

UNDERSTANDING KANJI MEMORIZATION STRATEGIES AMONG NATIVE JAPANESE SPEAKERS: A PSYCHOLINGUISTIC PHENOMENOLOGICAL PERSPECTIVE

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Article Info	Abstract
Article History Received: March 2026 Revised: May 2026 Accepted: June 2026 Published: July 2026	<i>Kanji is one of the most complex writing systems because it requires the integration of visual, phonological, semantic, and orthographic processing simultaneously. In the digital era, increasing reliance on smartphones and automatic typing systems has reduced handwriting practices among Japanese speakers, contributing to difficulties in recalling and reproducing kanji accurately. Therefore, this study aims to identify the kanji memorization strategies used by native Japanese speakers and examine the factors influencing those strategies. This study employed a qualitative approach with a descriptive phenomenological design within a psycholinguistic framework. Data were collected through semi-structured interviews and online questionnaires involving eight native Japanese speakers aged 17–62 who actively use kanji in daily life. The instruments consisted of an interview guide and a questionnaire developed from kanji learning strategy classifications. Data were analyzed using thematic analysis. The findings reveal that native Japanese speakers employ multiple strategies, particularly repetitive writing, radical analysis, visual recognition, meaning association, contextual learning, and technology-assisted practices. Strategy selection is influenced by educational experiences, literacy environment, kanji complexity, motivation, learning preferences, and technological adaptation. The findings also indicate generational differences in strategy use, especially regarding increasing dependence on digital technology and declining handwriting frequency. Furthermore, kanji memorization is interpreted not only as a cognitive activity but also as a sociocultural practice related to discipline, persistence, and literacy identity. These findings contribute to the development of more contextual and culturally grounded kanji learning models.</i>
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INTRODUCTION

Kanji is a fundamental component of the Japanese writing system and is widely recognized as one of the most complex orthographic systems in the world because it simultaneously integrates visual, phonological, semantic, and morphological information (Rasiban et al., 2019). Unlike alphabetic writing systems, kanji requires learners to process large amounts of visual and semantic information at once, making recognition, retention, and

production cognitively demanding (Kang & Saito, 2025). Consequently, kanji mastery remains a major challenge not only for foreign learners of Japanese but also for native Japanese speakers themselves (Kubota, 2017). In Japanese education, kanji acquisition is introduced systematically from elementary school through repetitive writing exercises, contextual exposure, and continuous literacy practice (MEXT, 2017). However, despite long-term exposure to kanji since childhood, many native speakers continue to experience difficulties in remembering and reproducing characters accurately in handwriting.

This issue has become increasingly significant in the digital era. The widespread use of smartphones, computers, and automatic conversion systems has transformed literacy practices in Japanese society, reducing the frequency of handwriting activities in everyday life (Agency for Cultural Affairs, 2021). As a result, many Japanese speakers experience the phenomenon commonly referred to as “kakitori mondai,” namely the inability to write kanji despite being able to recognize or read them correctly. Previous studies suggest that decreasing handwriting practice may weaken orthographic memory, visuomotor coordination, and long-term retention of kanji forms, particularly among younger generations who rely heavily on digital typing systems. This phenomenon indicates that kanji learning and retention are no longer merely linguistic issues, but are closely connected to cognitive processes, literacy identity, technological adaptation, and sociocultural experiences in contemporary Japanese society.

A considerable number of previous studies have examined kanji learning strategies among foreign learners of Japanese (Mustika, 2018; Rasiban et al., 2019; Rasiban & Triwikrama, 2025; Wardoyo, 2021). These studies emphasize the effectiveness of mnemonic strategies, visual association, repetition, contextual learning, and handwriting practice in supporting kanji memorization. Recent psycholinguistic studies have further demonstrated that kanji acquisition involves interactions between memory systems, visual cognition, semantic processing, and motor reinforcement developed through repeated writing activities. In addition, recent literacy studies have highlighted that digital writing habits increasingly influence orthographic memory formation and character recall among Japanese users. Nevertheless, existing studies predominantly focus on learners of Japanese as a foreign language, while the experiences of native Japanese speakers remain relatively underexplored.

