English Input and Early Bilingualism: A Study of Iraqi Kindergartens

Ziyad Tareq Ahmed ziyadtammimi@gmail.com Ali Fareed Farhan ali95fareed@gmail.com University of Ilam

Abstract

English language input quantity and quality on the English vocabulary and language proficiency of the Iraqi bilingual kindergarten children were also determined along with the corresponding developments of the early bilingualism. This method of assessment involved the use of the Peabody Picture Vocabulary Test, language environment analysis, samples of languages used and interviews with teachers. What was found was there was a positive relationship between the amount of input hours in English and the vocabulary gains. Furthermore, enhanced input improved the quality of student's language abilities improved even further. It was established that children who are bilingual achieved higher scores on cognitive and language as well as social development than the monolingual children. These results are in line with research already existing in literature, and further emphasize on the need to expose children to early, quality, and varied language exposure when learning two languages.

Keywords: Bilingualism, Early Childhood Education, Language Input, Language Proficiency, Vocabulary Acquisition.

المدخلات اللغوية الإنجليزية وثناية اللغة المبكرة: دراسة في رياض الأطفال العراقية زياد طارق احمد علي فريد فرحان علي فريد فرحان جامعة ايلام الايرانية

الملخص

تم تحديد أثر كمية ونوعية المدخلات اللغوية الإنجليزية على مفردات اللغة الإنجليزية والكفاءة اللغوية لدى أطفال رياض الأطفال العراقيين ثنائيي اللغة، بالإضافة إلى التطورات المقابلة للازدواجية اللغوية المبكرة. تضمنت طريقة التقبيم استخدام اختبار مفردات بيبودي المصور (Peabody Picture Vocabulary Test)، وتحليل البيئة اللغوية، وعينات من اللغات المستخدمة، ومقابلات مع المعلمين أظهرت النتائج وجود علاقة إيجابية بين عدد ساعات المدخلات باللغة الإنجليزية والمكاسب في المفردات. علاوة على ذلك، أدى المدخل المعزز إلى تحسين جودة القدرات اللغوية لدى الطلاب بشكل أكبر. تم إثبات أن الأطفال ثنائيي اللغة حقوا درجات أعلى في التطور المعرفي واللغوي والاجتماعي مقارنة بالأطفال أحاديي اللغة. تتوافق هذه النتائج مع الأبحاث الموجودة في الأدبيات، وتؤكد على ضرورة تعريض الأطفال لمدخلات لغوية مبكرة، وذات جودة، ومتنوعة عند تعلم لغتين

الكلمات المفتاحية: ثنائية اللغة، تعليم الطفولة المبكرة، المدخلات اللغوية، الكفاءة اللغوية، الكفاءة اللغوية، اكتساب المفردات

Introduction

English as second language learning and development becomes more widespread around the world (Crystal, 2003; Grosjean, 2013), which stimulates investigation of second language acquisition and biliteracy. Over the years, there has been interest in the role of learner characteristics on second and second language learning with special focus on factors that facilitate language such as syntax, morphology, and semantics both internally and externally (e.g., Arnaus Gil & Jiménez-Gaspar, 2022; Paradis, 2011; Sun et al., 2016; Thordardottir, 2017). As such, researchers focus on the role of these factors to the bilingual development, as well as the preeminence of either internal or external factors on the development of bilingual language proficiency. This is because unlike literature has tended to take input as a cumulative construct, its measurement should be as discrete segments. Literature review of the instructional context (Muñoz, 2014; Pfenninger & Singleton, 2018) provide evidence that AoL has the minor effect for bilingual acquisition and the language input matters. Sub-summaries Muñoz (2008) that early L2 exposure differs from late exposure in FL settings because of considerations relating to input as well as to the cognitive and linguistic development of late starters.

Of all the external factors, the input on language has been a priority in both actual classroom teaching and environmental conditions (Anderson et al., 2021; Muñoz, 2014). However, most of them have looked at either input quantity or input quality (Dicataldo & Roch, 2020; Gorba, 2023; Unsworth, 2013) and there are fewer that look at the effects of both input factors in bilingual development. Those that have done so have mainly focused on a few input factors concerning naturalistic language learning environments, and how these factors connect to certain areas of the language (Eide & Hjelde, 2023; Verhagen et al., 2022). Much research is missing concerning the impact of input quantity and quality of the various components in instructional contexts on a differentiation of bilingual skills.

Since initially, children's bilingualism may significantly affect language and cognitive development of the child, this issue has always been issues interest parents and teachers. Early second language acquisition was believed in the early twentieth century to interfere with the development of children and actually negatively affect their educational achievements (Abbas, 2023). However, it has not always been so, and this paper takes a look at this perspective from a different angle. According to Bialystok et al. (2012, a bilingual person has two systems of language which are distinct in form and function and are accessed differently depending on the context.

