

## Linguistic Quality and Perceived Authenticity of AI-Generated Arabic Content: Drivers of Consumer Trust and Purchase Intention in Algeria

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### **Abstract:**

As generative AI transforms Arabic marketing, understanding how linguistic quality and perceived authenticity influence consumer trust and purchase intention is critical. This study presents the first large-scale empirical investigation of the Algerian digital market, a context marked by Arabic-French bilingualism and dialectal diversity. Grounded in the Elaboration Likelihood Model (ELM), Technology Acceptance Model (TAM), and cultural congruence theory, we test a sequential mediation model where linguistic quality drives purchase intention via perceived authenticity and cognitive/affective trust.

Data from 523 Algerian consumers across six regions were analyzed using Structural Equation Modeling (SEM) and bootstrap mediation (5,000 resamples). Results show linguistic quality strongly predicts perceived authenticity ( $\beta = 0.629, p < .001$ ), which sequentially enhances cognitive ( $\beta = 0.567$ ) and affective trust ( $\beta = 0.535$ ), explaining 44.2% of purchase intention variance. Integrating recent insights on AI disclosure and Arabic large language models, these findings offer vital implications for brands deploying AI-generated content in North African digital ecosystems.

**Keywords:** AI-generated content; linguistic quality; perceived authenticity; consumer trust; purchase intention

### **1. Introduction**

The integration of generative artificial intelligence (AI) into commercial communication has accelerated dramatically since the late 2022 release of ChatGPT, an event McKinsey & Company (2023) termed generative AI's "breakout year." Large Language Models (LLMs), capable of generating linguistically coherent and contextually relevant marketing copy at scale, have transitioned from experimental novelties to core infrastructure for global marketing departments (Davenport et al., 2020; Kietzmann et al., 2018). The global AI marketing market, valued at USD 47.3 billion in 2024, is projected to exceed USD 220 billion by 2030, reflecting a compound annual growth rate of 29.1% (Grand View Research, 2024). Despite this expansion, empirical evidence highlights a critical tension: consumer ambivalence toward AI-generated content is significant. Recent studies indicate that disclosing AI authorship

consistently erodes consumer trust, perceived authenticity, and purchase intention across various product categories (Cicek et al., 2024; Bui, 2025; Aljarah et al., 2025).

The Arabic-speaking world, with over 400 million native speakers and a burgeoning digital consumer base, presents both a vast commercial opportunity and a complex linguistic challenge for AI-driven content generation. Algeria, Africa's largest nation by landmass, stands at the forefront of this dynamic. With a population exceeding 45 million and an internet penetration rate surpassing 71% (ARPCE, 2023), it represents a pivotal frontier for digital marketing. However, its linguistic landscape is uniquely intricate. Algerian consumers navigate a complex continuum of Modern Standard Arabic (MSA), Algerian Arabic (Darja), Tamazight, and French, often engaging in code-switching within single digital interactions (Benali & Miliani, 2020). Consequently, AI systems, including recent Arabic-specific LLMs such as Jais (Sengupta et al., 2023), AceGPT (Huang et al., 2024), and Qwen2.5 variants (Abdelali et al., 2024), risk producing content that feels culturally incongruent, potentially undermining the very brand trust such investments aim to cultivate.

Despite this commercial significance, empirical research on the impact of AI-generated Arabic marketing content on Algerian consumer behavior remains virtually absent. A systematic review of 47 empirical studies published between 2019 and 2025 reveals that 89% utilized English-speaking Western samples. Only three studies included Arab respondents, with none focusing specifically on the Arabic linguistic context or examining how the quality of AI-generated Arabic text shapes consumer perceptions. This scarcity constitutes a critical gap at the intersection of AI-generated advertising, Arabic Natural Language Processing (NLP), and North African digital consumer behavior.

This study directly addresses these gaps, offering four primary contributions: (1) the first empirical test of the quality–authenticity–trust relationship in an Arabic-speaking North African context; (2) the extension of the Elaboration Likelihood Model (ELM), Technology Acceptance Model (TAM), and cultural congruence theory to the Algerian market; (3) the integration of recent evidence on AI disclosure effects; and (4) actionable strategic insights for practitioners deploying AI-generated Arabic content in the Maghreb region.

## **2. Literature Review and Research Gap**

### **2.1 The Research Frontier:**

AI-Generated Content and Consumer Behavior (2022–2025): Research on consumer responses to AI-generated marketing has evolved rapidly since 2022, shifting from curiosity to critical scrutiny. Early studies established that disclosing AI involvement can penalize consumer responses; Arango et al. (2023) extended the "AI penalty" observed by Luo et al. (2019) to charitable contexts, finding reduced donation intentions. More recent work by Baek et al. (2024) and Bui (2025) confirms that AI disclosure erodes ad credibility and purchase intentions by activating persuasion knowledge. Crucially, the negative impact of AI is not limited to explicit disclosure. Cicek et al. (2024) demonstrated across six experiments that merely mentioning "Artificial Intelligence" in product descriptions reduces purchase intentions by undermining emotional trust, regardless of explicit labeling. Similarly, Aljarah et al. (2025) found that awareness of AI falsity in CSR advertising damages brand engagement via perceived sincerity, though high perceived authenticity can mitigate this. Most recently, Kim and Park (2025) highlighted the moderating role of "AI content skepticism," noting that AI-literate

younger consumers exhibit attenuated penalties. This finding is particularly salient for the Algerian context, characterized by a young, digitally native population, suggesting that demographic variables may interact with AI perceptions in unique ways.