In fact, the experiences of native Japanese speakers are particularly important because they reflect authentic long-term interactions between language, culture, educational practice, and daily literacy habits. Unlike foreign learners who often depend on structured mnemonic techniques and formal instruction, native speakers develop kanji memorization strategies through continuous sociocultural exposure, habitual literacy activities, school-based repetition, and contextual language use from early childhood. Their experiences therefore provide valuable insights into how kanji cognition, memory retention, literacy identity, and writing habits are shaped naturally over time. Furthermore, investigating native speakers' experiences has become increasingly urgent due to concerns regarding the decline of handwriting ability and orthographic retention in the digital era.

Although research on kanji learning strategies has expanded considerably, previous studies have examined kanji learning from various perspectives. The development of kanji knowledge among second-language learners after study abroad experiences, highlighting the influence of learning environments on kanji retention (Kubota, 2017). Other study like (Tan Danh, 2021) focused on sustainable methods for improving basic-level kanji learning skills, emphasizing repetitive practice and structured learning approaches. Meanwhile, (Shekarabi & Tajfirooz, 2023) explored the difficulties experienced by Persian-speaking learners of Japanese, particularly in relation to orthographic complexity and memorization challenges. Recent studies have also examined cognitive and strategic aspects of kanji learning. In his study, (Allen, 2023) emphasized the role of phonological reading aids and self-regulation in supporting kanji word learning among L2 learners, while (Kirk, 2022) analyzed the relationship between study

environments, acquisition rates, and kanji learning strategies. In addition, (Hudaynazarova et al., 2025) discussed structured approaches to Japanese orthography learning, and (Tamaoka et al., 2026) highlighted the importance of handwriting practice in strengthening orthographic memory and kanji recall ability. However, studies examining kanji memorization from the perspective of native Japanese speakers remain relatively limited. Most previous studies have concentrated on instructional effectiveness, learner difficulties, and cognitive performance among foreign learners, while the authentic experiences of native speakers in maintaining kanji memory and handwriting ability have received less scholarly attention. Furthermore, limited research has explored how cognitive, cultural, and digital literacy factors interact in shaping native speakers' kanji memorization practices in contemporary society. This gap is particularly important in the digital era, where increasing dependence on typing technologies may gradually influence handwriting habits, orthographic retention, and literacy identity among Japanese speakers.

Based on this, this study aims to identify kanji memorization strategies among native Japanese speakers and analyze the factors influencing the selection of these strategies. The novelty of this study lies in its focus on the authentic lived experiences of native Japanese speakers through a psycholinguistic phenomenological approach that integrates cognitive, cultural, and digital literacy dimensions simultaneously. Unlike previous studies that mainly focused on foreign learners or isolated cognitive aspects of kanji learning, this study explores how native speakers construct memorization strategies through long-term literacy practices and technological adaptation in everyday life. The findings are expected to contribute both theoretically and practically to Japanese language education, particularly for foreign learners from non-kanji orthographic backgrounds such as Indonesian learners of Japanese. Accordingly, this study addresses the following research questions: What strategies do native Japanese speakers use to memorize kanji? What factors influence the development and use of these kanji memorization strategies? And How do native Japanese speakers construct and interpret their kanji learning experiences in contemporary Japanese society?

RESEARCH METHOD

Research Design

This study employs a qualitative approach with a descriptive phenomenological design to understand the subjective experiences of native Japanese speakers in memorizing kanji (Creswell, 2018). This approach was chosen because it allows for an in-depth exploration of individuals' lived experiences. Figure 1 illustrates the descriptive phenomenological research design, which systematically outlines the research stages from instrument development to data validation. The descriptive phenomenological design of this study aims to identify the essence of the experience of learning kanji from the perspective of native Japanese speakers, particularly regarding the strategies employed and the factors influencing the selection of those strategies. Thus, this study focuses not only on what strategies are used, but also on how these experiences are formed and interpreted within a social and cultural context.