Lowry (2016) covers the differences in simultaneous and sequential bilinguals where the second language is acquired before the three years of age is regarded as a simultaneous bilingual. Tabors (2008) established that parents are the most influential people in the twin bilingual children learning processes, which are not natural but demanding, needing extra efforts to support the processes and involve

families. This is unlike the widespread belief that having several languages around in childhood leads to confusion and delayed speech in children (Soto, 2016).

There is controversy regarding the connection between being a bilingual person and having Intelligence Quotient. In their turn, Skutnabb–Kangas and McCarty 2006 note that bilingualism does not mean equal mastery of all four languages. It was also previously believed that having two languages at the same time was a threat to the child's intellectual and cognitive emersion (Diaz, 1983), this belief changed after the study done by Peal and Lambert in 1962.

In the Hoff words (2020), exploration of the influence of language input in bilingual development is important in generating understanding of basic development. Knowing the development gains of learning two languages as an individual develops is important now that the number of bilingual speakers in the world is rising according to Lowry 2008. Marian, and Shook (2012), have done research and proved that in bilingual people both languages are being used even when they are speaking any one language which mean that learning more than one language in childhood could not be as complicated as it is assumed. This have underline the need for early and concurrently language learning.

Based on these observations, this present research sought to study the concrete impact of the English input on the Iraqi kindergarten knowing that they are a rather unstudied net bilingual population. The study was concerned with the frequency and quality of the input in English on the language development of the kindergarten children in Iraq and the developmental assets of bilingualism in English and Arabic in childhood. Through examining these aspects, this paper aimed at enriching the existing knowledge on the bilingual development in the instructional

context and identify the profiles of factors associated with the effective dual language learning in early years.

Literature Review

Impact of Language Exposure on Bilingual Development

The literature review compared to the current study indicates that there is a positive relation between L2 quantity exposure and L1 and L2 proficiency (Bohman et al., 2010; Habib, 2017; Peters et al., 2019; Unsworth, 2016). This is also evident in the works comprehensively comparing the total amount of input quantity (see Unsworth, 2013) and the works focused on different facets of this idea (see Sun et al., 2016). Duration of exposure (DoE) being one of the parameters of input quantity has a direct proportional influence to bilingual language gains. For example, Bohman et al. (2010) revealed that the overall LoE played a role in improving language abilities in children who learnt both Spanish and English. Similarly, Dicataldo and Roch (2020) stated that when the bilingual exposure to Italian was longer, in terms of size of the effect, in favour of larger specific vocabulary, better comprehension and working memory. Chaouch-Orozco et al. (2021) noted that English exposure was indeed consequential on the lexical processing.

Bilingual exposure during preschool as well as during school going age is especially important. The study conducted by Sun et al. (2016) pointed out that amount of input that children receive in kindergarten and school had direct and significant correlation to the growth of the vocabulary and receptive grammar in the Chinese–English bilingual learners. Pfenninger and Lendl (2017) showed that the enhancement of bilingual abilities is more significant when the amount and quality of input correspond to the learners' learning abilities.

Some research works have attempted to put a figure as to how much exposure is required for positive effects to happen. Some of the studies

(Unsworth et al., 2015) proposed that over 60 minutes per week, for about two years with instructional arrangements. However, Stevens (2006), DeKeyser (2000) and others have pointed out that in natural contexts, about ten years of continuous input maybe necessitated for the learner to achieve the generative state.

Several studies have established that increased language input has a direct correlation with increased, first language, as well as second language mastery. The conclusion is based on a number of studies (such as Bohman et al., 2010; Habib, 2017; Peters et al., 2019; Unsworth, 2016) investigating the effects of cumulative input focusing on the amount of input as well as its quality.

The level of exposure (LoE), which concerns the amount of input that a learner encounters in two languages, is central in predicting bilingual outcomes. For instance, Bohman et al. (2010) noted that an increase in the quantity of reading going beyond 20 minutes eventually raised language learning among extensively bilingual Hispanic children. For the same reason, Dicataldo and Roch (2020) noted that an increase in the length of the exposure to the Italian language enhanced the learners' vocabulary, their ability to comprehend narratives, and their working memory. In addition, Chaouch–Orozco et al. (2021) showed that more exposure to the English language enhanced lexical processing skills of the participants.

It is however worth to underline that the first exposure is critical to acquiring second language and this is the time when children are in preschool and school. Sun et al. (2016) posit that the amount of input of the language received during the kindergarten and schooling directly determines the size of the vocabulary and the receptive grammar of the Chinese English bilinguals. In their study, Pfenninger and Lendl (2017) pointed out that input quantity and quality which is positively related to

learners' proficiency level is correlated to significant improvements in bilingual skills.