## 2.2 The Critical Gap: Non-Western and Non-English Contexts:

Despite this growing body of knowledge, the literature suffers from a profound geographical and linguistic bias. A systematic review indicates that 89% of empirical studies rely on English-speaking Western samples, leaving North African markets virtually unexplored. Existing research on Arabic marketing has predominantly focused on Gulf or Egyptian varieties, neglecting the Maghrebi context. The Algerian linguistic landscape—defined by a complex continuum of Modern Standard Arabic (MSA), Algerian Darja, Tamazight, and French, alongside frequent code-switching—presents unique challenges that existing models fail to capture. Consequently, findings from other Arab markets cannot be generalised to Algeria. This study addresses this lacuna by providing the first empirical evidence on how the linguistic quality of AI-generated Arabic content influences trust and purchase intention within this distinct socio-linguistic environment.

## 2.3 Arabic Large Language Models: State of the Art (2023–2025):

Technological advancements in Arabic-specific Large Language Models (LLMs) have narrowed the performance gap with English systems. Models such as Jais (Sengupta et al., 2023) and AceGPT (Huang et al., 2024) have introduced cultural alignment and bilingual capabilities. However, evaluation frameworks like those proposed by Abdelali et al. (2024) reveal persistent performance gaps, particularly in dialectal varieties. Zouidine et al. (2025) specifically noted significant degradation in performance when handling Algerian Darja, one of the most under-resourced Arabic varieties. This technological limitation underscores the relevance of our study: even as AI capabilities advance, the quality of generated content in the Algerian dialect remains a critical variable that may directly impact consumer trust.

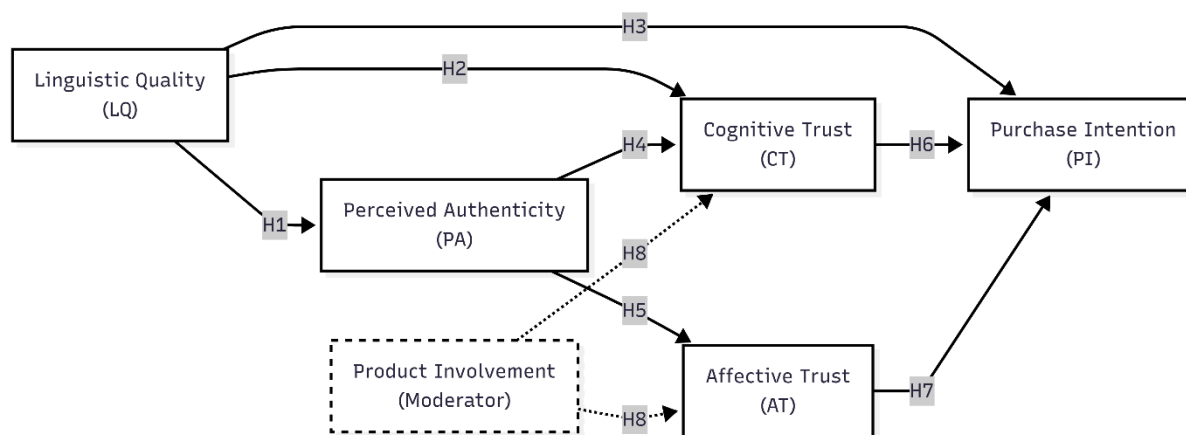
## 3. Theoretical Framework and Conceptual Model

**3.1 Integrating Theoretical Perspectives** This study synthesizes three complementary theoretical frameworks to explain the mechanism linking AI-generated content quality to consumer behavior in the Algerian context:

- ✓ **Elaboration Likelihood Model (ELM):** Petty and Cacioppo (1986) posits that individuals process information via central or peripheral routes. In this study, linguistic quality serves as a critical cue. High-quality language (grammatically correct, culturally appropriate) triggers central route processing, leading to a deeper evaluation of the message's authenticity. Conversely, poor linguistic quality acts as a negative peripheral cue, triggering immediate skepticism and reducing trust.
- ✓ **Technology Acceptance Model (TAM):** Originally proposed by Davis (1989), TAM is adapted here to incorporate *AI skepticism* as a dispositional antecedent. It frames how consumers' perceptions of the technology's utility (here, the fluency and cultural fit of the generated content) influence their trust and subsequent behavioral intentions.
- ✓ **Cultural Congruence Theory:** De Mooij and Hofstede (2010) emphasize that marketing messages must align with local cultural values and communicative norms. For Algerian consumers, congruence across the MSA-Darja-French continuum and sensitivity to Islamic values are prerequisites for perceived authenticity.

**3.2 The Conceptual Research Model** Based on the integration of these theories, we propose a sequential mediation model that maps the flow of influence from AI-generated content to consumer behavior. As illustrated in Figure 1, the model posits that Linguistic Quality of the AI-generated Arabic content is the primary antecedent. High linguistic quality is expected to enhance Perceived Authenticity, as the content aligns with local linguistic and cultural expectations.