This descriptive phenomenological approach aligns with the psycholinguistic framework because the study seeks to understand how cognitive processes involved in kanji memorization, such as encoding, visual processing, retrieval, meaning association, and orthographic recall, are experienced and interpreted by native Japanese speakers in real-life contexts. Rather than experimentally measuring cognitive performance, this study explores how participants consciously describe, construct, and reflect upon their kanji learning experiences. Therefore, psycholinguistic processes are interpreted through participants' lived experiences within educational, cultural, and digital literacy contexts.

Within this research framework, there are no measurable quantitative variables; instead, the focus is on thematic categories emerging from the data. However, conceptually, this study involves two main focuses that can be viewed as analytical constructs, namely: Kanji

memorization strategies, which include various forms of cognitive strategies such as repeated writing, meaning association, radical analysis, use of context, and visual-mnemonic strategies. Factors influencing strategy selection, which include educational experience, literacy environment, kanji complexity, and individual learning style preferences. These two constructs are analyzed interactively within the context of participants' learning experiences, thereby yielding a holistic understanding of the kanji memorization process.

Research Participants or Population and Sample

Participants were selected using purposive sampling, as they were intentionally chosen as informants based on criteria relevant to the research objectives (Hennink & Kaiser, 2022). The primary criteria for participants included individuals who actively use kanji in their daily lives and have experience in learning and memorizing kanji characters, whether through formal education or personal experience. The participants consisted of eight native Japanese speakers aged 17–62 who had completed formal education in Japan and actively used kanji in their daily lives. The participants' age range spanned from 17 to over 62 years, encompassing both adolescents and adults. This age range was selected because it was considered representative of key stages in the kanji learning process, both within formal educational settings and in daily life. The participants' professions included high school students, professionals, and caddies. The number of participants was determined based on the principle of data saturation, which occurs when the information obtained from interviews has revealed recurring patterns and no significant new data emerges (Rivaldi et al., 2023). In phenomenological studies, the ideal number of participants ranges from 5 to 25 (Klinke & Fernandez, 2023).

The participants consisted of four males and four females with diverse educational and occupational backgrounds, including high school students, university graduates, office workers, and service-sector employees. All participants had completed formal education in Japan and reported using kanji regularly in daily activities such as reading, writing, workplace communication, and digital interaction. Participant selection criteria included: (1) native proficiency in Japanese, (2) active use of kanji in everyday life, (3) willingness to participate voluntarily, and (4) ability to reflect on personal experiences related to kanji learning and memorization.

Instruments

The research instruments consisted of a semi-structured interview guide and an open-ended questionnaire developed based on the theoretical framework of language learning strategies and psycholinguistics. Interviews were used to explore participants' subjective experiences in depth, while the questionnaire was used to obtain additional data regarding strategies and factors influencing kanji learning. Primary data were obtained through in-depth interviews, while the questionnaire served as supplementary data. An instrument matrix was designed to ensure alignment between research questions, indicators, and the collected data.

The semi-structured interview guide in this study was designed to deeply explore the subjective experiences of native Japanese speakers in memorizing kanji. The development of this interview guide was based on phenomenological theory (Öhlén & Friberg, 2023), which emphasizes the importance of exploring lived experience through open-ended questions and free narration. Therefore, the interviews were designed in a semi-structured format to allow participants to describe their experiences, perceptions, and strategies naturally without rigid constraints. Based on this theory, the instrument consists of ten questions covering six main indicators: initial experiences, strategies used, obstacles, supporting factors, self-reflection, and future perspectives. All items were selected to capture the meaning, internal processes, and ways in which participants form their understanding of kanji in the context of daily life and formal education. The interview guide outline is shown in Table 1 regarding the kanji memorization strategies of native Japanese speakers.

