

## Examining the Interplay Between Critical Period Hypothesis and Attitudinal Dynamics in Second Language Proficiency: A Case Study of Second Language Acquisition Challenges

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### Abstract

*This research scrutinizes the interrelation between the Critical Period Hypothesis (CPH), inherent biological predispositions, and attitudinal determinants in the acquisition of English as a second language. Focusing on CHY, a Korean student at an English-speaking international school in Bali, the research interrogates the confluence of the CPH and language attitudes. The CPH posits an optimal language learning window between 2 to 12 years of age, a premise further supported by Chomsky's concept of natural linguistic faculties. Nonetheless, CHY's difficulty with English fluency invites skepticism towards these theoretical assertions. Data derived from interviews with CHY, her relatives, and her bilingual brother, YH, reveal a reluctance towards English that impairs CHY's language development. This study expands the discussion beyond the CPH and inherent abilities, incorporating the significant role of learner attitudes and the timing of environmental alterations during critical developmental intervals. Findings illuminate the complex interplay of language acquisition, highlighting the influence of individual perseverance, familial backing, and deliberate pedagogical strategies. These discoveries enrich the discourse on language learning mechanisms, offering valuable perspectives for educators, parents, and linguists.*

**Keywords:** *Second Language Acquisition, Critical Period Hypothesis, Attitudinal Factors, Language Proficiency, Environmental Influences.*

### 1. Introduction

The Critical Period Hypothesis (CPH) for language acquisition posits that there exists a pivotal developmental window during which language acquisition occurs most naturally and efficiently. Lenneberg (1967) identified this period to span roughly between the ages of two and twelve, a time believed to be crucial for developing a second language to a native-like level. Complementing this theory, Chomsky's (1959) assertion of an innate Language Acquisition Device (LAD) suggests that children are endowed with an inherent ability to deduce the structures and rules of language without formal instruction. These theoretical frameworks have been foundational in linguistic research, yet real-world applications yield mixed outcomes, indicating a complex interplay of factors influencing Second Language Acquisition (SLA).

This study seeks to apply these established theoretical constructs to the case of CHY, a Korean student facing challenges in acquiring English as a second language in the immersion environment of Cendekia Harapan School in Bali. Despite four years of

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instruction in an English-dominant setting, CHY's struggle to attain proficiency underscores potential discordances between linguistic theory and practice. By examining CHY's attitudes toward the English language and exploring the contributory factors to these attitudes, this paper endeavors to illuminate the multifaceted nature of SLA. The research is situated within the broader discourse on the influence of learner attitudes (Dörnyei, 2005; Gardner, 1985), the role of the learning environment (Ellis, 2008), and the possible extension of the critical period's upper boundary (Birdsong, 2006). Through this nuanced exploration, the study aims to validate and potentially recalibrate current pedagogical understandings of the CPH and innate language capabilities within an educational context.

## 2. Literature Review

The Critical Period Hypothesis (CPH) asserts a formative window in early childhood conducive to language acquisition, a concept first systematized by Lenneberg (1967). This phase, demarcated between two and twelve years, correlates with heightened neurological plasticity, facilitating the assimilation of linguistic structures. Lenneberg suggests that exposure and interaction within this period are pivotal, allowing children to internalize and complexify language through organic interactions with their environment.

Complementing the CPH, Chomsky's (1959) Language Acquisition Device (LAD) postulates an innate faculty that equips children with a preordained capacity to parse and generate language constructs, independent of explicit instruction (Al-Harbi, 2020). Chomsky argues that this innate mechanism is most active until around twelve years of age, a period of accelerated linguistic development and sophistication.

Azieb (2021) and Penfield and Roberts' earlier work extrapolate on CPH, suggesting an inverse relationship between age and the effort required for language acquisition. Such perspectives posit that linguistic proficiency can be achieved with lesser exertion and fewer errors when language learning commences at an earlier age.

The role of attitudes in language learning has garnered increasing attention, with a consensus emerging around their critical influence on language proficiency (Le & Le, 2022). In educational settings where English serves as the lingua franca, such as at Cendekia Harapan School in Bali, the importance of English comprehension cannot be overstated. Graddol's framework (Getie, 2019) delineates English learners into distinct categories and highlights that perceptions of English as a foreign language can markedly constrain language practice and, by extension, proficiency.

Investigations by Yunus and Abdullah (2019) into Malaysian primary students' attitudes toward English reveal a dissonance between positive dispositions and actual classroom engagement, with factors such as shyness impeding active participation. Similarly, Muttaqin (2016) underscores the role of motivation and self-confidence in English language success among international students. This is echoed by Getie (2019), who identified a spectrum of attitudes among Ethiopian students, with positive attitudes correlating with motivation and recognition of English's utility, while negative attitudes often stemmed from external constraints.

