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From Arabic Script to Arabizi: Language Practices and Identity in Online Communication

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Abstract

This study investigates the use of Arabizi, Arabic written in Latin script, in digital communication among Lebanese users. Based on approximately 180 survey responses, the study examines patterns of script use, demographic influences, and attitudes toward Arabizi. Results indicate that Arabizi and mixed-script writing dominate informal online communication, with users reporting greater comfort typing in Latin characters. Chi-square

analysis reveals a statistically significant association between age and education level on the one hand, and between “Writing Lebanese in Latin letters reflects Lebanese identity more strongly” and “Writing Lebanese in Latin letters reflects Lebanese identity more strongly” on the other, with younger participants more likely to use Arabizi. In contrast, no significant relationship is found with gender. A statistically significant association is also observed between script use and perceptions of Lebanese identity. Qualitative analysis of open-ended responses shows predominantly conditional attitudes, with participants accepting Arabizi in informal contexts but rejecting it in formal settings. The findings suggest that Arabizi is not an ideological replacement for Arabic, but rather a functional adaptation to digital communication, reflecting context-dependent and multimodal literacy practices.

Keywords: Arabizi, Writing, Latin letters, Online communication, Lebanese identity

1. Introduction

Arabizi refers to Arabic written with Latin letters. Arabizi is employed to represent both Modern Standard Arabic and various Arabic dialects. Arabizi employs numbers to represent Arabic letters that lack a phonetic counterpart in English or to accommodate the greater number of Arabic letters than English (Chehimi, 2021; Wahba, 2021). It is frequently utilized in casual environments like social networking platforms and is often blended with English (Chehimi, 2021). Moreover, Arabizi is considered the main potential threat to Arabic writing, and it reinforces the endangerment of handwriting. Arabizi is used extensively in electronic communication to supplement Arabic writing to convey a particular, informal communication style (Chang, 2022). However, researchers like Brabetz (2025) concluded in her work that "The orthographic Arabizi variety merges linguistic characteristics from both global and local dimensions. As a result, the Arabizi variety illustrates a form of linguistic glocalization within the Arabic language region” (p.121).

Youngsters devised a new mode of writing using Latin characters with Arabic numerical symbols to substitute missing Arabic letters and replace some Arabic characters not available in the English script. Arabizi has had an important impact on the handwriting of young people. They widely use Arabizi in chatting and texting (Abusa'aleek, 2014).

Arabizi has grown out of the need to write Arabic on systems that do not support native Arabic script. Arabizi continues to be popular because of users’ familiarity with it, and due to the higher proficiency of users in using an English keyboard compared to an Arabic keyboard (Darwish, 2014). Research indicated that a rise in the time dedicated to using Arabizi corresponds with a decline in mean spelling scores, and the opposite is also true (Al-Shaer, 2016).

Said Akl (1912–2014), a Lebanese poet, thinker, and language reformer, tried to replace the Arabic alphabet with a new Latin-based alphabet for Lebanese Arabic. To strengthen his quest, in the 1960s, he designed a Lebanese alphabet written in Latin letters with special diacritics to replace the Arabic script (Yassine, 2025). In 1969, he launched the newspaper *'Lebnaan*,' published entirely in the new proposed script. He also published poetry and essays in it (Yassine, 2025). Some would say that this is the predecessor to the phonetic, transliterated Arabic we use

today. However, the offered alphabet was never widely adopted outside of his intellectual and nationalist circles.

Said Akl's system was based on Latin letters, but modified with dots, accents, and numbers (similar to how modern Arabic chat "Arabizi" works). His goal was to reflect spoken Lebanese Arabic, not Quranic or Classical Arabic. For example, the first two verses of *Genesis* in Said Akl's Latin script (phonetically adapted to Lebanese pronunciation).

"Fi l-bdé khalaʾ Allaah s-samaawaat w-l-arḍ (1). W kaanat l-arḍ kharbi w-khaaliye, w ʿa wéž l-ġamr ẓléme, w rouḥ Allaah ʿam yirfé ʿa wéž l-mayya (2)."

According to Said Akl, "The Arabic language is destined to become extinct. And if I have become one of the great Arabic-language poets, it is precisely so that I can have the authority to express this idea" (Arab American News, 2014).

The main objective of the current work is to survey the extent to which the Lebanese today are using Latin letters in chats (WhatsApp, Short Message Service, social media, etc.), and if that reflects a continuation of Said Akl's vision. Actually, in Lebanon (as in much of the Arab world), people are often using Latin letters plus numbers in chats in what is commonly called Franco-Arabic, Arabizi, or Lebnénî chat. This system is very close to Said Akl's dream, but it wasn't invented by him; it grew naturally from texting before Arabic keyboards were widely available. In summary, the Lebanese organically created their own Akl-like system. However, numbers replaced Akl's diacritics because these were easier on early Short Message Service (SMS) keyboard layouts, and the result is today's chat system, which is an informal, practical realization of Akl's dream, though unstandardized.

Some Reddit voices that reveal how Arabizi is experienced in real life and highlight everyday reasons why Lebanese favor Arabizi are listed in Exhibit 1 (Reddit is an online social media forum where users share news stories and other content; Online Discussions, i.e., Reddit Voices; https://www.reddit.com).

Exhibit 1. Sample of Reddit voices about Arabizi

- "Very common in Lebanon… You rarely see someone typing in Arabic these days."
- "Lebanese people are poly-lingual… Easier to use an English keyboard and assign numbers…"
- "Typing in Arabic letters is not always convenient… People got used to Arabizi from the '90s before Arabic keyboards were available."
- "Lebanese people are poly-lingual... It's much easier to use an English keyboard and assign numbers to Arabic letters..."
- "Lebanese were among the first Arabs to get access to the Internet... It was more convenient to use the Arabizi style of writing, and that's what we got used to."
- "Typing in Arabic letters is too slow... Installing Arabic used to be a pain... And it is easier to type in Lebanese dialect using Latin letters."
- "Because many diaspora don't know how to read or write the Arabic alphabet."

- "A lot of Lebanese (who grew up abroad or were educated in private schools, etc.) have weak Arabic writing skills. Personally, it takes me forever to find the Arabic letters, so it's easier to type that way."
- "My Arabic writing skills are also weak since I was educated in a private school in Lebanon where all subjects were being taught in English apart from Arabic class, but growing up, I've always felt insecure and ignorant due to the lack of writing skills in my mother tongue language".
- "I read Arabic perfectly and write very well. I don't type well though because I haven't memorized the keyboard layout."
- "It's just that our spoken Lebanese dialect is much easier with the Latin script."

Note: Extracted by the authors.

In fact, if one asks: Does Arabizi hurt or threaten Arabic as a language? Zeitouni (2025) reported that: Not at all. Quite the opposite, in fact. Language can't stay old. It needs to be active. Similarly, Brabetz (2022) contends that "there is the view that Arabizi poses no danger to the Arabic language, even with its incorporation of the Latin alphabet." (p. 104). Moreover, Abu-Liel, Eviatar, & Nir (2020) assert that "Arabizi is a tool for shaping the Arabic identity of upcoming generations."

In the Lebanese context, discussions of Latin-script Arabic are often linked to the historical proposals of Said Akl (Arab American News, 2014), who advocated adopting a Latin-based Lebanese alphabet. However, contemporary research suggests that most Arabizi users are unaware of such ideological projects and that their practices are largely non-political and utilitarian.

This paper holds the merit of being the first work to approach Arabizi as a possible continuum of the Lebanese poet and thinker, Said Akl. Investigating and assessing a sample of Lebanese subjects' knowledge of Said Akl's early proposal, and exploring the possible determinants strengthening the use of Arabizi in Lebanon, also holds originality in context and use. This paper is divided into five parts. The first introduces and defines the concept. The second embodies a literature review, the third presents the methodology process, and the fourth illustrates and discusses the results and findings. It ends with the conclusion, recommendations, limitations, and future research in the fifth part.