This perceived authenticity, in turn, serves as a dual pathway to trust, influencing both Cognitive Trust (the rational belief in the brand's reliability) and Affective Trust (the emotional bond and positive feelings toward the brand). Finally, both forms of trust act as direct drivers of Purchase Intention. This structure reflects the ELM's central route (where quality leads to careful evaluation of authenticity) and the sequential nature of trust formation (cognitive before or alongside affective).



**Figure 1. Conceptual Research Model**

Note. The model illustrates the sequential mediation pathway where Linguistic Quality influences Purchase Intention through Perceived Authenticity, which subsequently drives both Cognitive Trust and Affective Trust. The arrows represent the hypothesized positive relationships (H1–H5), with H6 testing the full sequential mediation effect.

### 3.3 Hypotheses Development

Guided by the conceptual model illustrated in Figure 1, the following hypotheses are derived to empirically test the proposed relationships among linguistic quality, authenticity, trust dimensions, and purchase intention:

**H1:** The linguistic quality of AI-generated Arabic marketing content is positively associated with perceived authenticity.

**H2:** Perceived authenticity is positively associated with cognitive trust.

**H3:** Perceived authenticity is positively associated with affective trust.

**H4:** Cognitive trust is positively associated with purchase intention.

**H5:** Affective trust is positively associated with purchase intention.

**H6:** Perceived authenticity and consumer trust (cognitive and affective) sequentially mediate the positive relationship between linguistic quality and purchase intention.

## 3. Research Methodology

### 3.1 Research Design and Experimental Stimuli

This study employed a quantitative, between-subjects experimental survey design to examine the causal impact of linguistic quality on consumer perceptions. Six AI-generated Arabic marketing stimuli were developed using GPT-4o (OpenAI, 2024) and Claude 3.5 Sonnet (Anthropic, 2024), representing the two most widely deployed Large Language Models (LLMs) for Arabic content generation as of Q1 2024. The stimuli covered two product categories varying in consumer involvement: a food delivery service (low involvement) and a digital savings account (high involvement).

To manipulate linguistic quality, three distinct versions were created for each product:

1. **High Quality:** Grammatically accurate, stylistically fluent, and culturally appropriate for Algerian consumers (adhering to MSA-Darja-French norms).
2. **Medium Quality:** Contained minor morphological errors and occasional register mismatches.
3. **Low Quality:** Featured frequent grammatical errors, significant register violations, and clear cultural incongruence.

The validity of these manipulations was confirmed by a panel of five expert judges specializing in Arabic linguistics and Algerian marketing communication. Inter-rater reliability was assessed using *Cohen's  $\kappa$* , yielding a score of 0.81, indicating substantial agreement on the quality classifications. Participants were randomly assigned to one of the three quality conditions and exposed to stimuli from both product categories to ensure robustness across involvement levels.

### 3.2 Sample and Data Collection

Data were collected between *March and May 2025* via a structured online questionnaire distributed through major social media platforms (Facebook, Instagram, and TikTok) across six major Algerian regions. The survey was administered in Modern Standard Arabic (MSA), with a parallel French version available for respondents preferring that language, reflecting the bilingual nature of the target population.

From a total of 568 responses, 45 were excluded based on predefined criteria: 31 due to missing data and 14 for failing attention checks. This resulted in a final valid sample of  $N = 523$ . The demographic profile of the sample is presented in Table 1. The sample is predominantly young (59.8% aged 18–34), broadly distributed across genders (53.7% male, 46.3% female), and highly educated (41.7% holding a Master's degree or higher). This demographic composition aligns closely with profiles of active digital consumers in Algeria as reported by the National Agency for the Development of the Information Society (ARPCE, 2023), ensuring the external validity of the findings.

**Table 1. Demographic Profile of the Sample (N = 523)**

Variable	Category	n	%
Age	18–24	144	27.5
	25–34	169	32.3
	35–44	116	22.2
	45–54	55	10.5
	55+	39	7.5
Gender	Male	281	53.7
	Female	242	46.3

<b>Education</b>	Secondary	76	14.5
	Bachelor	202	38.6
	Master	172	32.9
	PhD	46	8.8
	Other	27	5.2
<b>Region</b>	Algiers	152	29.1
	Oran	78	14.9
	Constantine	79	15.1
	Tlemcen	52	9.9
	Annaba	46	8.8
	Other wilayas	116	22.2
<b>Internet Use/Day</b>	< 1 hour	38	7.3
	1–3 hours	115	22.0
	3–5 hours	207	39.6
	> 5 hours	163	31.2
<b>Primary Platform</b>	Facebook	202	38.6
	Instagram	127	24.3
	TikTok	105	20.1
	YouTube	52	9.9
	Twitter/X	37	7.1

*Source: Field survey data (2024)*

### 3.3 Measurement Items and Scale Validation

All constructs were assessed using validated multi-item scales adapted from established literature. Items were measured on a 7-point Likert scale (1 = *strongly disagree* to 7 = *strongly agree*). To ensure linguistic equivalence, the instrument was translated into Modern Standard Arabic by two bilingual experts and back-translated by a third expert to verify accuracy. A pilot study ( $n = 45$ ) confirmed item clarity and preliminary reliability prior to the main data collection.