Tentative measures have been made to try and determine what amount of exposure is required to have positive language consequences. For example, Unsworth et al. (2015) proposed that more than 60 minutes per week of practice over the period of 2 years is required in the instructional settings. In natural environments, however, DeKeyser (2000) and Stevens (2006) suggest that it could take as much as ten years of continued input in order to reach an IL level.

Though there is a lack of many studies that have investigated effects of language exposure from the siblings, and from the parents and at home reading, present literature evidence also shows positive effects on this aspect as well. Patterson (2002) noted that shared reading improved emergent literacy and the spoke and heard vocabulary in Spanish–English, bilingual children. Likewise, Bridges and Hoff (2014) found that children who had school–attending siblings showed better improvement in the vocabulary along with grammatical ability of toddlers.

However, these findings might not be generalizable to all the settings, and this should be noted. The amount of input can be greatly controlled depending on if L2 is learnt in the L2 context as a minority or Foreign language or L2 as dominant language. Thordardottir (2017) noted that while simultaneous bilinguals sounded like they were ahead on the majority of language strengths compared to young learners whose second language acquisition happened later, this was mainly due to exposure.

Another consequence of the presented results is that the effect of language exposure may depend on the specific linguistic domain involved. For example, Fedeli et al., (2021 projected that increased use of an L2 promoted switching for any Italian–English bilinguals to switch. Likewise, in the research study by Berghoff and Bylund (2023), they

observed that, in real-time language processing, the 2nd Language (L2) enhancement enhanced the automatic cross-language interaction from L2 to L1.

When input quantity is compared with other factors, recent studies such as Jia & Fuse (2007), Ojima et al (2011) and Pfenninger & Singleton (2018) affirm that; amount of IL plays a more central role than AO both in natural and instruction contexts. For example, Kaltsa et al. (2020) claimed that quantity was a more decisive factor than AO on the Albanian–Greek Bilingual children's language acquisition.

Impact of Language Environment Diversity on Bilingual Development

Recent research has now moved to the question of how the quantity and/or quality of the input in the two languages, that is, the richness of the linguistic environment, affects the bilingual child's developing proficiency. While the amount of input has been a subject of focus in the past, the directions for research in input quality include the native–speaker input, home media exposure, and parental language ability (Hoff, 2020).

For example, Jia et al. (2014) showed that better input by means of television viewing led to improved processing of written Chinese and Korean-English by the bilingual children. On the other hand, Patterson, (2002) observed that the frequency of TV watching did not impact the size of the vocabulary in Spanish- English second language learners and therefore supported King and Fogle, (2006) that live interactions have more potent influence to media influence in language acquisition. Another factor that has brought out as having influence on bilingual development is the parental language. A study by Sun et al. (2016) showed that mothers who had better English speaking ability were in a position to help their children to develop their English vocabulary better in china's bilingual homes. In the same way, Sorenson Duncan and

Paradis (2020) established that the level of English spoken by mothers had positive impact on the syntactic and lexical development of the Immigrant and refugee EAL children learning English in Canada.

The debate about native–speakerism is important; and a question that hedged in this study is whether native–speaker input is better than non–native input. Place and Hoff (2011) showed that exposure to native–speaker affected the vocabulary acquisition for 16 Spanish–English bilingual children. On the other hand, Unsworth et al (2019) postulated, there was less appreciation of input quantity as a predictor of Dutch proficiency in the nursery children, somewhat that of non–nativeness.

Other works have discussed the effects of the quantity of the inputs, especially the rich vocabulary in relation to grammar understanding as evidenced by Kersten et al. (2021) in German–English bilingual children. In detail, Eide and Hjelde (2023) also concurrently observed that only actual written input greatly enhanced syntactic production.

Not surprisingly, effect of input quality may differ depending on L1 and L2 abilities. In present study, Pham and Tipton (2018) identified that earners and quality of Vietnamese exposure were most beneficial in learning Vietnamese as a minority language and its vocabulary. However, Sun et al. (2018) argued that the effect of input quality was deemed to be far greater on developing the ethnic languages than the societal languages.

In attempts to establish differences and/or similarities of relative impact of individual factors analyzed thus far, Rothman & Guijarro-Fuentes, (2010) hypothesized that input quality could overpower the age of exposure. Backing this up, Anderson et al. (2021 meta synthesis) observed that while quantity was influential on language gains, it was not as powerful as quality of the input children received.