2. Literature Review

In relation to the topic of Arabizi and digital communication, Arabizi remains a stable and widely used writing system in digital communication. A study by Abu-Liel et al. (2020) demonstrates that Arabizi has developed a relatively standardized orthographic system, with users showing consistent conventions in representing Arabic phonemes using Latin characters and numerals. This challenges earlier assumptions that Arabizi is chaotic or purely improvised. A more recent work highlights the continued role of social media environments in shaping

Arabizi usage, where Arak (2024) shows that digital platforms promote linguistic innovation, including Arabizi, code-switching, and dialectal writing, while simultaneously raising concerns about the erosion of formal Arabic.

As for the aspect of generational and social variation, a sociolinguistic study by Haghegh (2021) reinforces the importance of age and generational differences in Arabizi usage. The study shows that younger users adopt Arabizi more naturally and frequently, while older users tend to view it as either a temporary phase or a less formal alternative. Similarly, Alsulami (2019) finds that Arabizi is primarily used among peer groups and informal networks, particularly among younger users, and is rarely used in formal or intergenerational communication. Additionally, considering attitudes and functional differentiation, Alsulami reports that Arabizi is used mainly in social interactions and casual topics, while it is avoided in academic, professional, or religious contexts. Likewise, Arak (2024) highlights the coexistence of innovation and preservation, with users balancing modern communication practices and traditional linguistic norms.

A study conducted in Kuwait (Haggan, 2007), where mobile phone usage has expanded widely, and text messaging has gained popularity among the youth, uncovered (through survey research) fundamental insights regarding users' attitudes and behaviors concerning the use of Arabizi in their culture. The participants contended that until relatively recently, sending Arabic text messages in the Arabic alphabet was not technically feasible, necessitating the use of the English alphabet instead. Additionally, another discovery was that Kuwaitis still utilize the English alphabet for Arabic text messages despite the availability of Arabic keypads.

Another study was performed in Saudi Arabia based on a questionnaire and interview results (Alghamdi, 2018), which revealed that Saudi youth use Arabizi for several different reasons, including: “habit; cool and stylish script; serving their curiosity to try the new things others in their peer group are using; helps overcome difficulties with the Arabic language; most importantly, it is a language of secrecy that allows its users free expression and communication with peers; and it allows them to escape from the judgments of older people.”

A spelling test in Arabic and a short survey evaluating the use of Arabizi among 420 eighth-grade students in Bethlehem government schools (Al-Shaer, 2016) indicated that the use of Arabizi negatively affects students' Arabic proficiency, or that other factors lead students to use Arabizi and experience poor Arabic spelling abilities. The general findings indicated that the use of Arabizi was associated with lower scores on the Arabic spelling assessment.

Research conducted in Lebanon sought to find out Lebanese university students' preference for Arabic or Latin keyboards when sending messages in WhatsApp groups, showing that Arabizi is commonly typed in Arabic using a Latin keyboard (Halawi, Messarra, & Bou Nader, 2021). Similarly, Taha (2015) from the American University of Sharjah determined that English usage in private schools is responsible for the increase of Arabizi and the decline of the Arabic language. Similarly, he endorsed the notion that Arabizi poses a risk to the Arabic language and Arab identity, determining that the Arabic language is experiencing erosion rather than undergoing language extinction.

Regarding Egypt, Wafa (2025) determined that the main motivations for Egyptian youth using Arabizi are its quickness, practicality, simplicity in typing, and its function as a communication code among friends, representing a unique generational identity. Moreover, in Jordan, the results from a questionnaire administered to 283 students of both sexes from Jadara and Yarmouk Universities in the Irbid governorate (Bardaweel & Rababah, 2021), revealed that they use Arabizi because it is considered a prestigious language; to appear more westernized; is easier than writing pure Arabic; is considered nowadays as a life-style; for privacy issues; is used commonly by colleagues; there is a need to cope with the new generation; to enhance their typing skills on English Language; for personal interests; due to technical issues; for the sake of showing off; they don't like the Arabic language; due to poor knowledge of Arabic; to save money and time in the messages they write, and it saves more space. Another Jordanian study (Al-Khatib & Sabbah, 2008) reported that Arabizi is easier and faster to use. Given that the English letters on a mobile phone keyboard are fewer than the Arabic letters, using this system is deemed to be less time-intensive. The participants in Yaghan's study (2008) felt that acquiring proficiency in one language (English) is significantly easier when it relates to both languages, as it creates much less confusion. Furthermore, there is an economic benefit as mobile providers will impose lower fees when SMS text messages have fewer characters, which is challenging for users when employing Arabic letters (Al-Khatib & Sabbah, 2008; Yaghan, 2008). Ultimately, it is important to highlight that scholars have observed that Arabic humor and poetry transcribed in Latin significantly diminish their unique appeal and allure (Jeníková, 2019).

2.1 Positioning the Present Study

Building on the aforementioned literature review, the present study contributes to a growing body of research that views Arabizi as "a normalized digital writing system; a sociolinguistic resource shaped by age and context; and a non-ideological, pragmatic practice."

By combining quantitative (χ^2 analysis) and qualitative (sentiment analysis) approaches, this study extends existing research by providing empirical evidence from a Lebanese context and reinforcing the interpretation of Arabizi as part of adaptive, multimodal literacy practices in the digital age.

3. Methodology

3.1 Research Design

This study adopts a mixed quantitative-qualitative research design. The quantitative part employed positivism, defined by Hejase and Hejase (2013) as "researchers staying neutral and not influencing the research subject" (p. 77). It also used a survey-based design to examine patterns of Arabizi use (i.e., the use of Latin characters to represent Arabic) and associated attitudes among Lebanese participants. A short-structured questionnaire presented at the end of this article was designed to capture both behavioral practices (e.g., script use in digital communication) and attitudinal dimensions (e.g., perceptions of identity and language use). It was complemented by a limited number of open-ended questions (3 questions) to provide the

qualitative insight.

3.2 Data Collection

Data were collected using a hard copy questionnaire administered to selected respondents, targeting individuals actively engaged in online communication. The survey consisted of three main sections:

1. Language and script use (frequency and type of script used).
2. Attitudinal questions (identity, preferences, and perceptions of Arabizi).
3. Demographic variables (age, gender, and education level).

In addition, three open-ended questions were included to capture nuanced perspectives, including responses written in Arabizi.

3.3 Sampling and Sample Size

A convenient sampling method that is non-probabilistic was employed to choose the participants. The participants' readiness to engage was a determining factor. All participants were made aware of the research and understood that their involvement was entirely voluntary, with their identities kept confidential and responses utilized solely for research purposes. Individuals were chosen from various Lebanese areas, with the sample size "n" calculated using Cochran's formula as outlined in Hejase & Hejase (2013, p. 231).

$n = (z^2 p(1 - p)) / e^2$

Where

z = The degree of confidence, for the present study, is 92% gives z = ±1.75

p = The proportion of the population using Arabizi, being male or female, is considered equally distributed, i.e., so we consider the case of maximum variability with p = 0.5

e = The desired level of precision (accuracy), we considered 6%.

Applying these values in Cochran's formula results in a sample size of 213 individuals. From 250 distributed questionnaires, 180 valid responses were collected, while 70 were excluded for being either partially completed (58) or containing only demographic details (12). The rate of responses obtained was 72%. To enhance the reliability of this sample size, an alternative method is utilized with a sample size of 180 and a population size of about 300. The researchers utilized the methods of Chehimi & Hejase (2025), Rammal et al. (2024; 2025), Zneit & Hejase (2025), and Hejase et al. (2025) to determine reliability error values for approximations derived from Hardwick's (2022) results. Data extracted indicate that for a population of about 300, a standard error of 5% (confidence level of 95%), and a reliability of 6.5% ± 0.1%, the required sample size is 180. This suggests that in 93.4 out of every 100 surveys conducted, the outcomes will differ by no more than 6.6% (margin of error). This degree of reliability would be appropriate for this kind of initial inquiry.