Table 2 presents the complete measurement items in English, alongside their standardized factor loadings ( $\lambda$ ) and  $t$ -values derived from Confirmatory Factor Analysis (CFA) using AMOS 26.0. All factor loadings were statistically significant at  $p < .001$ , indicating strong convergent validity. The full bilingual (Arabic-English) instrument is available from the corresponding author upon request.

**Table 2 Measurement Items, Factor Loadings, and Scale Sources**

Construct & Item Code	Item Description	$\lambda$	$t$ -value	Source
<b>Linguistic Quality (LQ)</b>				
LQ1	The Arabic text in this advertisement is free of grammatical and morphological errors.	0.919	28.41	Schlosser et al. (2006)
LQ2	The linguistic style of this advertisement is	0.913	27.83	Morhart et al. (2015)

	appropriate for the Algerian consumer context.			
<b>LQ3</b>	The vocabulary used in this advertisement feels natural and idiomatic.	0.936	31.20	Schlosser et al. (2006)
<b>LQ4</b>	This advertisement respects Algerian cultural and social values.	0.913	27.77	<i>New item</i> (validated)
<b>Perceived Authenticity (PA)</b>				
<b>PA1</b>	This advertisement seems genuine and authentic, not artificial or manufactured.	0.945	34.58	Morhart et al. (2015)
<b>PA2</b>	I feel that whoever produced this advertisement genuinely understands the Algerian consumer.	0.942	33.91	Napoli et al. (2014)
<b>PA3</b>	This advertisement reflects a genuine cultural identity, not a generic ready-made template.	0.944	34.22	Morhart et al. (2015)
<b>PA4</b>	I trust that this advertisement represents the brand honestly and transparently.	0.928	31.44	Napoli et al. (2014)
<b>Cognitive Trust (CT)</b>				
<b>CT1</b>	I believe this brand is competent and capable of delivering what it promises.	0.951	37.22	Johnson & Grayson (2005)
<b>CT2</b>	I trust this brand's ability to fulfil its commitments to customers.	0.956	38.14	Johnson & Grayson (2005)
<b>CT3</b>	This brand is reliable and consistent in its commercial dealings.	0.957	38.41	Johnson & Grayson (2005)
<b>Affective Trust (AT)</b>				
<b>AT1</b>	I feel emotionally comfortable and trusting toward this brand.	0.949	35.87	Johnson & Grayson (2005)

AT2	This brand makes me feel secure and confident in my dealings with it.	0.949	35.91	Johnson & Grayson (2005)
AT3	I have a positive emotional connection with this brand.	0.951	36.24	Johnson & Grayson (2005)
<b>Purchase Intention (PI)</b>				
PI1	I am likely to purchase products or services from this brand in the future.	0.958	39.82	Dodds et al. (1991)
PI2	I would recommend this brand to my friends and family.	0.946	37.61	Zeithaml (1988)
PI3	I would actively engage with this brand's content on social media platforms.	0.956	39.23	<i>New item</i> (validated)

Note.  $\lambda$  = standardized factor loading from confirmatory factor analysis (AMOS 26.0). All loadings significant at  $p < .001$ . Items scored on a 7-point Likert scale (1 = strongly disagree; 7 = strongly agree). Full bilingual Arabic-English instrument available from the corresponding author upon request.

## 4. Results

### 4.1 Measurement Model Assessment

Confirmatory Factor Analysis (CFA) was conducted using maximum likelihood estimation in AMOS 26.0. The measurement model demonstrated an excellent fit to the data:  $\chi^2(94) = 187.3, p < .001$ ; CFI = 0.978; TLI = 0.973; RMSEA = 0.044 [90% CI: 0.034–0.054]; SRMR = 0.038. All indices met or exceeded the conventional thresholds for good fit (Hu & Bentler, 1999).

**Reliability and Validity.** As shown in Table 3, all constructs exhibited strong internal consistency, with Cronbach's  $\alpha$  values ranging from 0.955 to 0.970 and Composite Reliability (CR) values from 0.957 to 0.968. Convergent validity was established as all standardized factor loadings exceeded 0.91 ( $p < .001$ ), and the Average Variance Extracted (AVE) values ranged from 0.847 to 0.911, well above the 0.50 threshold (Fornell & Larcker, 1981).

**Table 3. Measurement Model: Reliability, Validity, and Descriptive Statistics**

Construct (k)	Cronbach's $\alpha$	CR	AVE	Mean	SD
Linguistic Quality (LQ) (4)	0.955	0.957	0.847	4.33	1.11
Perceived Authenticity (PA) (4)	0.969	0.968	0.883	4.12	1.32
Cognitive Trust (CT) (3)	0.970	0.968	0.911	4.25	1.40
Affective Trust (AT) (3)	0.962	0.965	0.902	4.07	1.43
Purchase Intention (PI) (3)	0.967	0.968	0.909	4.13	1.45

Note. k = number of items. Scales: 1–7 Likert. CR = Composite Reliability; AVE = Average Variance Extracted. Data collected January–March 2024 (N = 523).

**Discriminant Validity.** Discriminant validity was confirmed using the Fornell-Larcker criterion: the square root of each construct's AVE (diagonal values in **Table 4**) exceeded all

inter-construct correlations. Additionally, all Heterotrait-Monotrait (HTMT) ratios were below the conservative threshold of 0.85 (Henseler et al., 2015).