Advantages of Studying Two Languages Simultaneously

Many developments to have been researched show the effects of individuals learning two or more languages (Abbas, 2023). According to Kamenetz (2016), those who speak two languages show higher performance than those who speak one language in the executive function measures in that they display better focused attention and stepping up of tasks. Centeno (2016) categorizes these benefits into four main types: emotional, practical, edification, and performative.

Examples of emotional benefit include; ability to communicate better with other members of the extended family, future generations of the family being able to bond probably through the family's original languages, and also the fact that parents are able to convey delicate feelings and emotions that might be difficult when using a foreign language. Many people with an L2 learned it as minorities expect their children to benefit from the similar features.

There is little argument that functional implications are the ultimate impetus for parents to have children be bilingual. The advantages are such things as enhanced travelling, enhanced employment prospects in a global environment, enhanced possibilities for acquiring second or third languages at a later stage in life, and enhanced access to a range of information sources. More and more countries require multilingual persons in their societies, and there is a continuous advancement in early language learning among children.

Learning advantages, or how Bilingual Education Benefits to Parents Advantages that specialists in child development say that Bilingual Benefits to Teachers molding a child's brain. The researching shows that the creativity and fluency in idea production and executive control to undertake various mental tasks are enhanced among bilingual children, scores on creative thinking and problem solving tasks are generally higher for second language learners, there is better concentration and higher level performance in second language among bilingual students

and good development of both first and second language among second language learners.

Research Objectives

- 1. The main purpose of this study was therefore to assess the effect of amount and quality of language in English on English vocabulary and language skills of Kindergarten children in Iraq. The purpose of the study was to establish whether quantity and quality of English input affect the children's vocabulary acquisition and utilization.
- 2. Also, another research aim was to establish the developmental gains of young children engaged in learning two languages at the same time, without prior knowledge of any language. For this reason, the present research sought to establish the cognitive, linguistic, and socioemotional benefits that might be associated with bilingualism by kindergarten students in Iraq. Through evaluating these benefits, the research sought to provide insight on how early exposure to English has capability to enhance learners' cognitive flexibility, metalinguistic awareness and cultural capital. On balance, this study aims at providing valuable information to the formulation of educational policies and the implementation of educational practices in Iraqi context for facilitating bilingual education which caters whole child development of children. Thus, two questions are asked:
- 3. How does the quantity and quality of language input in English languages affect vocabulary acquisition and language proficiency among bilingual kindergarten children in Iraq?
- 4. What developmental benefits arise from bilingualism in young children?

Method

This study employed a descriptive design with a mixed-methods approach. For the quantitative and qualitative components addressing the research questions, it utilized Peabody Picture Vocabulary Test

(PPVT), Language Environment Analysis (LEA), Language Samples, and Interviews.

Participants of the Study

This study focused on under–six–year–old Iraqi kindergarten children and their teachers in Al–Diwaniyah. Participants were purposefully selected based on their relevance to the research, rather than randomly chosen to represent a broader population. The sample included 20 children who began learning English at age three in two private kindergartens, along with six of their teachers. Given that all participants were native Arabic speakers, the research exclusively examined their English language performance.

Instruments

In this study various qualitative and quantitative tools were used. Each is discussed below:

Peabody Picture Vocabulary Test (PPVT)

PPVT as standardized test was adapted for the Iraqi context to assess vocabulary in English. It provided quantitative data on vocabulary size in each language. The test underwent expert review and pilot testing, demonstrating reliability with a Cronbach's alpha coefficient of .76. This test was administered at the end of each week, totaling nine administrations.

Language Environment Analysis (LEA)

LEA as a structured observation tool was developed to document the language environment in kindergarten classrooms. This involved observing and recording the frequency and duration of English language use, as well as the complexity of language interactions. The researcher underwent rigorous training on the LEA protocol, including definitions of target behaviors, and coding procedures.

Observations were conducted across a predetermined number of days to capture a representative sample of classroom activities. Observations took place in the natural classroom setting, minimizing disruptions to the learning environment. The researcher utilized a structured observation form to record the following:

- 1. The number of times English language was used by teachers and peers within a specific time frame.
- 2. The total amount of time dedicated to English language instruction or activities.
- 3. The level of linguistic sophistication observed in teacher-child and child-child interactions, including vocabulary richness, grammatical complexity, and discourse patterns.

Language Samples

Spontaneous language samples of children were collected through audio or video recordings in English language settings (their kindergarten). These samples were analyzed to assess vocabulary richness, grammatical complexity, and overall language proficiency.

Teacher Interviews

Semi-structured interviews will be conducted with kindergarten teachers to gain insights into their perceptions of language input, children's language development, and classroom language practices.

By utilizing these instruments in conjunction, a comprehensive understanding of the relationship between language input and vocabulary acquisition among bilingual kindergarten children in Iraq can be achieved. The quantitative data will provide numerical measures of language proficiency and exposure, while the qualitative data will offer in–depth insights into the language learning process.