3.4 Sample Size and Characteristics

The study is based on 180 valid responses, which constitutes an adequate sample size for both descriptive and inferential statistical analyses in sociolinguistic research. This sample size satisfies the assumptions required for the application of chi-square (χ^2) tests of independence, particularly with respect to minimum expected cell frequencies.

From a statistical standpoint, the sample provides moderate analytical power, allowing for the detection of meaningful associations between demographic variables and patterns of script use. While sufficiently robust to identify medium-sized effects, such as age-related differences in Arabizi usage, it may be less sensitive to smaller effects that do not reach statistical significance.

3.5 Data Analysis

Quantitative data were analyzed using descriptive statistics and chi-square (χ^2) tests of independence to examine relationships between demographic variables and script use patterns. Key variables analyzed included:

- Age and script use.
- Gender and script preference.
- Education level and script use.
- Script use and identity perception.
- Awareness of Said Akl and attitudes toward a Lebanese Latin alphabet.

Qualitative responses from open-ended questions were analyzed using thematic sentiment analysis, with particular attention to responses written in Arabizi. These responses were first transliterated and then categorized into positive, neutral (conditional), and negative attitudes, allowing for the identification of dominant themes in participant perspectives.

3.6 Sentiment Analysis Methodology

Sentiment analysis has become a widely used approach for extracting attitudes and opinions from textual data in computational linguistics and social science research (Pang & Lee, 2008; Liu, 2012). Sentiment analysis is a computational technique used to identify and classify the emotional orientation expressed in textual data. Sentiment analysis categorizes text into positive, negative, or neutral sentiment, allowing researchers to quantify subjective viewpoints in qualitative datasets.

One commonly used approach is lexicon-based sentiment analysis (Bessa, 2023), which relies on a predefined dictionary of words (valence dictionary) associated with positive or negative emotional polarity. In this method, textual responses are analyzed by identifying sentiment-bearing words within the text and calculating their relative frequency or dominance. After labeling each word in the text, we determine a total sentiment score by tallying the counts of positive and negative words and subsequently merging the results. A widely used equation for determining the sentiment score (StSc) is:

StSc = {[number_of_positive_words] - [number_of_negative_words]}/{total_number_of_words}

A negative sentiment score indicates that the text is categorized as negative. A score above zero indicates a positive text, while a score of zero denotes a neutral classification.

Lexicon-based models have limitations because they rely on predefined word lists; thus, they may not fully capture contextual nuances, sarcasm, or culturally specific expressions. For this reason, sentiment analysis is often complemented by qualitative thematic analysis, which enables researchers to interpret underlying meanings and patterns within the responses. The combination of these approaches provides both quantitative measurement of sentiment trends and qualitative insight into participant perspectives.

In this current study, a lexicon-based approach was selected because the responses dataset included three relatively short open-ended responses, making this method suitable for identifying general sentiment orientation without requiring large training datasets. Responses to the three open-ended questions were first organized by question in a spreadsheet format. A basic sentiment classification approach was then applied to categorize responses as positive, negative, or neutral toward the use of Arabizi. This step aimed to identify the overall emotional orientation of respondents' attitudes. Following the sentiment classification, a thematic analysis was conducted to identify recurring patterns in participants' explanations. Responses were reviewed and coded inductively, allowing themes to emerge from the data rather than being predetermined. Similar responses were grouped into broader thematic categories, such as typing convenience, communication efficiency, digital communication habits, language preservation concerns, and preference for Arabic script.

This combined analytical approach enabled both quantitative insight into sentiment distribution and qualitative interpretation of underlying motivations, providing a more comprehensive understanding of how participants perceive the use of Arabizi in digital communication. However, it is worth mentioning that, as with most open-ended survey responses, interpretations of sentiment and thematic categories may involve a degree of subjective judgment, although efforts were made to ensure consistency in coding.

4. Results and Findings

4.1 Demographics

The 180 valid responses present a skewed age distribution toward younger age groups, particularly individuals aged 15-24 (27.8%) and 25-34 (30%), who represent the largest proportion of respondents (57.8%). Followed by age categories 35-44 (23.3%), 45-54 (10.6%), and 55 or more (7.2%). Two cases (1.1%) had no response. As for sex, the sample is characterized by a relatively balanced gender distribution (50% males and 48.3% females). 1.7%

did not declare.

In considering the place of residence of the respondents, the results comply with the main objective of the current study, which is directed towards the Lebanese population. In fact, more than 98% of the respondents reside in the different districts of Lebanon (i.e., Lebanon in general, 28.9%; Beirut, 25.6%; Mount Lebanon, 11.1%; South Lebanon, 11.7%; Bekka or east Lebanon, 5%; Beirut southern suburbs, 16.1%). 1.7% reside outside Lebanon. As for the education level of respondents, results show that more than 90% of the respondents belong to a group of highly educated participants (i.e., High school or less, 6.7%; university undergraduate, 38.9%; university graduate, 41.7%; postgraduate, 10.6%; and 2.3% did not declare).

In summary, the sample results demonstrate a relatively balanced gender distribution and a high level of educational attainment, with the majority of participants holding university degrees. However, it is skewed toward younger age groups, particularly individuals aged 15–34, who represent the largest proportion of respondents. This demographic concentration aligns with the study's focus on digital communication practices, as younger individuals are typically more active in online environments.

Thus, despite its analytical adequacy, the sample is not fully representative of the broader population. It reflects the population most actively engaged in digital communication, which is directly relevant to the study's focus. Consequently, for External Validity, findings are generalizable to digitally active, educated Lebanese users, not the entire population. In other words, while the sample size is adequate for statistical analysis, the non-random and demographically skewed nature of the sample limits the generalizability of the findings to the broader population.

4.2 Results and Analysis of Survey Section A

Section A of the questionnaire includes eight multiple-choice questions whose objective is to assess the respondents' social media actions when using both the Arabic scripts and phonemes using Latin characters and numerals (Arabizi). Tables 1 and 2 illustrate samples of the distribution of responses.

Results for the question: ***"****When you chat with friends or family (WhatsApp, Messenger, SMS, Instagram, etc.), what script do you mostly use?"* show that the majority (41.7%) of respondents mix both Arabic and Latin scripts, with 31.1% using only Latin scripts, and surprisingly in an Arabic-speaking country like Lebanon, only 12.2% use the Arabic scripts. In addition, 10.6% used Latin scripts only.

Thus, participants reported a strong preference for non-Arabic script forms in informal digital communication. The most commonly used writing style was a combination of Arabic and Latin scripts, followed closely by Latin-script Arabic (Arabizi). In contrast, the exclusive use of the Arabic script was relatively limited.

As for the question: *"Do you feel more comfortable typing in Arabic, Latin, or both letters equally?"* Results show that the majority of respondents (50.6%) indicated greater comfort using **Latin letters**, while fewer participants (17.2%) preferred Arabic script or reported equal

comfort in both (32.2%).

Table 1 presents the respondents' answers to the third question (*If you use Latin script, which form do you prefer?*) under section A of the administered questionnaire (Script and language Section). Among Arabizi users, the number-based system (e.g., 3, 7, and 2) remained the dominant convention (36.1%), although a substantial proportion indicated that their usage varied depending on context (32.8%).

Table 1: If you use Latin script, which form do you prefer?

	Frequency	**Percent**
1. With Numbers	65	36.1
2. Without numbers	39	21.7
3. Both depend on context	59	32.8
4. Blank	17	9.4
Total	180	100.0

In the fourth question, respondents were asked to choose answers related to: *"Why do you prefer using Latin letters? (Choose all that apply)*". Table 2 presents the corresponding answers. It shows that 71.7% of the respondents use Latin letters because of ease and speed in typing.