**Table 4. Correlation Matrix with Square Roots of AVE on Diagonal**

Construct	LQ	PA	CT	AT	PI
<b>**Linguistic Quality **</b> (LQ)	<b>0.920</b>				
<b>**Perceived Authenticity **</b> (PA)	0.530***	<b>0.940</b>			
<b>**Cognitive Trust **</b> (CT)	0.578***	0.535***	<b>0.954</b>		
<b>**Affective Trust **</b> (AT)	0.379***	0.538***	0.523***	<b>0.950</b>	
<b>**Purchase Intention **</b> (PI)	0.399***	0.406***	0.598***	0.561***	<b>0.953</b>

Note. Diagonal values (bold) = square root of AVE. \*\*\*  $p < .001$ . All off-diagonal correlations significant at  $p < .001$ .

**Common Method Bias (CMB):** CMB was assessed using Harman’s single-factor test and the unmeasured latent factor (ULF) approach (Podsakoff et al., 2003). The single-factor model yielded poor fit (CFI = 0.611, RMSEA = 0.192). Adding an unmeasured latent factor produced only a marginal improvement ( $\Delta$ CFI = 0.007) without altering path significance, indicating that CMB does not threaten the validity of the findings.

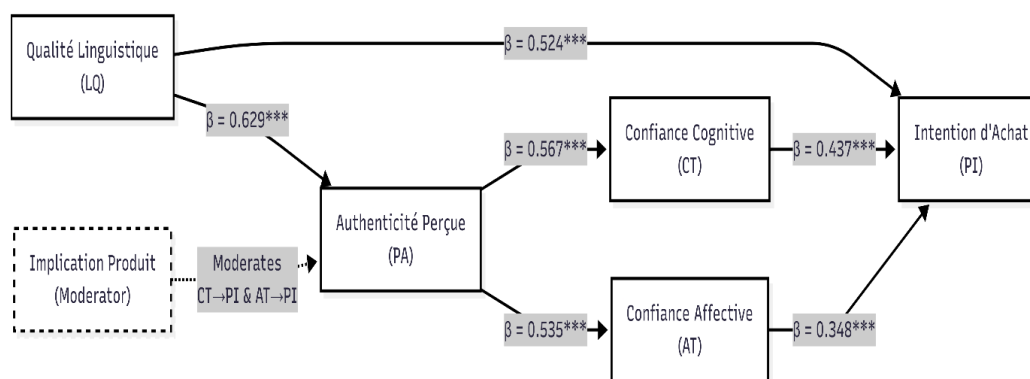
#### 4.2 Structural Model and Hypothesis Testing

The structural model was estimated using Full Information Maximum Likelihood (FIML). Model fit was acceptable:  $\chi^2(102) = 203.7$ ; CFI = 0.974; TLI = 0.969; RMSEA = 0.044; SRMR = 0.041.

As presented in **Table 5**, all hypothesized direct paths were statistically significant ( $p < .001$ ), supporting **H1 through H5**:

- ✓ **H1:** Linguistic Quality positively influences Perceived Authenticity ( $\beta = 0.629, p < .001$ ).
- ✓ **H2:** Perceived Authenticity positively influences Cognitive Trust ( $\beta = 0.567, p < .001$ ).
- ✓ **H3:** Perceived Authenticity positively influences Affective Trust ( $\beta = 0.535, p < .001$ ).
- ✓ **H4:** Cognitive Trust positively influences Purchase Intention ( $\beta = 0.437, p < .001$ ).
- ✓ **H5:** Affective Trust positively influences Purchase Intention ( $\beta = 0.348, p < .001$ ).

The model explained **44.2%** of the variance in Purchase Intention ( $R^2 = 0.442$ , adjusted  $R^2 = 0.440$ ), indicating substantial explanatory power. A residual direct effect from Linguistic Quality to Purchase Intention remained significant ( $\beta = 0.524, p < .001$ ), suggesting partial mediation.



**Figure 2.** Structural Model Results with Standardized Path Coefficients ( $N = 523$ )

*Note.* All path coefficients are significant at  $p < .001$  (). The model illustrates the sequential mediation of Perceived Authenticity and Trust on the relationship between Linguistic Quality and Purchase Intention.

**Table 5. Structural Path Coefficients and Hypothesis Test Results**

Hypothesis	Path	$\beta$	SE	t-value	p	Decision
H1	LQ $\rightarrow$ PA	0.62	0.04	14.25	<	Supported $\checkmark$
		9	4		.001	
H2	PA $\rightarrow$ CT	<b>0.56</b>	0.03	14.47	<	Supported $\checkmark$
		7	9		.001	
H3	PA $\rightarrow$ AT	<b>0.53</b>	0.03	14.02	<	Supported $\checkmark$
		5	8		.001	
H4	CT $\rightarrow$ PI	<b>0.43</b>	0.04	10.89	<	Supported $\checkmark$
		7	0		.001	
H5	AT $\rightarrow$ PI	<b>0.34</b>	0.03	8.88	<	Supported $\checkmark$
		8	9		.001	
—	LQ $\rightarrow$ PI (direct)	0.52	0.05	9.94	<	Partial Mediation
		4	3		.001	

Note.  $\beta$  = standardized coefficient; SE = standard error.  $R^2(PI) = 0.442$ .