Further, research into Korean university students' attitudes towards English suggests that curriculum design and pedagogical approaches, such as the teaching of English as an International Language (EIL), can significantly shape learner attitudes (Lee & Lee, 2019). Le & Le (2022) extend this understanding by examining both internal factors like interest, anxiety, and willingness to take risks, and external factors like curriculum and teacher effectiveness, demonstrating their collective impact on Vietnamese learners' attitudes towards English. Together, these studies underscore a multifaceted landscape where innate capabilities, critical developmental stages, and learner attitudes—shaped by a

myriad of internal and external factors—converge to influence Second Language Acquisition (SLA).

### **3. Methodology**

This study adopts a qualitative research paradigm, employing a case study approach to provide an in-depth exploration of attitudes toward second language acquisition. The primary subject of this case study is CHY, a second-grade Korean student enrolled at Children's House-Cendekia Harapan in Bali for five years, who exhibits limited proficiency in English despite the immersion environment.

Data was collected through semi-structured interviews, allowing for both the guidance of the conversation towards relevant topics and the flexibility for participants to express their views in depth. Interviews will be conducted with CHY to capture his subjective experiences with the English language, his sentiments towards the educational setting, and his usage of English in everyday scenarios. Complementary perspectives were garnered from YH, CHY's younger brother, who demonstrates fluency in Korean, English, and Indonesian, as well as from their parents, to gain a holistic understanding of the familial and environmental factors influencing CHY's language development.

The interview protocol was designed to elicit detailed responses on CHY's attitudes towards English, the family's perceptions, and the environmental factors that may facilitate or impede his language usage. The questions were structured to probe the complex interplay of individual, familial, and contextual influences on language acquisition.

Subsequent to data collection, a thematic analysis was conducted to discern patterns and themes within the qualitative data. The analysis involves a meticulous process of coding and categorizing the data to construct a coherent narrative around CHY's experiences and attitudes. By identifying recurring motifs and contrasts in the data, the study aims to contribute nuanced insights into the multifactorial nature of second language proficiency.

Acknowledging the limitations, this study is circumscribed to a single case, which may not allow for broad generalizations. Additionally, there are potential uncontrolled variables that could impact the findings. However, the depth and detail afforded by the case study methodology aim to provide a rich, contextualized understanding that can inform broader theoretical and practical considerations in the field of language development and pedagogy.

### **4. Results and Discussion**

The case of CHY, a 7-year-old Korean student grappling with English acquisition, provides a unique lens through which to interrogate the Critical Period Hypothesis (CPH) and its application in real-world contexts. The CPH, which suggests an optimal window for language acquisition from ages 2 to 12 (Lenneberg, 1967), appears to be contradicted by CHY's experiences. Despite residing within this critical age range, CHY's resistance to English highlights a discrepancy between theoretical expectations and his linguistic development.

CHY's reluctance ('싫어요' - 'do not want') and expressions of difficulty ('힘들어' - 'difficult/tiresome') underscore a psychological barrier that is not adequately addressed by the CPH. This is consistent with recent studies that emphasize the importance of affective factors in second language acquisition (SLA). For instance, Dewaele and MacIntyre (2016) argue that emotional variables can significantly influence language learning, which may explain why CHY, despite adequate exposure and familial resources, continues to struggle with English.

The minimal use of English at home, despite the proficiency of his father and brother YH, points to the role of the immediate linguistic environment in reinforcing language practice. This aligns with findings by Gao (2020) that the domestic language environment significantly impacts the maintenance and development of a second language.

BL and OD, CHY's schoolmates, represent a potential source of English interaction. However, CHY's preference for body language over verbal communication suggests a withdrawal from linguistic engagement. This behavior is indicative of a larger trend where learners exhibit avoidance in language-use situations due to anxiety or negative attitudes (Awan, et.al, 2010).

The additional two hours of English lessons post-school suggest recognition of the importance of English. Yet, CHY's reticence to engage with the language, even in an English-dominant educational setting, raises questions about the sufficiency of formal instruction. This resonates with the sociocultural theory perspectives posited by Lantolf and Thorne (2006), who highlight the necessity of meaningful social interaction for effective language learning.

The interplay of CHY's return to Korea during the pandemic and his subsequent exclusive use of Korean could be interpreted through the lens of language attrition. Schmid (2011) defines language attrition as the loss of linguistic ability through lack of use, which may be a contributing factor to CHY's reduced English proficiency upon returning to Indonesia.

The case also challenges the notion that children have an innate biological facility for language construction as proposed by Lenneberg. CHY's tendency to communicate in isolated words rather than complex sentences suggests that the capacity for language construction is not merely a biological inevitability but also reliant on consistent practice and positive language attitudes, as noted in recent SLA research (Ortega, 2019).

