiveness. *Journalism & Mass Communication Quarterly*. Advance online publication. <https://doi.org/10.1177/10776990241290234>
- Mohamed, A. S., Moayad, H. G., & Ali, A. K. (2026). Rethinking news in the new media environment: A theoretical perspective on journalism. *Scientific Culture*, 12(4), 1167–1184.
- Ohanian, R. (1990). Construction and validation of a scale to measure celebrity endorsers' perceived expertise, trustworthiness, and attractiveness. *Journal of Advertising*, 19(3), 39–52. <https://doi.org/10.1080/00913367.1990.10673191>
- Pennycook, G., & Rand, D. G. (2019). Lazy, not biased: Susceptibility to partisan fake news is better explained by lack of reasoning than by motivated reasoning. *Cognition*, 188, 39–50. <https://doi.org/10.1016/j.cognition.2018.06.011>
- Petty, R. E., & Cacioppo, J. T. (1986). *Communication and persuasion: Central and peripheral routes to attitude change*. Springer.
- Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology*, 63, 539–569. <https://doi.org/10.1146/annurev-psych-120710-100452>
- Ramondt, S., Kerkhof, P., & Merz, E. M. (2025). Boosting blood donations through Facebook engagement: Randomized controlled field trial. *Journal of Medical Internet Research*, 27, Article e64740. <https://doi.org/10.2196/64740>
- Shin, D. (2022a). How do people judge the credibility of algorithmic sources? *AI & Society*, 37, 81–96. <https://doi.org/10.1007/s00146-021-01304-w>
- Shin, D. (2022b). Expanding the role of trust in the experience of algorithmic journalism: User sensemaking of algorithmic news. *Telematics and Informatics*, 64, Article 101679. <https://doi.org/10.1016/j.tele.2021.101679>
- Shoemaker, P. J., & Vos, T. (2009). *Gatekeeping theory*. Routledge.
- Sundar, S. S. (2008). The MAIN model: A heuristic approach to understanding technology effects on credibility. In M. J. Metzger & A. J. Flanagin (Eds.), *Digital media, youth, and credibility* (pp. 73–100). MIT Press.
- Thorson, K., & Wells, C. (2016). Curated flows: A framework for mapping media exposure in the digital age. *Communication Theory*, 26(3), 309–328. <https://doi.org/10.1111/comt.12087>
- Till, B. D., & Busler, M. (1998). Matching products with endorsers: Attractiveness versus expertise. *Journal of Consumer Marketing*, 15(6), 576–586. <https://doi.org/10.1108/07363769810241445>
- van Dijck, J., Poell, T., & de Waal, M. (2018). *The platform society: Public values in a connective world*. Oxford University Press.
- Weismueller, J., Harrigan, P., Soutar, G., & Dolan, R. (2020). Influencer endorsements: How advertising disclosure and source credibility affect consumer purchase intention on social media. *Australasian Marketing Journal*, 28(4), 246–260. <https://doi.org/10.1016/j.ausmj.2020.03.002>
- Wellman, B. (2023). Networked trust and credibility performance in digital environments. *New Media & Society*. Advance online publication. <https://doi.org/10.1177/14614448231160978>
- World Health Organization. (2022). *Global status report on blood safety and availability 2021*. <https://www.who.int/publications/i/item/9789240051683>
- Yoo, K. H., & Gretzel, U. (2011). Influence of personality on travel-related consumer-generated media creation. *Tourism Management*, 32(4), 690–701. <https://doi.org/10.1016/j.tourman.2010.05.027> .