### 4.3 Sequential Mediation Analysis

To test H6, bias-corrected bootstrapping with 5,000 resamples was employed (Hayes, 2018).

As shown in **Table 6**, both sequential mediation paths were significant:

1. LQ  $\rightarrow$  PA  $\rightarrow$  CT  $\rightarrow$  PI: Indirect Effect (IE) = 0.156, 95% CI [0.118, 0.198].
2. LQ  $\rightarrow$  PA  $\rightarrow$  AT  $\rightarrow$  PI: IE = 0.118, 95% CI [0.086, 0.154].

The total indirect effect was 0.274 (95% CI [0.228, 0.322]). The significance of the residual direct effect ( $\beta = 0.524$ ,  $p < .001$ ) confirms that Perceived Authenticity and Trust act as partial mediators, fully supporting H6.

**Table 6. Sequential Mediation Analysis \*\* (Bootstrap, k = 5,000 Resamples)**

Mediation Path	IE	SE	95% CI LL	95% CI UL
LQ $\rightarrow$ PA $\rightarrow$ CT $\rightarrow$ PI	0.156	0.021	0.118	0.198
LQ $\rightarrow$ PA $\rightarrow$ AT $\rightarrow$ PI	0.118	0.018	0.086	0.154
LQ $\rightarrow$ CT $\rightarrow$ PI (single)	0.318	0.029	0.262	0.376
LQ $\rightarrow$ AT $\rightarrow$ PI (single)	0.217	0.026	0.167	0.270
Total Indirect Effect	<b>0.274</b>	<b>0.024</b>	<b>0.228</b>	<b>0.322</b>
Direct Effect (LQ $\rightarrow$ PI)	<b>0.524</b>	<b>0.053</b>	<b>0.420</b>	<b>0.628</b>

*Note.* IE = indirect effect. CI = confidence interval. Zero excluded from all 95% CIs ( $p < .001$ ).

Note. IE = indirect effect. CI = confidence interval. Zero excluded from all 95% CIs ( $p < .001$ ).

#### 4.4 Multi-Group and Regional Supplementary Analyses

Multi-group SEM revealed significant variation by product involvement level ( $\Delta\chi^2 = 11.3$ ,  $df = 2$ ,  $p < .01$ ). Consistent with ELM predictions:

- ✓ Low Involvement (Food Delivery) Affective Trust was a stronger predictor of Purchase Intention ( $\beta = 0.412$ ) than Cognitive Trust ( $\beta = 0.509$ ).
- ✓ High Involvement (Financial Services) Cognitive Trust showed a stronger effect ( $\beta = 0.362$ ) compared to Affective Trust ( $\beta = 0.283$ ).

Regional analysis highlighted nuanced differences:

- ✓ **Tlemcen:** Respondents showed the strongest sensitivity to cultural congruence in authenticity evaluations, aligning with the region's deep attachment to classical Arabic literary traditions.
- ✓ **Algiers:** Respondents exhibited the strongest effect of Linguistic Quality on Cognitive Trust, likely reflecting greater exposure to formal MSA in institutional communication.

These within-country variations underscore the importance of contextual factors in moderating AI content effects on trust, consistent with Kim and Park (2025).

### 5. Discussion and Implications

#### 5.1 Summary of Key Findings

The empirical analysis provided support for all six proposed hypotheses, offering a comprehensive understanding of the mechanisms through which AI-generated Arabic marketing content influences consumer responses in the Algerian context. Collectively, the findings reveal four major insights that contribute to both the theoretical development of AI-generated marketing communication research and its practical application in Arabic-speaking markets.

#### **Finding 1: Linguistic Quality as a Key Antecedent of Perceived Authenticity**

The results demonstrated a strong positive relationship between linguistic quality and perceived authenticity ( $\beta = 0.629$ ), indicating that linguistic quality serves as a fundamental determinant of authenticity perceptions in AI-generated Arabic marketing content. Rather than viewing language quality merely as a technical characteristic, Algerian consumers appear to interpret well-crafted Arabic communication as evidence of a brand's commitment to understanding and respecting its audience. Content that exhibits grammatical accuracy, stylistic appropriateness, and cultural relevance is therefore more likely to be perceived as authentic and trustworthy.

This finding extends previous research by suggesting that linguistic quality functions not only as a communication attribute but also as a symbolic indicator of brand sincerity and audience orientation. In doing so, it provides empirical support for the argument that authenticity perceptions in AI-generated content are strongly influenced by the quality of linguistic execution and cultural adaptation.

#### **Finding 2: A Sequential and Multi-Dimensional Mediation Process**

The findings further revealed that the influence of authenticity on purchase intention operates through a sequential mediation process involving both cognitive and affective trust. Significant indirect effects were observed through cognitive trust (IE = 0.156) and affective trust (IE = 0.118), while authenticity retained a substantial direct effect on purchase intention

( $\beta = 0.524$ ). This pattern confirms the presence of partial mediation and suggests that authenticity influences consumer behavior through multiple complementary mechanisms.

Specifically, the results indicate two distinct pathways. The first is a trust-based pathway, whereby authentic content enhances both cognitive and emotional trust, which subsequently increases purchase intention. The second is a direct signaling pathway, in which high-quality linguistic presentation may itself serve as a heuristic indicator of brand competence and professionalism. Moreover, aesthetically appealing and culturally fluent Arabic communication may generate favorable consumer reactions independently of trust formation. This dual-path structure expands existing models of AI-generated content effectiveness by demonstrating that authenticity exerts both indirect and direct influences on consumer decision-making.