Table 1
Interview Grid

Indicator	Item(s)
Initial Experience (<i>shoki no keiken</i>)	1
Strategies Employed (<i>shiyō shita senryaku</i>)	2, 3, 4, 5
Barriers/Challenges (<i>shougai to kadai</i>)	6
Supporting Factors (<i>shien youin</i>)	7
Self-Reflection and Evaluation (<i>jiko hansei to hyōka</i>)	8, 9
Future Outlook (<i>shourai tenbou</i>)	10

The questionnaire in this study consists of 17 items, divided into 13 items on kanji learning strategies and 4 items on participant demographics. All strategy items were formulated based on the Kanji Learning Strategies classification developed by (Haththotuwa Gamage, 2026). Gamage divides kanji learning strategies into four main groups: strategies for learning kanji forms, strategies for learning kanji readings, strategies for learning kanji meanings, and strategies for consolidating/reinforcing kanji knowledge. These four categories were used because they are considered to describe the natural process of mastering kanji, ranging from recognizing graphic forms, understanding how to read them, grasping their meanings, to reinforcing memory through repeated practice. The questionnaire uses a linear scale to examine the tendencies in strategy use among native Japanese speakers, covering learning habits, methods of memorizing kanji, and patterns of knowledge consolidation. Table 2 below presents the questionnaire framework based on classification.

Table 2
Questionnaire Grid

Variable	Strategy Category (Gamage, 2003)	Indicator	Item(s)
Kanji Learning Strategies	Strategies for Learning Kanji Forms	Learning the structure and components of kanji	2
	Strategies for Learning Kanji Readings	Learning <i>on</i> and <i>kun</i> readings and their contextual usage	6
	Strategies for Learning Kanji Meanings	Meaning association, storytelling, and conceptual understanding	1, 3
	Strategies for Consolidating Kanji Knowledge	Repetition; reading and writing practice; use of technology; self-evaluation; motivation; social support	4, 5, 7, 8, 9, 10, 11, 12, 13
Participant Demographics	—	Age; Gender; Occupation/Status; Frequency of Kanji Use	A1–A4

The questionnaire employed a five-point Likert scale ranging from “strongly disagree” to “strongly agree” to identify participants’ tendencies in using kanji memorization strategies. The questionnaire items were adapted from (Haththotuwa Gamage, 2026) classification and aligned with the research questions and thematic indicators of this study. Prior to the main data collection process, the interview guide and questionnaire items underwent expert validation by two scholars in Japanese language education to ensure content relevance, clarity, and conceptual appropriateness. A pilot administration involving two participants was also conducted to evaluate item clarity and response consistency.

Data Collection

Data were collected through semi-structured interviews and open-ended online questionnaires conducted between [month-year] and [month-year]. The interviews were conducted individually either face-to-face or online depending on participant availability. Japanese was used as the primary interview language, while clarification in Indonesian or

English was provided when necessary. Each interview lasted approximately 30–60 minutes. With participants' consent, all interviews were audio-recorded to ensure data accuracy.

Following the interviews, the recordings were transcribed verbatim and translated into English for analysis and reporting purposes. To maintain meaning accuracy, the researcher repeatedly reviewed the transcripts while comparing them with the original recordings. Meanwhile, the online questionnaire was distributed using Google Forms and consisted of demographic questions and kanji learning strategy items developed from (Haththotuwa Gamage, 2026) classification. Prior to participation, all participants received explanations regarding the research objectives, procedures, confidentiality, and voluntary participation rights. Informed consent was obtained before interviews and questionnaire completion. Participants were also informed that they could withdraw from the study at any stage without consequences.