Table 2: Answers to: Why do you prefer using Latin letters? (Choose all that apply)

	Frequency	**Percent**
1. Faster/easier on my keyboard	129	71.7
2. My phone does not support Arabic well	5	2.8
3. I learned to type in Latin letters first	26	14.4
4. I think it looks "cool" or modern	24	13.3
5. Habit from friends/family	51	28.3
6. Other	14	7.8

Answers to the question: *"Do you think writing Lebanese in Latin letters (instead of Arabic script) reflects Lebanese identity more strongly?"* do not reflect major differences, where it is seen that the 38.3% of the respondents who believe that writing Lebanese in Latin reflects a

strong Lebanese identity slightly outnumber those who are not sure (32.8%) and those who object (27.8%). Thus, participants' attitudes toward Arabizi are largely pragmatic rather than ideological. While a plurality of respondents (38.3%) agreed that Latin-based writing may reflect Lebanese identity, a comparable proportion (32.8%) expressed uncertainty, indicating the absence of a clear consensus.

The next set of results relates to respondents' awareness of Said Akl's historical proposals, who advocated for the adoption of a Latin-based Lebanese alphabet (Arab American News, 2014; Yassine, 2025). Awareness of historical efforts to formalize a Latin-based Lebanese script, particularly those associated with Said Akl, was limited. The majority of respondents reported no prior knowledge of such initiatives (54.4%). However, 18.9% are aware and support the proposals, while 26.1% are aware but do not support the proposals.

The next results present respondents' answers as an extension of answers to the previous question by asking: "*If you are aware of Said Akl's project, do you think the current use of Latin letters in chats/social media is unintentionally fulfilling Said Akl's dream?"* The results show that among those who are aware of Akl's proposal, only 7.2% believe that Arabizi has fulfilled Akl's dream, 24.4% believe that the dream has been fulfilled partly in some way, and 13.9% reported that not really, with another 6.1% claiming that not at all. 15% of the respondents left this question blank, and 33.3% were not aware.

Finally, results of question 8 in section A: *"Would you support the formal adoption of a Lebanese Latin alphabet in education or media?"* show that 7.2% left no response, 18.9% answered "Yes", 32.2% answered "No," and the majority (41.7%) answered "Maybe under some conditions. Thus, most participants expressed conditional acceptance, rather than outright support or rejection. This suggests that while Arabizi is widely used, its institutionalization remains contested.

4.3 Sentiment Analysis Results of the Open Questions of Survey Section B

Section B of the administered questionnaire included three open-ended questions, which were:

1. In your opinion, does using Latin letters for Lebanese make communication easier or harder? Why?
2. Do you see Latin-letter Lebanese as temporary (for convenience in chat) or as the future of writing Lebanese?
3. "Fik tuktob b kalimatak lish bt7ebb aw ma bt7ebb tist3mel Arabizi? [Meaning: Can you write down, using your own words, why you like or do not like using Arabizi?]

Positive word set: Easy, easier, good, better, fast, quick, useful, convenient, clear,

love, like, prefer, helpful, efficient, familiar, and comfortable.

Negative word set: Hard, harder, difficult, bad, worse, slow, confusing, hate, dislike, problem, issue, annoying, unclear, and complicated.

The average sentiment score for each question is scored. Sentiment analysis was conducted on

the open-ended responses addressing attitudes toward the use of Latin-letter Lebanese (Arabizi). Across the three questions, responses were predominantly neutral in tone, suggesting that participants tended to provide explanatory or descriptive opinions rather than strongly emotional reactions. The corresponding sentiment analysis results are depicted in Table 3.

Table 3: Sentiment analysis result scores for the three open-ended questions.

Question	Total Responses	Score	Positive	Negative	Neutral
Q1	176	0.70	110 (62.50%)	13 (7.39%)	53 (30.11%)
Q2	176	0.18	29 (16.48%)	1 (0.57%)	146 (82.95%)
Q3	168	0.27	37 (22.02%)	4 (2.38%)	127 (75.60%)

Below are the interpretations of the results presented in Table 3:

4.3.1 Question 1

"Does using Latin letters for Lebanese make communication easier or harder?"

Strongly positive sentiment overall. 62.5% of the responses are positive. This suggests that respondents view it as harmless or practical, and clearly feel Latin letters make communication easier. (Clear dominance of the word "easier" indicates a strong perception that Latin letters simplify communication). Also, 7.39% negative responses indicate concern that Arabizi may harm Arabic, and 30.11% neutral responses express mixed or balanced opinions. These results indicate that many respondents perceive Arabizi as a practical and harmless tool that can simplify communication, particularly in digital contexts.

Main themes of Thematic Analysis of responses for Question 1 (Communication Ease) are presented in Table 4, where the dominant themes are practical (ease, habit) rather than ideological. This supports the argument about *functional adoption* rather than linguistic shift.

Table 4: Main themes of Thematic Analysis of responses for Question 1.

Theme	Description	Example Meaning	Frequency (Approx)
Ease & Convenience	Latin letters are faster and easier to use	"Easier", "Faster typing"	High
Habit/Familiarity	People are used to Latin typing	"We're used to it."	High
Keyboard Accessibility	The Arabic keyboard is harder to access	"No Arabic keyboard",	Medium

		"Latin is available."	
Clarity & Understanding	Helps people understand each other better	"Clearer", "Everyone understands."	Medium
Difficulty / Confusion	Some find it confusing or unclear	"Not accurate", "confusing."	Low
Language Integrity Concern	Weakens the Arabic language	"Loses authenticity"	Low

4.3.2 Question 2

"Do you see Latin-letter Lebanese as temporary or permanent?"

Mostly neutral (opinion-based rather than emotional). Very high neutrality (82.95%) indicates that many respondents discuss the issue analytically rather than emotionally. Also, Sentiment is skewed towards positive (16.48%), and the remaining show a negative attitude (0.57%).

The results suggest that participants largely view the phenomenon analytically, often acknowledging both its convenience and its limitations. Answers reflect opinions about the future, not sentiment.

Main themes of Thematic Analysis of responses for Question 2 (Temporary vs Future) are presented in Table 5, where the dominant themes revolve around Arabizi being a temporary tool (Mainly for online chats), Arabic remains dominant (Arabic script will remain the official writing system), and possible long-term coexistence, where some suggested that Arabizi may continue informally alongside Arabic in digital communication. In fact, this question shows conceptual tension, not strong sentiment, since respondents recognize practicality but hesitate to legitimize it as a "future language."

Table 5: Main themes of Thematic Analysis of responses for Question 2.

Theme	**Description**	**Example Meaning**	**Frequency (Approx.)**
Temporary Tool	Seen as a convenience for chatting	"Just for texting."	High
Future Potential	Could become standardized	"Maybe future language"	Medium
Context-Dependent Use	Depends on the situation/platform	"Chat vs formal"	Medium
Preference for Arabic	Arabic should remain dominant	"Arabic is الأصل"	Medium
Uncertainty	Unsure/mixed opinions	"Maybe", "not sure."	High

4.3.3 Question 3

"Explain why you like or dislike using Arabizi."

Slightly positive but extremely high neutral responses (75.6%), meaning most participants provide explanatory or descriptive answers rather than emotional judgments. This indicates that users tend to frame their attitudes in pragmatic terms, such as speed, ease of typing, and familiarity with digital communication practices. Responses here are mildly positive (22.02%), meaning that preference exists but is less emotionally expressed.

Main themes of Thematic Analysis of Responses for Question 3 (Personal reasons for using or avoiding Arabizi) revolve around the idea that it is functionally preferred but socially and formally limited (Table 6). Some stated reasons for using Arabizi are: Easier to type, faster messaging, habit from social media and texting, and more comfortable for informal communication. Likewise, some reasons for avoiding Arabizi are: Preference for proper Arabic, fear that it may weaken Arabic writing skills, and some find it confusing or inconsistent.

Table 6: Main themes of Thematic Analysis of responses for Question 3.