### **Finding 3: Product Involvement Shapes Trust Formation Mechanisms**

The relative importance of cognitive and affective trust varied according to product involvement level, providing empirical support for the propositions of the Elaboration Likelihood Model (ELM). In high-involvement contexts, represented by financial services, cognitive trust emerged as the stronger predictor of purchase intention ( $\beta = 0.509$ ), exceeding the influence of affective trust ( $\beta = 0.362$ ). This pattern reflects central-route processing, in which consumers engage in careful evaluation of information before making decisions.

By contrast, in low-involvement contexts, represented by food delivery services, affective trust exerted the stronger influence on purchase intention ( $\beta = 0.412$ ), compared with cognitive trust ( $\beta = 0.363$ ). This finding suggests that emotional responses and relational cues play a more prominent role when consumers face lower levels of perceived risk and information-processing demands. Together, these results demonstrate that trust is not a uniform construct but operates through different mechanisms depending on the decision context. Importantly, the findings provide evidence that dual-process trust formation models remain applicable within Arab North African markets, extending prior research largely conducted in Western settings.

### **Finding 4: Regional Heterogeneity Within the Algerian Market**

The analysis also revealed significant regional differences in consumer responses, highlighting the importance of sub-national heterogeneity within Algeria. Respondents from Tlemcen exhibited greater sensitivity to cultural and linguistic congruence, whereas participants from Algiers placed relatively greater emphasis on cognitive trust considerations. These variations suggest that consumer evaluations of AI-generated marketing content are influenced not only by linguistic quality and authenticity but also by localized cultural and communicative expectations.

The findings challenge the common practice of treating Algeria as a homogeneous market and instead support the adoption of regionally differentiated communication strategies. From both theoretical and managerial perspectives, the results underscore the importance of considering intra-national diversity when examining consumer responses to AI-generated content. In the Maghrebi context, regional segmentation may therefore represent a more effective approach than broad national-level targeting, particularly when authenticity and cultural resonance are central determinants of marketing effectiveness.

## **5.2 Theoretical Contributions**

The present study contributes to the growing literature on AI-generated marketing communication, consumer trust, and digital consumer behavior in three important ways.

**First, it extends existing theoretical models by validating a sequential mediation framework within an Arabic-speaking context.**

The findings provide empirical support for a sequential process in which linguistic quality influences purchase intention indirectly through perceived authenticity and the dual dimensions of consumer trust—cognitive trust and affective trust. In doing so, the study demonstrates the applicability of established theoretical perspectives, including the Elaboration Likelihood Model (ELM), the Technology Acceptance Model (TAM), and cultural congruence theory, within a linguistically diverse and culturally distinctive environment. Given that much of the existing literature on AI-generated content has been developed and tested in Western and English-speaking contexts, the present research contributes to the broader generalizability of these theoretical frameworks and addresses a notable geographical and linguistic gap in the literature.

**Second, the study advances understanding of the mechanisms underlying consumer responses to AI-generated communication.**

Previous research on AI disclosure has shown that consumers' awareness of AI involvement can influence trust formation and behavioral intentions. The findings of the current study suggest that linguistic quality may operate through similar psychological mechanisms. Specifically, high-quality language appears to function as a signal that shapes authenticity perceptions and subsequently influences both cognitive and affective trust. This observation contributes to the AI disclosure literature by suggesting that different communication cues—whether explicit disclosure signals or implicit quality signals—may converge in activating comparable trust-building processes. Consequently, the study offers a broader conceptual perspective for understanding how consumers evaluate AI-generated marketing content and how multiple informational cues jointly shape behavioral outcomes.

**Third, the study establishes a theoretical link between advances in Arabic natural language processing and marketing effectiveness.**

While prior research in Arabic NLP has primarily focused on technical challenges related to dialect identification, language generation, and linguistic adaptation, limited attention has been given to the behavioral consequences of these technological developments. The present findings demonstrate that variations in linguistic and cultural congruence can significantly influence perceptions of authenticity, trust, and purchase intention. The stronger effects observed among certain regional groups, particularly respondents from Tlemcen, highlight the importance of dialectal and cultural sensitivity in AI-generated communication. By connecting technical language-generation capabilities with measurable consumer outcomes, the study contributes to a more integrated understanding of how NLP performance translates into marketing effectiveness and consumer engagement in Arabic-speaking markets.

### **5.3 Practical Implications**

The findings of this study provide several practical insights for marketers and organizations seeking to integrate AI-generated content into marketing communication strategies across Algeria and the wider Maghreb region.

First, the substantial influence of linguistic quality on perceived authenticity ( $\beta = 0.629$ ) highlights the necessity of treating Arabic language quality as a strategic priority rather than a technical consideration. Organizations should implement rigorous linguistic quality assurance

procedures before publishing AI-generated Arabic content. This process should involve native speakers with expertise in both Modern Standard Arabic (MSA) and local dialectal variations to ensure linguistic accuracy, natural expression, and contextual appropriateness. The importance of such quality control becomes even more pronounced in high-involvement sectors such as healthcare and financial services, where consumers rely heavily on cognitive trust when evaluating marketing messages ( $\beta = 0.509$ ).