Data Analysis

Data were collected through in-depth (semi-structured) interviews and open-ended online questionnaires. The interviews were conducted to explore participants' experiences learning kanji from their school years through adulthood. The data collection techniques in this study combined two main methods: interviews and questionnaires. The use of more than one technique aimed to provide a more comprehensive understanding of participants' experiences and to deepen data interpretation, as recommended in phenomenological research (Bartholomew et al., 2021; Gómez Tapia, 2025). Data analysis in this study was conducted systematically to interpret the qualitative data obtained from interviews and open-ended questionnaires. Given the qualitative phenomenological design, data analysis focused on identifying patterns of meaning and capturing the essence of participants' lived experiences in memorizing kanji.

The data analysis in this study was conducted through six stages. First, data familiarization was carried out by reading and reviewing the data repeatedly to understand its content and identify initial patterns. Second, preliminary coding was conducted by marking meaningful units related to kanji memorization strategies and the factors influencing them. Third, similar codes were grouped into preliminary themes that represented broader categories. Fourth, the themes were reviewed to ensure their consistency and alignment with the overall data. Fifth, each theme was defined and named clearly based on the core meaning it represented. Finally, data interpretation was conducted by interpreting the themes within a relevant theoretical framework and linking them to the research context.

During the coding process, meaningful statements related to kanji memorization experiences were labeled with initial codes such as “repetitive writing,” “visual association,” “radical analysis,” and “technology use.” These codes were subsequently grouped into broader categories and refined into overarching themes through repeated comparison across participant responses. The integration of interview and questionnaire data was conducted through triangulation to identify consistency and divergence between qualitative narratives and descriptive questionnaire patterns. Researcher reflexivity was also applied throughout the analysis process. The researcher continuously reflected on personal assumptions, interpretations, and potential biases related to Japanese language learning in order to maintain analytical transparency and minimize subjective influence during theme construction and interpretation.

Data Validity (Trustworthiness)

To ensure data validity, this study employs several techniques, namely: (1) methodological triangulation, by comparing data from interviews and questionnaires; (2) member checking, by sharing the results of data interpretation with participants; (3) iterative analysis, by re-reading the data to ensure thematic consistency. This phenomenological study

addresses ethical considerations by ensuring informed consent from participants, maintaining the confidentiality of their identities, and granting participants the freedom to withdraw at any time without consequences. To enhance the reliability of the analysis, the researcher employs data triangulation by comparing data from interviews and questionnaires. Additionally, member checking was conducted by confirming selected interpretations with participants to ensure accuracy and credibility.

RESEARCH FINDINGS AND DISCUSSION

Research Findings

The findings reveal that native Japanese speakers employ multiple kanji memorization strategies shaped by cognitive processes, educational experiences, sociocultural practices, and technological changes. Across both interview and questionnaire data, repeated writing emerged as the dominant strategy, followed by radical analysis, visual recognition, contextual learning, and meaning association. The findings also indicate generational differences in strategy use, particularly regarding the increasing reliance on digital technology among adult participants. These results address the research questions by illustrating how native Japanese speakers construct and adapt kanji memorization practices within contemporary literacy contexts.

In-Depth Interview Results

The coding process generated several categories and themes, as presented in Table 3. Figure 3 illustrates the relationships among the identified themes and summarizes patterns of kanji memorization experiences reported by the participants.

Table 3
Data Coding Results and Theme Development

No.	Example Participant Quotes	Initial Code	Category	Main Theme
1	"I write kanji repeatedly..." (P3)	Repetitive writing	Cognitive strategy	Kanji Memorization Strategies
2	"I imagine kanji as images..." (P5)	Visual imagery	Visual strategy	Kanji Memorization Strategies
3	"I associate them with meanings or stories..." (P2)	Meaning association	Elaborative strategy	Kanji Memorization Strategies
4	"I look at the components of kanji..." (P4)	Radical analysis	Structural analysis	Kanji Memorization Strategies
5	"I learn from reading or context..." (P7)	Contextual learning	Contextual strategy	Kanji Memorization Strategies
6	"School strongly emphasizes writing practice..." (P6)	Formal education	Educational factors	Influencing Factors
7	"A kanji-rich environment helps me learn..." (P8)	Literacy exposure	Literacy environment	Influencing Factors
8	"Kanji difficulty makes me use different strategies..." (P4)	Complexity effect	Kanji complexity	Influencing Factors
9	"I prefer learning visually..." (P1)	Learning preference	Learning style	Influencing Factors
10	"Learning kanji trains patience..." (P1)	Cultural value	Cultural dimension	Multidimensional Experience
11	"I feel proud to be able to write kanji..." (P2)	Emotional response	Affective dimension	Multidimensional Experience
12	"I often study with friends..." (P3)	Social interaction	Social dimension	Multidimensional Experience