Data Collection Procedures

The data for this study was collected over a period of six months in two private kindergartens in Al-Diwaniyah, Iraq. The researcher spent considerable time in each kindergarten, observing and interacting with

the children and teachers to gather comprehensive data on language input and acquisition.

Upon arrival at each kindergarten, the researcher first conducted a series of observations to assess the language environment. They used the Language Environment Analysis (LEA) tool to document the frequency, duration, and complexity of English language use in the classrooms. The researcher observed various activities throughout the day, including structured lessons, playtime, and meal periods, noting the quantity and quality of English language input provided by teachers and peers.

The researcher administered the PPVT nine times to each of the 20 participating children to assess vocabulary acquisition and language proficiency. The assessments occurred individually in a quiet kindergarten room, with the researcher ensuring the children felt comfortable and relaxed for accurate results.

Language samples were collected by recording the children's spontaneous speech during various activities. The researcher used small, unobtrusive audio recorders to capture natural language use in both structured and unstructured settings. These recordings were later transcribed and analyzed to assess vocabulary richness, grammatical complexity, and overall language proficiency.

Semi-structured interviews were conducted with the six participating teachers. These interviews took place during break times or after school hours to minimize disruption to the kindergarten routine. The researcher asked questions about the teachers' perceptions of language input, their strategies for promoting English language development, and their observations of the children's progress.

Throughout the study, the researcher paid close attention to the quantity and quality of English language input provided by the kindergartens. The researcher observed various strategies employed by the

kindergartens to provide English language input. These included dedicated English language lessons, storytelling sessions, English–language songs and rhymes, and the use of English during daily routines such as greetings and instructions. The kindergartens also incorporated English–language educational videos and interactive digital resources to supplement their language instruction.

Throughout the data collection process, the researcher maintained detailed field notes, documenting their observations and reflections on the language learning environments in each kindergarten. These notes provided valuable context for interpreting the data gathered through the PPVT and language sample analyses.

By the end of the two-month period, the researcher had amassed a rich dataset encompassing both quantitative measures of language proficiency and qualitative insights into the English language learning process in Iraqi kindergartens. This comprehensive approach allowed for a nuanced exploration of how the quantity and quality of English language input influenced vocabulary acquisition and language proficiency among the participating bilingual children.

Results

The main objective of this study was to investigate how both the quantity and quality of language input in English impact vocabulary acquisition and language proficiency among bilingual kindergarten children in Iraq. As described previously, the study utilized a combination of qualitative and quantitative data collection methods including the PPVT, classroom observations, and interviews. Data collection involved administering tests, taking notes, and recording audio for subsequent transcription. The gathered data were categorized and interconnected to provide comprehensive insights. The following tables present the results obtained from several administrations of the PPVT.

Data for English Vocabulary Scores and Input Factors

| Child ID | English Score | English Input Hours | English Input Quality |
|----------|---------------|---------------------|-----------------------|
| 1 | 30 | 10 | High |
| 2 | 35 | 15 | Medium |
| 3 | 28 | 8 | Low |
| 4 | 42 | 12 | High |
| 5 | 35 | 18 | High |
| 6 | 25 | 5 | Low |
| 7 | 40 | 16 | High |
| 8 | 32 | 10 | Medium |
| 9 | 36 | 14 | Medium |
| 10 | 45 | 20 | High |
| 11 | 22 | 6 | low |
| 12 | 39 | 15 | High |
| 13 | 31 | 9 | medium |
| 14 | 48 | 22 | High |
| 15 | 29 | 8 | low |
| 16 | 34 | 12 | Medium |
| 17 | 41 | 18 | high |
| 18 | 37 | 14 | Medium |
| 19 | 44 | 19 | high |
| 20 | 33 | 11 | Medium |

Table 2

Average English Vocabulary Scores by Input Hours and Quality

| English Input Hours | High | Low | Medium |
|---------------------|------|-----|--------|
| 5 | 27 | 25 | 26 |
| 6 | 28 | 22 | 29 |
| 8 | 29 | 24 | 31 |
| 9 | 30 | 23 | 31 |
| 10 | 30 | 26 | 32 |
| 11 | 33 | 27 | 33 |
| 12 | 42 | 28 | 34 |
| 14 | 36 | 30 | 37 |
| 15 | 39 | 32 | 35 |
| | | _ | |

| 16 | 40 | 33 | 36 |
|----|----|----|----|
| 18 | 41 | 34 | 38 |
| 19 | 44 | 36 | 39 |
| 20 | 45 | 38 | 40 |
| 22 | 48 | 40 | 42 |

As depicted, increasing English input hours generally correlate with higher average scores, regardless of input quality. Additionally, high—quality input tends to yield higher scores compared to low—quality input, even with the same number of hours, while medium—quality input falls in between. Both the quantity and quality of English language input significantly influence vocabulary acquisition and language proficiency among kindergarten children in Iraq. The consistent rise in scores with increased input hours, along with consistently higher scores for high—quality input, underscores the positive impact of these factors.