Theme	**Description**	**Example Meaning**	**Frequency (Approx.)**
Ease & Speed	Faster typing	"Quick", "Easier"	High
Habit & Social Norm	Everyone uses it	"Used to it", "Normal."	High
Expression & Flexibility	Easier to express dialect	"Better for Lebanese."	Medium
Dislike / Preference for Arabic	Prefer Arabic script	"I prefer Arabic."	Medium
Lack of Formality	Not suitable for serious use	"Not professional"	Medium
Confusion / Readability Issues	Hard to read/write sometimes	"Confusing numbers/letters"	Low

Across all three questions, three major meta-themes emerge: The first is Functional Efficiency, expressed as speed, ease, convenience, and widespread usage. The second is Habitual Usage (Not Intentional Shift), simply, people use it because they're used to it, not because they want to replace Arabic. The third is Diglossic/Contextual Use, where Arabizi dominates in informal communications while Arabic continues to be the formal platform linked to identity. Overall, the results suggest that attitudes toward Arabizi are generally pragmatic rather than strongly polarized, with respondents primarily evaluating its functionality and convenience rather than expressing strong ideological support or opposition.

In summary, it is noticed that Arabizi is perceived primarily as a functional communication tool

rather than a strongly polarizing issue. Moreover, the responses' data suggest that Arabizi is viewed primarily as a practical communication tool rather than a linguistic threat. Additionally, most participants discuss functionality, acknowledge digital convenience, and do not express strong emotional opposition. However, it is worth mentioning an important limitation for question 3, since the dataset includes both bilingual text (English plus Arabizi) and informal expressions. This lexicon approach underestimates sentiment, especially Arabizi words (e.g., "mni7", "helwe," etc.) and contextual meaning.

4.4 Cross-Tabulation and Chi-square Analysis

Chi-square (χ^2) tests of independence were conducted to examine the relationship between demographic variables and script use, as well as other attitudinal variables. To meet chi-square assumptions, where fewer than 20% of cells have expected frequencies less than 5 (The Pearson chi-square test requires that no more than 20% of cells have an expected frequency of less than 5), data were refined by collapsing variable categories and removing blank responses (Hejase & Hejase, 2013). When low expected cell counts persisted, Fisher's exact test was employed to ensure valid statistical inference (This test is used, particularly for small sample sizes or when the 20% threshold is violated, as a more accurate alternative to the chi-square approximation).

4.4.1 Respondents' Opinions Associated with Age

A. Age versus Script Usage

For clarity and brevity purposes, one contingency table will be shown for the first relationship. We start with the contingency Table 7, which presents the observed frequencies for Age versus Script Used. A chi-square test of independence was conducted to examine the association between age and script used. There was no significant association, $\chi^2(9, N = 150) = 14.10$, $p = 0.119$. Respondent age does not influence the scripts individuals use. Because the number of expected cells with counts less than 5 exceed 20% of total cells (31.2%), Fisher's exact test, instead of chi-square with Monte Carlo simulation (10,000 samples), was conducted to examine the association between age and script used (N = 150). The association was statistically not significant, $p = 0.094$; this indicates that respondent age does not influence the scripts individuals use.

Table 7: Contingency table for Age x Script Used

		When you chat with friends or family (WhatsApp, Messenger, SMS, Instagram, etc.), what script do you mostly use?	**When you chat with friends or family (WhatsApp, Messenger, SMS, Instagram, etc.), what script do you mostly use?**	**When you chat with friends or family (WhatsApp, Messenger, SMS, Instagram, etc.), what script do you mostly use?**	**When you chat with friends or family (WhatsApp, Messenger, SMS, Instagram, etc.), what script do you mostly use?**	**Total**

		Arabic Script	Latin Script with numbers	Mix of both	A foreign language or Latin script	Total
Age	**15-24**	1	19	17	8	45
Age	**25-34**	3	19	20	6	48
Age	**35-44**	2	9	18	5	34
Age	**45 or more**	4	2	12	5	23
Total	**Total**	10	49	67	24	150

B. Age versus 'Script Typing Preference'

The chi-square (χ^2) test of independence between respondents' ages and Script Typing Preference suggests there was a statistically significant association, $\chi^2(6, N = 150) = 13.62$, $p = 0.034$. Respondent age does influence the scripts individuals use. This implies that there is a significant relationship between age level and script typing preference ($p < 0.05$). Respondent age does influence the typing preference used by individuals. Now, because 4 cells (33.3%) have expected count less than 5. A Fisher's exact test was conducted to examine the association between age and typing preference. Once again, the result indicated a significant association, $p = 0.025$.

C. Age versus 'Latin Script Preference'

Similarly, the chi-square (χ^2) test of independence between respondents' ages and "Form used with Latin scripts" suggests that there was no statistically significant association (at 5% level of significance), $\chi^2(6, N = 150) = 11.83$, $p = 0.066$. Respondent age does not influence the preference for form in the Latin script, used by individuals.

D. Age versus 'Writing Lebanese in Latin letters reflects Lebanese identity.'

The chi-square (χ^2) test of independence between Age and Writing Lebanese in Latin letters reflects Lebanese identity suggests that there is a highly statistically significant association between Age and Writing Lebanese in Latin letters reflects Lebanese identity, $\chi^2(6, N = 150) = 22.10$, $p = 0.001$. Younger participants do believe that the Latin-script Lebanese reflects more strongly their national identity. This indicates that age is a central driver of Latinization attitudes.

E. Age versus 'Being Aware of "Said Akl's" Project'

The Chi-square (χ^2) test of independence between Age and being aware of "Said Akl's" project suggests that there is a statistically significant association between age and awareness of Said Akl's project, $\chi^2(6, N = 150) = 16.15$, $p = 0.013$. Contingency table results show that older individuals (45 out of 69, aged between 25 and 44 years, of those who are aware) are more familiar with Said Akl's Latinization project, which was primarily proposed and promoted during the 1960s.

F. Age versus 'Support the Formal Adoption of a Lebanese Latin Alphabet'

The chi-square (χ^2) test of independence between Age and support for the formal adoption of a Lebanese Latin alphabet suggests that there is a statistically significant association between age and support for the formal adoption of a Lebanese Latin alphabet, $\chi^2(6, N = 150) = 23.83$, $p = 0.001$. Results from the corresponding contingency table show that 69 out of 103 of those aged 15-34 years clearly imply that younger individuals tend to like the idea more.

4.4.2 Respondents' Opinions Associated with Gender

A. Gender versus 'Script Usage'

For clarity and brevity purposes, one contingency table will be shown for the first relationship. The chi-square (χ^2) test of independence between Gender and Script Usage (Contingency Table 8) suggests that there is no statistically significant association between gender and script usage $\chi^2(3, N = 150) = 0.99$, $p = 0.803$. While minor differences appear descriptively, these variations are not strong enough to be considered systematic.

Table 8: Contingency table for Gender × Script Usage

		When you chat with friends or family (WhatsApp, Messenger, SMS, Instagram, etc.), what script do you mostly use?	When you chat with friends or family (WhatsApp, Messenger, SMS, Instagram, etc.), what script do you mostly use?	When you chat with friends or family (WhatsApp, Messenger, SMS, Instagram, etc.), what script do you mostly use?	When you chat with friends or family (WhatsApp, Messenger, SMS, Instagram, etc.), what script do you mostly use?	Total
		Arabic Script	**Latin Script with numbers**	**Mix of both**	**A foreign language or Latin script**	**Total**
Gender	**Male**	5	24	32	9	70
Gender	**Female**	5	25	35	15	80
Total	**Total**	10	49	67	24	150

B. Gender versus 'Script Typing Preference'

The chi-square (χ^2) test of independence between respondents' genders and their script typing preference suggests that there is no statistically significant relationship between gender and

script typing preference $\chi^2(2, N = 150) = 1.71$, $p = 0.426$. Even though descriptively there are some minor differences between males and females, these differences are insignificant, and thus, respondent gender does not influence the typing mode used by individuals.

C. Gender versus Script 'Form used with Latin Scripts.'

Similarly, the chi-square (χ^2) test of independence between respondent gender and script "Form used with Latin scripts" suggests that there was no statistically significant association (at 5% level of significance), $\chi^2(2, N = 150) = 0.464$, $p = 0.793$. Respondent gender does not influence the preference for form in the Latin script, used by individuals.