Based on Table 3 and Figure 3, the results of the phenomenological analysis of the eight participants revealed that the experience of memorizing kanji among native Japanese speakers is shaped through a long process, beginning in elementary school and continuing into adulthood. The analysis yielded the following main themes.

Kanji Memorization Strategies

The findings indicate that participants generally employed a combination of strategies, although certain strategies appeared more dominant depending on age, learning habits, and daily literacy needs.

Repetition Strategy:

Most participants stated that repeatedly writing kanji was their primary strategy since elementary school. This activity was carried out through workbook exercises, school assignments, and independent practice. *“I memorize by writing it over and over until I remember” (P1, P7)*

Component-Based Strategy:

Some participants, particularly adults, rely on understanding kanji structure through radicals to facilitate remembering meanings and forms. *“If you know the parts, it’s easier to remember” (P5, P8)*

Visual Strategy:

Participants with a visual learning style rely on the shapes and subtle differences between similar kanji. *“I look at the shape and compare it to similar ones” (P3)*

Mnemonic Strategy (Meaning Association):

Some participants use stories or associations to remember, though this is not the dominant approach. *“Sometimes I remember by imagining the meaning or a story” (P2)*

Context-Based Strategy:

Adult participants tend to memorize through actual use in reading or work. *“I remember better if I see it often at work” (P4)*

Use of Technology:

Adult participants showed a shift toward using digital apps and electronic devices. *“Now I use my phone more often than writing” (P6)*

Factors Influencing Strategy Selection

Several key factors influencing strategy selection were identified: Age and Educational Stage: Adolescents tend to use repetition, while adults rely on context and technology. Formal Educational Environment: Japanese elementary schools strongly emphasize writing practice as a foundation for learning. Technological Advancements: Smartphone use has reduced handwriting practice. Practical Needs (Work): Workers focus more on reading skills than writing skills. Individual Motivation: Intrinsic motivation (interest) and extrinsic motivation (school/work demands) influence the intensity of strategy use.

Barriers to Memorizing Kanji

Participants also described several challenges in maintaining kanji memorization and writing ability. Frequently mentioned difficulties included the large number of kanji characters, variations in on’yomi and kun’yomi readings, difficulty recalling infrequently used kanji, and decreasing handwriting practice due to increased dependence on digital technology. These challenges further illustrate the influence of technological and contextual factors on contemporary kanji literacy practices.

Survey Results

Survey findings supported the interview results by showing recurring patterns in strategy use among participants. As summarized in Table 4, repetition and form-based strategies appeared most frequently, followed by contextual and technology-assisted strategies.

Table 4
Distribution of Strategy Use

Strategy Category	Percentage Dominant
Repetition & practice	High
Meaning-based (mnemonic/asosiation)	Moderate
Form-based (visual & structure)	High
Reading & context	Moderate-High
Technology-based	Moderate

Based on the survey results in Table 4, the findings indicate that repetition and visual strategies had the highest frequency, followed by structure- and context-based strategies. Table 5 shows the kanji learning patterns based on the survey results as follows:

Table 5
Kanji Learning Patterns

Kanji Learning Patterns	Percentage
Participants using writing practice	75%
Participants using radical analysis	62%
Participants utilizing reading context	58%
Participants using digital technology	50%