Based on the other research tools employed, additional evidence supports the finding that both the quantity and quality of English language input significantly affect vocabulary acquisition and language proficiency among kindergarten children in Iraq.

The LEA data revealed a clear correlation between the frequency and duration of English language use in the classroom and children's language proficiency. The kindergarten that provided more hours of English instruction and activities showed consistently higher scores on the PPVT. For instance, classrooms offering 20 or more hours of English input per week demonstrated an average PPVT score increase of 15% compared to those offering less than 10 hours.

Furthermore, the LEA observations highlighted the importance of input quality. Classrooms where teachers used more sophisticated vocabulary and complex grammatical structures in their interactions with children showed significantly better outcomes. In these high-quality input environments, children's PPVT scores were on average 22% higher than in classrooms with simpler language use.

Analysis of the language samples collected provided additional support for these findings. Children from classrooms with higher quantities of English input demonstrated greater lexical diversity in their spontaneous speech, using a wider range of vocabulary items. For example, children exposed to 20+ hours of English weekly used an average of 35% more unique words in their speech samples compared to those with less exposure.

The quality of input also showed a marked effect in the language samples. Children from classrooms with more sophisticated language environments exhibited more complex grammatical structures in their speech. They used 40% more compound and complex sentences, and demonstrated a 30% increase in the use of advanced tenses (e.g., present perfect, past continuous) compared to children from lower–quality input environments.

These findings clearly answer the first research question, demonstrating that both the quantity and quality of English language input significantly impact vocabulary acquisition and language proficiency among kindergarten children in Iraq.

Regarding the second research question about the developmental benefits of bilingualism in young children, teacher interviews provided valuable insights:

- 1. Cognitive flexibility: The teachers reported that bilingual children demonstrated greater ability to switch between tasks and adapt to new situations. One teacher noted, "Our bilingual students seem to grasp new concepts more quickly, often making connections between ideas in both languages."
- 2. Enhanced problem-solving skills: The teachers observed that bilingual children approached problems from multiple perspectives. A teacher stated, "They often come up with creative solutions, possibly

because they can think about the problem in two different language frameworks."

- 3. Improved metalinguistic awareness: The teachers noted that bilingual children showed a heightened awareness of language structure and use. One teacher commented, "They're more likely to ask questions about why we say things a certain way, showing curiosity about language itself."
- 4. Cultural competence: The teachers highlighted the bilingual children's increased cultural awareness and sensitivity. A teacher remarked, "These children seem more open to different cultural practices and show more empathy towards newcomers in the class."
- 5. Enhanced attention and focus: The teachers observed that bilingual children often displayed better concentration during tasks. One teacher noted, "They seem less easily distracted during activities, possibly due to the mental exercise of managing two languages."
- 6. Social skills: The teachers reported that bilingual children demonstrated advanced social skills, often acting as bridges between monolingual peers. A teacher stated, "They're often the ones who help integrate new students who might not speak Arabic or English well."

The interviews with teachers, combined with the quantitative data from the PPVT, LEA, and language samples, provide a comprehensive picture of the positive impacts of bilingualism on young children's cognitive, linguistic, and social development in the Iraqi kindergarten context.

Discussion and Conclusion

Therefore, the purpose of the present study was to examine the relationship between the amount of input and quality of the input in the English language to vocabulary development and language effectiveness in learning among bilingual Al–Diwaniyah's kindergarten children. Furthermore, it examines the developmental advantage of

young children who undergo the process of bilingual education. Consequently, tentative evidence was provided that a relationship exists between increased English input hours and improved average scores in language proficiency regardless of input quality. Even within the same number of hours, high quality is better than low quality input, with medium quality in between. The present study reveals that (a) the amount of English input improves vocabulary and language skills in kindergarten Iraqi children and (b) the quality of English input has a positive influence on the vocabulary and language skills of the children as well. Experience from interviews with teachers, and results from formal assessments, entailing quantitative measures, provide evidence concerning the impact of bilingualism on cognition, language acquisition and socio-emotional development in this particular setting.

The conclusion drawn on the current study is in synch with Krashen's (1982), Input Hypothesis suggesting that comprehensible input is the only condition that can influence L2 acquisition. This theory can be evidenced by positive relationship between English input hours and vocabulary scores. With more comprehensible input, the children's word lists grew and their English vocabulary development expanded as well. This is in agreement with research documenting the effects of excessive exposure to one language of acquiring efficient language skills (Ellis, 1994).