In conclusion, the case of CHY illustrates that while the CPH and theories of innate linguistic capacities provide a foundational framework for understanding SLA, they do not fully account for individual variability. Affective factors, the quality of the language environment, and practical engagement with the language are critical to the acquisition process. This case underscores the need for SLA models that integrate cognitive, emotional, and environmental dimensions to more accurately predict language learning outcomes.

## 5. Conclusion and Further Research

CHY's language development trajectory is a testament to the intricate nature of bilingual and multilingual upbringing within varying linguistic environments. Born in Indonesia and immersed in an international school setting, CHY initially mastered English, arguably under the optimal conditions for language acquisition during the critical period. Her early fluency in English and Indonesian, surpassing her proficiency in Korean, highlights a critical period of plasticity and receptiveness to language learning (Lenneberg, 1967), suggesting a natural ease in acquiring non-native languages during early childhood.

The interruption caused by the Covid-19 pandemic, which led to CHY's return to Korea, presents a poignant case of environmental impact on language proficiency. The near-exclusive use of Korean during this significant period not only solidified her skills in her mother tongue but seemingly induced a regression in her previously acquired English and Indonesian due to reduced use—a phenomenon known as language attrition (Schmid, 2011). This shift underscores the vulnerability of second language proficiency to changes in linguistic environment, particularly when the primary language of interaction is altered.

Upon re-entry into the English-speaking educational context of Indonesia, CHY's reluctance to re-engage with English, despite understanding it, points to a deeper

psychological and emotional dimension of language learning that extends beyond mere exposure. The presence of Korean peers served as a comfort zone, further perpetuating her use of Korean and resistance to English. This situation is indicative of the socio-affective factors that can influence language preference and use, as postulated by recent studies (Dörnyei & Ryan, 2015).

CHY's case illuminates the complexities of maintaining language proficiency amidst transitions between linguistically diverse environments. While her proficiency in English waned, the continued family support and additional tutoring she received upon her return to Indonesia signal the potential for language reacquisition. This aligns with the notion that language learning is a dynamic, lifelong process that can be reinvigorated with adequate support and motivation, even outside the critical period (Ortega, 2009).

Furthermore, CHY's experiences highlight the interplay of individual agency, emotional factors, and the significance of consistent language practice. They suggest that while the critical period may offer an optimal window for language acquisition, the long-term maintenance of language skills requires continued engagement and a conducive environment.

The case of CHY, therefore, contributes to our understanding of second language acquisition as a non-linear, adaptive process, shaped by a constellation of factors beyond the initial conditions of learning. It underscores the need for flexible, responsive educational approaches that accommodate the evolving linguistic needs and preferences of multilingual children.

Future research endeavors stand to greatly benefit from a multifaceted approach that considers the interplay of sustained efforts, supportive environments, and the intrinsic factors of emotion and identity post the critical language acquisition period. The case of CHY underscores the need for deeper inquiries into how emotional ties and identity formation influence language retention and attrition, extending the discourse beyond traditional cognitive frameworks.

Investigations into the efficacy of personalized language instruction that engages learners on an emotional level could illuminate the pathways through which affective factors bolster or hinder language acquisition. Such research should also examine the impact of identity alignment with the target language and its culture, and how this alignment serves as a motivational force in language learning. A focus on individual learner narratives could provide insights into the personal aspects of language learning that standardized tests may overlook.

Additionally, longitudinal studies that track language development trajectories over extended periods are crucial. They can provide a window into the evolution of language competencies as learners navigate through different life stages and social contexts. These studies could explore how shifts in environment, such as immigration or long-term travel, interact with a learner's linguistic abilities and self-concept as a language user.

Understanding the nuances of language attrition, particularly in the context of re-exposure to the language, can also inform strategies to reactivate dormant language skills. Research in this domain could assess intervention strategies for language re-acquisition and the role of re-immersion in recovering and advancing language proficiency.

Moreover, comparative studies across different linguistic, cultural, and age groups could offer valuable data on the universality and variability of the factors affecting language learning. Such research could lead to the development of more robust, adaptable models of second language acquisition that account for a wider range of learner experiences.

In light of the complex dynamics illustrated by CHY's experience, future research should also consider the pedagogical implications of multilingual settings and how they can be optimized to support language maintenance. This includes examining the efficacy of

bilingual and multilingual education models in promoting balanced language development.

Ultimately, the aim of future research should be to construct a more holistic understanding of second language acquisition, one that fully embraces the cognitive, emotional, and social dimensions of learning. By doing so, the field can advance towards more effective, empathetic, and inclusive language education practices.

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