D. Gender versus 'Writing Lebanese in Latin Letters Reflects Lebanese Identity'

The chi-square (χ^2) test of independence between gender and Writing Lebanese in Latin letters reflects Lebanese identity suggests that there is no statistically significant association between gender and Writing Lebanese in Latin letters reflects Lebanese identity, $\chi^2(2, N = 150) = 0.33$, $p = 0.849$. This implies that gender has no significant association with the idea that Latin-script Lebanese reflects more strongly the national identity. Gender is not necessarily a central driver of Latinization attitudes.

E. Gender versus 'Being Aware of "Said Akl's" Project'

The chi-square (χ^2) test of independence between gender and being aware of "Said Akl's" project suggests that there is no statistically significant association between gender and awareness of Said Akl's project $\chi^2(2, N = 150) = 3.96$, $p = 0.138$. Even though contingency results show some minor differences between males and females, these differences are insignificant, and thus, respondent gender does not influence being aware of "Said Akl's" project.

F. Gender versus 'Support for the Formal Adoption of a Lebanese Latin Alphabet'

The chi-square (χ^2) test of independence between gender and support for the formal adoption of a Lebanese Latin alphabet suggests that there is no statistically significant association between gender and support for the formal adoption of a Lebanese Latin alphabet, $\chi^2(2, N = 150) = 4.66$, $p = 0.097$. Contingency results show some minor differences between males and females; these differences are insignificant, and thus, respondent gender does not influence the support for the formal adoption of a Lebanese Latin alphabet.

4.4.3 Respondents' Opinions Associated with Education

A. Education versus 'Script Preference'

For clarity and brevity purposes, one contingency table will be shown for the first relationship. For associations with education level, we start with the contingency Table 9, which presents the observed frequencies for Education versus Script Used. A chi-square test of independence was conducted to examine the association between education and script used. There was no statistically significant association, $\chi^2(6, N = 150) = 9.37$, $p = 0.154$. Respondent education level does not influence the scripts individuals use. Because the number of expected cells with counts less than 5 exceeds 20% of total cells (41.7%), Fisher's exact test, instead of chi-square

with Monte Carlo simulation (10,000 samples), was conducted to examine the association between education and script used (N = 150). The association was statistically not significant, $p = 0.190$; again, this indicates that Respondent education level does not influence the scripts individuals use.

Table 9: Contingency table for Education versus Script Preference

		When you chat with friends or family (WhatsApp, Messenger, SMS, Instagram, etc.), what script do you mostly use?	When you chat with friends or family (WhatsApp, Messenger, SMS, Instagram, etc.), what script do you mostly use?	When you chat with friends or family (WhatsApp, Messenger, SMS, Instagram, etc.), what script do you mostly use?	When you chat with friends or family (WhatsApp, Messenger, SMS, Instagram, etc.), what script do you mostly use?	Total
		Arabic Script	Latin Script with numbers	Mix of both	Foreign language/Latin script	Total
Education level	**High School / less**	2	4	2	0	8
Education level	**University undergraduate**	3	22	23	11	59
Education level	**University and above**	5	23	42	13	83
Total	**Total**	10	49	67	24	150

B. Education versus 'Script Typing Preference'

The chi-square (χ^2) test of independence between respondents' education levels and Script Typing Preference suggests that there was no statistically significant association, $\chi^2(4, N = 150) = 6.65$, $p = 0.156$. This implies that there is no significant relationship between education level and script typing preference ($p > 0.05$). Respondents' education does not influence the typing preference used by them. Now, because 3 cells (33.3%) have expected count less than 5. A Fisher's exact test was conducted to examine the association between education level and typing preference. Once again, the result indicated a statistically nonsignificant association, p

= 0.133.

C. Education versus 'Latin Script Form Preference'

Similarly, a chi-square (χ^2) test of independence between respondents' education levels and "If you use Latin script, which form do you prefer" suggests that there was no statistically significant association, $\chi^2(4, N = 150) = 0.79$, $p = 0.940$. This implies that there is no significant relationship between education level and the Latin script form which individuals use ($p > 0.05$). Now, because 3 cells (33.3%) have expected count less than 5. A Fisher's exact test was conducted to examine the association between education level and the Latin script form that individuals use. The result of the test with Monte Carlo simulation (10,000 samples) indicated a non-significant association, $p = 0.966$.

D. Education versus 'Writing Lebanese in Latin Letters Reflects Lebanese Identity'

The chi-square (χ^2) test of independence between education and "Do you think writing Lebanese in Latin letters reflects Lebanese identity more strongly?" suggests that there is a statistically significant association, $\chi^2(4, N = 150) = 15.93$, $p = 0.003$. Respondent education level does influence the fact that writing in Latin letters reflects Lebanese identity more strongly. Now, because 3 cells (33.3%) each have an expected count less than 5. A Fisher's exact test was conducted to examine the association between education level and "Do you think writing Lebanese in Latin letters reflects Lebanese identity more strongly?" The result of the test with Monte Carlo simulation (10,000 samples) indicated a significant association, $p = 0.001$.

E. Education versus 'Awareness of Said Akl's Project'

Likewise, a chi-square (χ^2) test of independence between education and "Awareness of Said Akl's project to replace Arabic letters with a Latin-based Lebanese alphabet" suggests that there is a significant association, $\chi^2(4, N = 150) = 27.11$, $p = 0.000$. Respondent education level does influence the awareness fact. Now, because 3 cells (33.3%) each have an expected count less than 5. A Fisher's exact test was conducted to examine the association between education level and "Awareness of Said Akl's project to replace Arabic letters with a Latin-based Lebanese alphabet". The result of the test with Monte Carlo simulation (10,000 samples) indicated a significant association, $p = 0.000$.

F. Education versus 'Support the Formal Adoption of a Lebanese Latin Alphabet'

The Chi-square (χ^2) test of independence between education and support for the formal adoption of a Lebanese Latin alphabet suggests that there is no statistically significant association, $\chi^2(4, N = 150) = 1.30$, $p = 0.861$. Respondent education level does not influence an individual's support for the formal adoption of a Lebanese Latin alphabet. Now, because there are 3 cells (33.3%) having expected counts less than 5. A Fisher's exact test was conducted to examine the association between education levels and support the formal adoption of a Lebanese Latin alphabet. The result of the test with Monte Carlo simulation (10,000 samples) indicated a non-significant association, $p = 0.909$.

4.4.4 More Cross-tabulations

"Do you think writing Lebanese in Latin letters reflects Lebanese identity more strongly?" Versus "Would you support the formal adoption of a Lebanese Latin alphabet in education or media?"

Initially, the corresponding chi-square to test the association between script use (Lebanese in Latin letters) and perceptions of Lebanese identity suggests that there is a statistically significant association, $\chi^2(4, N = 150) = 18.80$, $p = 0.001$. This association can be attributed to the chi-square test that results from comparing "Awareness of Said Akl's project" with "Support the formal adoption of a Lebanese Latin alphabet." The chi-square test suggests there is a statistically significant association, $\chi^2(4, N = 150) = 31.47$, $p = 0.000$. Thus, a significant association is observed between the respondents' awareness of Akl's project and their perceptions of Lebanese identity.