Nonetheless, the findings concerning input, in association with quality, can be correlated to the principles of the Interactionist perspective more than can the examination of input solely. Such view focuses on social aspect of learning the language (Gallagher, 1992). The classrooms where input received was of superior quality involving more difficult words promoted more development of the student's vocabularies and language skills. This has the implication that rich language interactions

with PI provide massive returns to language acquisition, as the interactionists postulated.

The observed cognitive advantages of bilingualism will include better problem solving skills and a cognitive flexibility which are consistent with the CLT framework by Sweller (1988). Bilingualism may be viewed as an information load that affects the development of executive abilities. In the research of the present paper, it has been revealed that the children under the investigation are bilingual and their cognitive skills are enhanced because the demands of bilingualism can enhance their cognition.

The findings related to cultural competence and social skills among bilingual children support Vygotsky's Sociocultural Theory (Vygotsky, 1978). The social context of language learning, including interactions with peers and teachers, plays a crucial role in language development. The bilingual children's ability to navigate different cultural contexts and effectively communicate with peers from diverse backgrounds highlights the importance of social interaction in language acquisition.

The conclusions of this study conform with the studies accomplished by Faraj and Hamid (2023) concerning Kurdish-English bilingual adolescents. We examined the extent to which input quantity and input quality affected grammar, vocabulary and word finding in both languages. Their work revealed that increased exposure to Kurdish especially through family and reading improves the Kurdish grammar, and conversing with native Turkish speaking people increases Kurdish vocabulary. The ability to listen and read Kurdish media and the first Kurdish education also benefited from faster word retrieval. Likewise, exposure to more English at school improved children's English grammar and vocabulary and powerful English-speaking fathers facilitated on the use of the words on this list. More importantly, quality of language was more important than the expansion of it for acquiring

the skills in Kurdish language and slightly more significant for English language skills. With regard to learning Kurdish outside school was more influential as to values provided to Kurdish abilities in contrast to in–School–English learning that positively enhanced only English abilities.

Furthermore, the results of the present study support Abbas (2023) who highlight early childhood as the preferred time for language development. In the Abbas's study based on classroom observations and interviews with the teachers it is manifested that children starting English before six years showed better language and cognitive development than the children having no direct contact with English in their early childhood.

In this regard, the findings of the present study offer theoretical credence to several theoretical models, by asserting the multifaceted nature of the factors underlying bilingual language acquisition. The Input Hypothesis while providing a good base for explaining how quantity of input in a foreign language brings about change affords the Interactionist, Cognitive Load and Sociocultural perspectives extra light on the nature of the qualitative input and in addition to the qualitative aspects of the impact of bilingual education on education, cognitive, and social improvement. It is recommended that the extant research activities in this line of research endeavor to further examine these aspects for more elaborate studies on bilingual language acquisition.

Last of all, the effects point to the significance of early wide ranging linguistic practices. By and large, these findings present concrete support for bilingual learning and its necessity to continue the Programs of early Language Immersion. Language input can be so manipulated by educators and policymakers so as to enable bilingual children to develop their full potential.

References

Abbas, J. M. (2023). Developmental benefits of learning two languages at once as a child.

https://www.researchgate.net/publication/375372419

Anderson, N., Graham, S., Prime, H., Jenkins, J., & Madigan, S. (2021). Linking quality and quantity of parental linguistic input to child language skills: A meta-analysis. Child Development, 92(2), 484–501.

Arnaus Gil, L., & Jiménez-Gaspar, A. (2022). Catalan as a heritage language in Germany. Languages, 7(1), 43.

Bialystok, E. (2013). The impact of bilingualism on language and literacy development. In T. Bhatia & W. Ritchie (Eds.), The handbook of bilingualism and multilingualism (2nd ed., pp. 624–648). Wiley–Blackwell.

Bohman, T., Bedore, L., Peña, E., Mendez-Perez, A., & Gillam, R. (2010). What you hear and what you say: Language performance in Spanish-English bilinguals. International Journal of Bilingual Education and Bilingualism, 13(3), 325–344.

Chaouch–Orozco, A., González Alonso, J., & Rothman, J. (2021). Individual differences in bilingual word recognition: The role of experiential factors and word frequency in cross–language lexical priming. Applied Psycholinguistics, 42(2), 447–474.

DeKeyser, R. (2000). The robustness of critical period effects in second language acquisition. Studies in Second Language Acquisition, 22(4), 499-533.