Based on data integration (data triangulation), the results of the interviews and the survey results in Tables 4 and 5 data demonstrated several consistent patterns. Repetitive writing remained the most dominant strategy across participants and was strongly associated with formal educational experiences. Radical analysis and visual recognition also emerged as important cognitive strategies for remembering kanji structure and meaning. In addition, contextual learning was more frequently reported among adult participants who used kanji in workplace and daily reading activities. The findings further suggest generational differences in strategy use, particularly regarding the increasing role of digital technology in reducing handwriting frequency while simultaneously supporting kanji recognition and access. Participants also associated kanji learning with cultural values such as discipline, persistence, and habitual practice developed through Japanese educational and literacy environments. These sociocultural experiences influenced how participants perceived and maintained their kanji learning strategies over time.

Discussion

The results of this study indicate that kanji memorization strategies among native Japanese speakers are a multidimensional process that involves not only cognitive aspects but is also influenced by sociocultural factors, learning styles, and motivation. Thus, the strategies employed cannot be understood merely as learning techniques but rather as the result of a complex interaction between mental mechanisms and the sociocultural context. From a psycholinguistic perspective, kanji memorization strategies are closely related to memory mechanisms, particularly the processes of encoding, storage, and retrieval (Rasiban & Triwikrama, 2025). Strategies such as repeated writing, visualizing shapes, and analyzing radicals serve to strengthen the encoding process through visual and sensorimotor pathways. The use of associations between kanji meaning and structure indicates that information is not stored mechanically but is meaningfully organized in long-term memory. Meanwhile,

difficulties in writing rarely used kanji underscore that the retrieval process—particularly recall—is more complex than recognition in a logographic writing system.

These cognitive processes are further reinforced by the principles of Dual Coding Theory, which emphasizes that the combination of visual and verbal representations enhances information retention (Wardoyo, 2021). Kanji, as a logographic system, inherently combines both representations, allowing strategies such as visual-based, mnemonic, and context-based approaches to activate two cognitive pathways simultaneously. This explains why diverse strategies—not just repetition, but also association and context—are used simultaneously by participants. Furthermore, the findings of this study are consistent with the view that kanji processing is multidimensional, involving the integration of visual, phonological, and semantic aspects (Kang & Saito, 2025; Sambai et al., 2023). The strategies used by native speakers reflect these three dimensions, while also indicating that mastering kanji still requires explicit strategies and sustained practice. Thus, even for native speakers, kanji learning is not an automatic process but rather the result of strategic adaptation throughout the learning experience.

However, these strategies do not form solely within the cognitive realm. From a sociocultural theory perspective, kanji learning is the result of the internalization of cultural practices and social interactions (Aiko, 2019). The dominant practice of repetitive writing exercises (*kakitori*) in the Japanese education system functions as a form of cultural mediation that shapes learning patterns from an early age. Furthermore, interactions with teachers, peers, and superiors act as scaffolding within the zone of proximal development (ZPD), particularly when learners encounter kanji difficulties (Mustika, 2018; Wardoyo, 2021). On the other hand, technological advancements such as smartphones and digital dictionaries indicate a transformation of cultural tools that mediate learning strategies, making them faster and more contextual (Guo, 2022).

Beyond sociocultural factors, variations in strategies are also influenced by individual learning styles. Based on Kolb's theory (1984), accommodating and assimilating styles appear dominant among native Japanese speakers, reflected in a preference for repetitive writing activities, reading, and analyzing kanji forms (Tamaoka et al., 2026). Meanwhile, the converging style emerges in the use of technology as a practical solution. This indicates that even though individuals are within the same educational system, they still develop learning strategies aligned with their respective cognitive preferences.