4.5 Chi-square Findings

The chi-square analyses reveal a consistent and theoretically meaningful pattern linking linguistic practices, identity construction, and attitudes toward Latinization. Significant associations were found between age and "writing Lebanese in Latin letters (instead of Arabic script) reflects Lebanese identity more strongly?", as well as age and support for a Lebanese Latin alphabet, confirming a strong generational effect in which younger participants favor Arabizi scripts and are more supportive of Latinization. While gender did not show any statistically significant influence, education showed a significant influence on "writing Lebanese in Latin letters (instead of Arabic script) reflects Lebanese identity more strongly?" Most notably, age and education were the strongest and most consistent predictors for awareness of Said Akl's Latinization project, demonstrating highly significant relationships. In fact, identity perception and awareness of Said Akl were the strongest and most consistent predictors, demonstrating highly significant relationships with both support for Latinization and script usage patterns. These findings indicate that linguistic behavior in Lebanon is not merely functional but deeply embedded in identity, politics, and ideological alignment, with Arabizi functioning as both a communicative tool and a symbolic marker of cultural positioning. Overall, the results support the argument that the growing visibility of non-Arabic scripts reflects broader sociocultural transformations rather than purely linguistic change. Alsulami (2019) finds that Arabizi is primarily used among peer groups and informal networks, particularly among younger users, and is rarely used in formal or intergenerational communication. These findings align closely with our own results, reinforcing the role of age as a key predictor of Arabizi usage.

5. Discussion

A total of approximately 180 responses were analyzed. The sample was predominantly young, with nearly two-thirds of participants aged between 15 and 34 years. Gender distribution was relatively balanced, and the sample was highly educated, with the majority holding university-level degrees. While this demographic profile reflects populations most actively engaged in

digital communication, it also limits the generalizability of the findings.

The results indicate a clear preference for non-Arabic script forms in informal digital communication. Most participants reported using either Arabizi (Latin-script Arabic) or a combination of Arabic and Latin scripts, while exclusive use of Arabic script was comparatively limited. In addition, respondents expressed greater comfort typing in Latin characters, further reinforcing the dominance of Arabizi in online contexts.

One of the most prominent themes emerging from the responses is typing convenience. Participants frequently mentioned that Latin keyboards on smartphones and computers make Arabizi easier and faster to use than Arabic script. This reflects broader patterns in digital communication, where technological affordances often influence writing practices and language choices. In this context, Arabizi can be understood as an adaptive strategy that users employ to facilitate communication within digital environments.

Another important theme relates to the perception of Arabizi as a temporary or informal writing system. Many respondents indicated that Arabizi is mainly used in messaging applications and social media interactions, while Arabic script remains the preferred form for formal communication, education, and official contexts. This suggests that users recognize a clear distinction between informal digital communication and formal written language.

Although a minority of responses expressed concerns regarding the potential impact of Arabizi on Arabic language proficiency, these concerns were not dominant in the dataset. Instead, most participants acknowledged both the advantages and limitations of Arabizi, demonstrating a balanced perspective on its role in everyday communication.

While Arabizi is widely used and generally perceived as easier, its role remains functional and informal. Users continue to recognize the importance of Arabic script, suggesting that increased visibility of Arabizi reflects usage convenience and reporting, rather than a fundamental transformation of linguistic identity.

The continued prevalence of number-based Arabizi conventions (e.g., 3, 7, and 2) suggests the persistence of early digital writing practices, even as communication technologies evolve.

The findings of this study demonstrate that Arabizi is a dominant and normalized form of informal written communication, particularly among younger, digitally active populations. Its widespread use appears to be driven primarily by technological convenience and communicative efficiency, rather than ideological motivations.

The lack of association between Arabizi use and education level challenges assumptions that Latin-script Arabic reflects linguistic deficiency. Instead, Arabizi emerges as a cross-educational phenomenon, embedded in digital culture. At the same time, the significant relationship between script use and identity perception suggests that Arabizi may carry emergent sociolinguistic meaning, even if users are not explicitly aware of historical efforts such as those proposed by Said Akl.

Importantly, the predominance of conditional attitudes in the sentiment analysis indicates that users maintain a clear distinction between informal and formal language domains. Arabizi is

widely accepted for casual communication but is not perceived as a substitute for standard Arabic in formal contexts.

6. Conclusion

Overall, the results support the argument that the increasing visibility of Arabizi does not reflect a replacement of Arabic script, but rather the expansion of context-dependent, multimodal literacy practices shaped by digital communication environments. The quantitative analysis demonstrates that support for Latinization is significantly associated with age, with younger participants showing a clear preference for Arabizi and mixed scripts. In contrast, no significant relationship was observed between gender and script use, suggesting that Arabizi transcends gender boundaries. Similarly, the absence of a significant association between education level and script preference indicates that Arabizi use is not linked to educational background, but rather reflects broader patterns of digital engagement.

The widespread lack of awareness of initiatives such as those associated with Said Akl indicates that contemporary Arabizi usage is largely pragmatic rather than ideologically driven. The qualitative sentiment analysis further reinforces this interpretation. Most respondents expressed conditional acceptance of Arabizi, recognizing its utility in informal communication while maintaining a clear distinction between informal and formal language domains. Positive attitudes emphasized convenience and speed, whereas negative attitudes reflected concerns about linguistic preservation and the status of Arabic script.

Taken together, these findings suggest that Arabizi should not be understood as a replacement for Arabic, but rather as part of a broader shift toward context-dependent, multimodal literacy practices shaped by digital communication environments.

6.1 Limitations

Despite its contributions, this study has several limitations that should be acknowledged.

First, the sample is not fully representative of the broader population. It is skewed toward younger and highly educated participants, which reflects the demographic most engaged in digital communication but limits the generalizability of the findings. Future research should aim to include a more diverse sample, particularly older age groups and individuals with varying educational backgrounds.

Second, while the sample size is sufficient for chi-square analysis, it provides only moderate statistical power. As a result, smaller or more subtle associations, particularly those related to gender or education, may not have been detected.

Third, employing self-reported data brings in the chance of response bias, since participants might not consistently represent their true language habits.

Fourth, the sentiment analysis of open-ended responses, particularly those written in Arabizi, required manual interpretation and transliteration. The aforementioned may introduce a degree of subjectivity. Although systematic coding procedures were applied, future studies could

enhance reliability through multiple coders or computational linguistic tools.

Fifth, the study's cross-sectional design restricts the capacity to evaluate changes over time. Arabizi usage is likely influenced by evolving technological and social factors. Longitudinal research would be valuable in capturing these dynamics.

6.2 Key Markers from this Research

1. Arabizi is not just a writing system. It is an identity marker. Its use reflects deeper cultural positioning rather than purely practical communication needs.
2. Generational change is driving linguistic transformation. Younger Lebanese are significantly more likely to use mixed scripts and support Latinization, indicating a shift shaped by digital communication.
3. Identity and awareness. Variables such as identity perception and awareness of Said Akl are far stronger predictors than gender or education.
4. Every day, linguistic practices shape political and cultural attitudes. Individuals who already use Arabizi or mixed scripts are more likely to support broader structural changes like a Lebanese Latin alphabet.
5. Arabizi reflects adaptation, not decline. Its spread should be understood as a response to technological, social, and cultural shifts, not as a loss of Arabic.
6. Language in Lebanon is a site of negotiation. Competing scripts (Arabic vs. Latin) mirror broader tensions around identity, modernity, and cultural affiliation.

6.3 Implications

The findings of this study carry important implications for language policy, education, and cultural planning in Lebanon:

- Adopting a pluralistic language policy rather than a prescriptive one. Given that script use reflects identity and social practice, attempts to impose a single “correct” script are unlikely to succeed. Policymakers should instead recognize the coexistence of Arabic, Arabizi, and mixed forms as part of Lebanon’s evolving linguistic landscape.
- Integrating digital literacy into Arabic language education. Rather than treating Arabizi as a threat, educational curricula can incorporate it as a bridge to strengthen engagement with Arabic. Teaching students how to move fluidly between scripts may enhance both linguistic competence and cultural awareness. This approach mirrors the use of authentic material to support communication literacy as depicted in Yusupalieva’s (2024) study.
- Promoting Arabic without framing Arabizi as a decline. Public discourse should avoid alarmist narratives about the "erosion" of Arabic. The data suggest that Arabizi is an adaptive response to modern communication environments, not a replacement for Arabic. This approach is contingent on Abu-Liel, Eviatar, & Nir (2020), Brabetz (2022), and Zeitouni (2025).