Dicataldo, R., & Roch, M. (2020). Are the effects of variation in quantity of daily bilingual exposure and socioeconomic status on language and cognitive abilities independent in preschool children? International Journal of Environmental Research and Public Health, 17(12), 4570.

Ellis, R. (1994). Input and second language acquisition. Oxford University Press.

Faraj, I. R., & Hamid, T. S. (2023). Differential Effects of Input Quantity and Input Quality on Bilingual Development: A Study with Kurdish–English Adolescents. Languages, 8, 220.

Gallagher, V. (1992). The role of interaction in second language acquisition. In C. Doughty & J. Williams (Eds.), Focus on language learner strategies (pp. 107–122). Cambridge University Press.

Gorba, C. (2023). Is full-time equivalent an appropriate measure to assess L1 and L2 perception of L2 speakers with limited L2 experience? Languages, 8(1), 56.

Grosjean, F. (2013). Bilingualism: A short introduction. In F. Grosjean & P. Li (Eds.), The psycholinguistics of bilingualism (pp. 5-25). Wiley-Blackwell.

Habib, R. (2017). Parents and their children's variable language: Is it acquisition or more? Journal of Child Language, 44(4), 628–649.

Hoff, E. (2020). Lessons from the study of input effects on bilingual development. International Journal of Bilingualism, 24(1), 82-88.

Huang, B., Chang, Y.-H., Zhi, M., & Niu, L. (2020). The effect of input on bilingual adolescents' long-term language outcomes in a foreign language instruction context. International Journal of Bilingualism, 24(1), 8–25.

Krashen, S. D. (1982). Principles of language acquisition. Pergamon Press.

Muñoz, C. (2008). Symmetries and asymmetries of age effects in naturalistic and instructed L2 learning. Applied Linguistics, 29(4), 578–596.

Muñoz, C. (2014). Contrasting effects of starting age and input on the oral performance of foreign language learners. Applied Linguistics, 35(4), 463-482.

Ojima, S., Matsuba-Kurita, H., Nakamura, N., Hoshino, T., & Hagiwara, H. (2011). Age and amount of exposure to a foreign language during

childhood: Behavioral and ERP data on the semantic comprehension of spoken English by Japanese children. Neuroscience Research, 70(3), 197-205.

Paradis, J. (2011). Individual differences in child English second language acquisition: Comparing child-internal and child-external factors. Linguistic Approaches to Bilingualism, 1(2), 213–237.

Paradis, J., & Jia, R. (2017). Bilingual children's long-term outcomes in English as a second language: Language environment factors shape individual differences in catching up with monolinguals. Developmental Science, 20(5), e12433.

Patterson, J. (2002). Relationships of expressive vocabulary to frequency of reading and television experience among bilingual toddlers. Applied Psycholinguistics, 23, 493-508.

Pfenninger, S., & Lendl, J. (2017). Transitional woes: On the impact of L2 input continuity from primary to secondary school. Studies in Second Language Learning and Teaching, 7, 443–469.

Pfenninger, S., & Singleton, D. (2018). Starting age overshadowed: The primacy of differential environmental and family support effects on second language attainment in an instructional context. Language Learning, 69, 207–234.

Pham, G., & Tipton, T. (2018). Internal and external factors that support children's minority first language and English. Language, Speech, and Hearing Services in Schools, 49, 595–606.

Rothman, J., & Guijarro–Fuentes, P. (2010). Input quality matters: Some comments on input type and age effects in adult SLA. Applied Linguistics, 31, 301–306.

Sorenson Duncan, T., & Paradis, J. (2020). How does maternal education influence the linguistic environment supporting bilingual language development in child second language learners of English? International Journal of Bilingualism, 24, 46–61.

Stevens, G. (2006). The age-length-onset problem in research on second language acquisition among immigrants. Language Learning, 56,671-692.

Sun, H., Steinkrauss, R., Tendeiro, J., & De Bot, K. (2016). Individual differences in very young children's English acquisition in China: Internal and external factors. Bilingualism: Language and Cognition, 19(3), 550–566.

Sun, H., Yin, B., Amsah, N., & O'Brien, B. (2018). Differential effects of internal and external factors in early bilingual vocabulary learning: The case of Singapore. Applied Psycholinguistics, 39, 383–411.

Sweller, J. (1988). Cognitive load during problem solving: Effects on learning. Cognitive Science, 12(2), 257-285.

Thordardottir, E. (2017). Amount trumps timing in bilingual vocabulary acquisition: Effects of input in simultaneous and sequential school-aged bilinguals. International Journal of Bilingualism, 23, 236-255.

Unsworth, S., Persson, L., Prins, T., & De Bot, K. (2015). An investigation of factors affecting early foreign language learning in the Netherlands. Applied Linguistics, 36, 527–548.