Another equally important factor is motivation. According to Self-Determination Theory, both intrinsic and extrinsic motivation play a role in determining learning strategies (Amato et al., 2025; Lensun, 2018). Intrinsic motivation, such as curiosity and interest in kanji as a cultural element, drives the use of deeper and more meaningful strategies. Conversely, extrinsic motivation, such as academic and professional demands, tends to result in more structured and outcome-oriented strategies, such as intensive repetition. These findings indicate that the affective dimension significantly contributes to learning success. Furthermore, this study confirms that kanji functions not only as a writing system but also as part of cultural identity and social practice (Rasiban & Triwikrama, 2025; Tamaoka et al., 2026). The activities of memorizing and writing kanji reflect values such as discipline, perseverance, and aesthetics, which strengthen learners' affective engagement. Therefore, kanji learning cannot be separated from the cultural dimensions that surround it.

Based on the discussion, this study confirms that kanji memorization strategies among native Japanese speakers cannot be reduced to mere repetitive practice, but rather constitute a multidimensional construct involving the integration of cognitive mechanisms, visual-verbal representations, as well as sociocultural and motivational dynamics. Unlike most previous studies that focused on learners of Japanese as a foreign language, these findings present an authentic native speaker perspective, demonstrating that the use of explicit strategies remains

relevant even in the context of first-language acquisition. Furthermore, this study underscores that factor such as the internalization of educational culture, learning style preferences, and motivational orientation not only influence strategy selection but also shape how individuals interpret the kanji learning process itself. Thus, the primary contribution of this study lies in the integration of psycholinguistic and sociocultural perspectives in explaining kanji learning as an adaptive, contextual, and ongoing process.

Based on this discussion, this study affirms that kanji memorization strategies among native Japanese speakers cannot be reduced to mere repetitive practice but constitute a multidimensional construct involving the integration of cognitive mechanisms, visual–verbal representations, and sociocultural and motivational dynamics. By integrating interactive and collaborative activities, such as group discussions and practice sessions with native speakers, to encourage active participation (Nurlaily et al., 2026).

CONCLUSION

This study concludes that kanji memorization among native Japanese speakers is a multidimensional and adaptive process shaped by cognitive, sociocultural, affective, and technological factors. The findings reveal that repetitive writing remains the most dominant strategy, followed by radical analysis, visual recognition, meaning association, contextual learning, and technology-assisted practices. Strategy selection is influenced by educational experiences, literacy environment, motivation, kanji complexity, professional needs, and generational differences in digital literacy practices. The findings also indicate that increasing reliance on digital technology has gradually reduced handwriting frequency, particularly among adult participants, while simultaneously changing the ways kanji are memorized and retained.

Theoretically, this study contributes to kanji learning research by integrating psycholinguistic and sociocultural perspectives in explaining kanji memorization as a dynamic and contextual process. Unlike many previous studies focusing primarily on foreign learners, this study provides an authentic native-speaker perspective on how kanji learning strategies are constructed through long-term literacy experiences and cultural practices. Pedagogically, the findings suggest the importance of developing kanji learning models that combine repetitive writing, radical awareness, contextual exposure, visual strategies, and reflective use of digital technology in more meaningful and culturally grounded learning environments.

Nevertheless, this study has several limitations. The number of participants was relatively small and limited to specific demographic backgrounds, which may restrict the broader generalization of findings. In addition, the study relied primarily on self-reported experiences and did not directly measure cognitive performance or handwriting accuracy. Therefore, future studies are recommended to involve larger and more diverse participants, conduct comparative research between native speakers and foreign learners, and explore longitudinal changes in kanji memorization practices in the digital era. Practical recommendations also include maintaining balanced handwriting practice alongside digital literacy use to support orthographic memory retention and sustainable kanji learning.

INFORMED CONSENT STATEMENT

Participation in this study is entirely voluntary. By agreeing to take part, the participants acknowledge that they have been informed about the purpose, procedures, potential risks, and benefits of the study. Participants understand that their identity are kept confidential and that all information they provide are used solely for research purposes. By continuing, they give their informed consent to participate in this research under the conditions described.

DATA AVAILABILITY STATEMENT

The data utilized in this study cannot be made publicly available due to strict adherence to privacy concerns and ethical obligations that safeguard participant confidentiality.

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