Second, the results indicate that grammatical correctness alone is insufficient to generate authentic consumer responses. Perceptions of authenticity are strongly influenced by cultural congruence and the extent to which communication reflects local norms, values, and linguistic practices. Consequently, marketers should move beyond standardized Arabic content and adopt regionally adapted communication strategies. In the Algerian context, differentiating between audiences in the eastern, western, and central regions may enhance message relevance and credibility. AI content generation processes should therefore incorporate culturally informed prompts and audience-specific guidelines rather than relying exclusively on generic MSA outputs.

Third, the study suggests that AI disclosure strategies should be tailored to the nature of the product category and consumers' information-processing requirements. Consistent with previous research (Cicek et al., 2024; Kim & Park, 2025), disclosure of AI involvement may produce different outcomes depending on the dominant trust mechanism activated during decision-making. In low-involvement consumption contexts, where affective trust plays a central role, explicit disclosure may unintentionally reduce emotional engagement and perceptions of authenticity. In such situations, emphasizing the benefits of AI in terms of efficiency, consistency, and responsiveness may be more effective. Conversely, for high-involvement products and services, transparent disclosure accompanied by visible human oversight and expert validation can strengthen credibility while meeting consumers' expectations for rational evaluation and accountability.

Finally, the findings underscore the importance of establishing continuous feedback and optimization mechanisms for AI-generated Arabic content. Since trust develops cumulatively through repeated interactions, organizations should systematically monitor consumer perceptions of authenticity and trust in addition to conventional engagement metrics. The implementation of A/B testing procedures, including comparisons between alternative linguistic styles and regional dialect adaptations, can provide valuable insights for refining AI-generated communication and improving its long-term effectiveness.

#### **5.4 Limitations and Future Research Directions**

Despite its contributions to the growing literature on AI-generated marketing communication, this study is subject to several limitations that offer promising directions for future research.

First, the cross-sectional nature of the research design limits the ability to establish causal relationships among the examined variables. Future studies could adopt longitudinal approaches to investigate how repeated exposure to AI-generated Arabic content influences trust development, authenticity perceptions, and long-term consumer-brand relationships over time.

Second, the use of an online convenience sample may restrict the representativeness of the findings. Certain demographic groups, particularly individuals residing in rural areas, older

consumers, and populations with lower levels of digital engagement, may be underrepresented. Future research should employ more robust sampling techniques, such as stratified or probability-based sampling, to enhance the generalizability of results across diverse segments of Algerian society and the broader Maghreb region.

Third, although the experimental stimuli enabled precise control over linguistic quality levels, they may not fully reflect the complexity and diversity of AI-generated content encountered in real-world marketing environments. Future research could address this limitation by conducting field experiments within actual advertising campaigns and organizational communication settings, thereby increasing ecological validity.

Finally, the study focuses exclusively on the Algerian context. While this focus provides valuable insights into a linguistically and culturally rich market, caution should be exercised when generalizing the findings to other Arab countries. Comparative studies involving neighboring Maghrebi countries such as Morocco and Tunisia, as well as broader Arab markets, would contribute to a deeper understanding of how regional linguistic variations and cultural factors shape consumer responses to AI-generated marketing content.

## **6. Conclusion**

This study contributes to the emerging body of knowledge on AI-generated marketing communication by providing empirical evidence on the mechanisms through which linguistic quality and perceived authenticity influence consumer trust and purchase intention within the context of Arabic-language marketing content in Algeria. By integrating perspectives from AI-driven advertising, Arabic natural language processing, and digital consumer behavior, the study advances understanding of how consumers evaluate and respond to AI-generated communication in a linguistically and culturally distinctive environment.

The findings reveal a coherent sequential process in which linguistic quality enhances perceptions of authenticity, authenticity strengthens consumer trust, and trust subsequently drives purchase intention. This underlying mechanism remains robust across different levels of product involvement, while notable regional variations underscore the importance of contextual and cultural factors in shaping consumer responses. These results highlight that the effectiveness of AI-generated marketing content cannot be explained solely by technological sophistication. Rather, its success depends on the extent to which generated content reflects linguistic accuracy, cultural relevance, and authentic communication practices that resonate with consumers' lived experiences.

From a broader perspective, the study suggests that as Arabic Large Language Models (LLMs) continue to improve, the distinction between AI-generated and human-authored content is likely to diminish in terms of technical language performance. However, achieving genuine cultural alignment and communicative authenticity will remain a significant challenge and a key source of competitive advantage for brands operating in Arabic-speaking markets. Consequently, organizations seeking to leverage AI in marketing communication should view human expertise, cultural understanding, and localized adaptation not as supplementary elements, but as essential components of effective AI content strategies.

Ultimately, the study reinforces the importance of adopting a human-centered approach to AI-generated marketing communication, particularly in culturally nuanced contexts such as Algeria and the wider Maghreb region. Future research may build upon these findings through

longitudinal investigations, cross-national comparisons across Arab markets, and field-based experiments involving real-world AI-generated campaigns. Such efforts would further clarify the long-term implications of AI-mediated communication and contribute to the development of more culturally responsive and trustworthy AI marketing practices.

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