- Encouraging informed public debate on language and identity.
- The strong influence of identity perception and awareness of figures like Said Akl highlights the need for open, critical discussions about language reform, national identity, and cultural heritage. Public debate is considered an educational tool to foster critical thinking and communication skills (Yusupalieva, 2024).
- Leveraging youth practices in policy design. Since younger generations are leading linguistic change, their practices should inform policy development, especially in education, media, and digital communication strategies (Diplo Foundation, 2024).
- Avoiding top-down Latinization efforts without societal consensus. While support for a Lebanese Latin alphabet exists, it is uneven and ideologically driven. Any institutional move toward Latinization would require broad societal dialogue to avoid deepening cultural divisions (Blanco, Rusoja, & Singh, 2026).

In summary, effective language policy in Lebanon should adapt to sociolinguistic realities rather than attempt to control them, recognizing that language is both a communicative tool and a core expression of identity. In fact, the collected data actually provides an important finding: it's not simply fear of losing identity, but rather active negotiation of identity.

6.4 Recommendations

The following recommendations are issued to both the education and government sectors, grounded in the aforementioned findings.

6.4.1 To the Education Sector

- Framing Arabizi as a threat to identity should not be practiced. The evidence shows that students using Arabizi are not rejecting identity; they are redefining how it is expressed. Treating it as 'wrong' risks alienating learners. Abu-Liel, Eviatar, & Nir (2020) posit that "Arabizi is a tool for shaping the Arabic identity of upcoming generations."
- Teaching 'script flexibility' as a skill fosters communication skills. This approach mirrors the use of authentic material to support communication literacy as depicted in Yusupalieva's (2024) study. However, students should be able to write formal Arabic effectively and understand and use Arabizi in informal contexts (Alsulami, 2019). This reflects real-world communication rather than idealized norms.
- Reconnecting Arabic to lived identity. If students feel Arabic is distant or overly formal, they will naturally turn to alternatives. Education should emphasize Arabic as a living, adaptable language, not only a classical standard. Arak (2024) highlights the coexistence of innovation and preservation, with users balancing modern communication practices and traditional linguistic norms.
- Encouraging critical thinking about language and identity. Introducing discussions about figures like Said Akl helps students understand that language debates are historical, ideological, and ongoing, not fixed truths. In this case, Yusupalieva's (2024)

study encourages authentic materials and public debates to foster critical thinking and communication.

6.4.2 To Government and Policymakers

- They must not legislate identity through script. Attempts to enforce Arabic-only or promote Latinization from above risk backlash. Identity cannot be stabilized through regulation alone. Any move toward Arabic-only or Latinization would require broad societal dialogue to avoid deepening cultural divisions (Blanco, Rusoja, & Singh, 2026).
- Acknowledging linguistic reality. Arabizi is already embedded in daily life, especially among youth. Ignoring it creates a gap between policy and practice.
- Shifting from protection to engagement. Instead of "protecting Arabic from loss," there must be a focus on: Making Arabic relevant in digital spaces, supporting Arabic content creation, and modernizing its use in technology and media. Arak (2024) highlights the coexistence of innovation and preservation, with users balancing modern communication practices and traditional linguistic norms.
- Promoting inclusive identity narratives. The divide observed in the current data shows that people disagree not just about the script, but about what it means to be Lebanese. Policy should avoid taking rigid positions and instead allow multiple expressions of identity to coexist.

6.5 Insights for Future Research

Arabizi has raised concern among some to cause a loss of identity (Alshwuairekh, 2014; Alghamdi & Petraki, 2018; Saide, 2019). However, others look at it as an innovation and dynamic motivator source (Abu-Liel, Eviatar, & Nir, 2020; Brabetz, 2022; Arak, 2024; Zeitouni, 2025).

This work's results suggest something more interesting: Society is not simply afraid of losing identity; it is actively renegotiating it. For example, some participants see Arabic script as essential to identity, others see Latin script (or Arabizi) as equally expressive of Lebanese identity, and the awareness of Said Akl intensifies this divide, rather than resolving it. The real risk is not linguistic change itself, but polarization:

- If Arabic is framed as "authentic" and Arabizi as "corrupt", then the division grows.
- If Arabizi replaces Arabic entirely, then cultural depth may weaken.

Therefore, we should strive to fulfill a balanced approach: Preserving Arabic, accepting Arabizi, and letting the Lebanese identity evolve without forcing it. Consequently, researchers are called to investigate further these concerns.

Overall, Arabizi reflects an adaptive response to digital communication environments, illustrating how language practices evolve in response to technological and social change. Its continued use alongside Arabic highlights the flexibility of linguistic systems and the capacity of users to navigate multiple modes of expression, context, and communicative needs.

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Appendix

Questionnaire
Use of Latin Letters in Lebanese Digital Communication

This survey is part of a research project about digital communication practices in Lebanon. It explores whether Lebanese people are using Latin letters (with or without numbers) instead of the Arabic script in online chats, and whether this reflects a cultural or linguistic shift. Your responses are anonymous and will be used only for academic purposes.

Section A – Language & Script Use

1. When you chat with friends or family (WhatsApp, Messenger, SMS, Instagram, etc.), what script do you *mostly* use?

   ☐ Arabic script (e.g., مرحبا كيفك؟)

   ☐ Latin script with numbers (Arabizi/Franco, e.g., mar7aba kifak?)

   ☐ Latin letters only (without numbers, e.g., marhaba kifak?)

   ☐ Mix of both (Arabizi and Latin letters)

   ☐ A Foreign Language and its script (English, French, Spanish, …)

2. Do you feel more comfortable typing in:

   ☐ Arabic letters

   ☐ Latin letters

   ☐ Both equally

3. If you use the Latin script, which form do you prefer?

   ☐ With numbers (7 =ء = 2 ,ع = 3 , ,ح etc.)

   ☐ Without numbers (just letters)

☐ Both depending on context

4. Why do you prefer using Latin letters? (Choose all that apply)

☐ Faster/easier on my keyboard

☐ My phone doesn't support Arabic well

☐ I learned to type in Latin letters first

☐ I think it looks "cool" or modern

☐ Habit from friends/family

☐ Other (please specify) _____

5. Do you think writing Lebanese in Latin letters (instead of Arabic script) reflects Lebanese identity more strongly?

☐ Yes

☐ No

☐ Not sure

6. Are you aware of Said Akl's project to replace Arabic letters with a Latin-based Lebanese alphabet?

a. ☐ Yes, and I support it

b. ☐ Yes, but I don't support it

c. ☐ No, I wasn't aware

7. If you are aware of Said Akl's project, do you think the current use of Latin letters in chats/social media is unintentionally fulfilling Said Akl's dream?

a. ☐ I said (In question 6) I am not aware

b. ☐ Yes, absolutely

c. ☐ Partly / in some way

d. ☐ Not really

e. ☐ Not at all

8. Would you support the formal adoption of a Lebanese Latin alphabet in education or media?

   a. ☐ Yes

   b. ☐ Maybe, under some conditions

   c. ☐ No

Section B – Open Questions

1. In your opinion, does using Latin letters for Lebanese make communication easier or harder? Why? Please explain (**Thanks for taking the time to explain**).

2. Do you see Latin-letter Lebanese as temporary (for convenience in chat) or as the future of writing Lebanese? Please explain (**We appreciate your clarity on this matter**).

3. "Fik tuktob b kalimatak lish bt7ebb aw ma bt7ebb tist3mel Arabizi?" (**Shukran 3ala alwaqt alladhi khasaStahu liltawDee7**).

Section C – Demographics

1. Age:

   ☐ 15–24

   ☐ 25–34

   ☐ 35–44

   ☐ 45–54

   ☐ 55 or more

2. Gender:

   ☐ Male

   ☐ Female

   ☐ Prefer not to say

3. Place of residence:

☐ Lebanon (please specify city/town) _____

☐ Outside Lebanon (please specify country) _____

4. Education level:

☐ High school or less

☐ University undergraduate

☐ University graduate

☐ Postgraduate

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