

DAMPAK MENONTON MELALUI MEDIA TERHADAP PEMEROLEHAN DUA BAHASA BAGI PEBELAJAR USIA MUDA

EARLY MEDIA VIEWING IMPACTS ON DUAL LANGUAGES ACQUISITION OF A YOUNG LEARNER

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ABSTRACT

Despite all benefits of technology, a young child who is exposed to two languages through early media viewing may experience language development problems. It may consequently lead one to undergo therapies which can be counterproductive to their developmental milestones, especially to their dual language development. This research aims to gain deeper insights into the impacts of early media viewing on a young child's early dual language acquisition. A case study of a young dual language learner experiencing language development problems diagnosed as symptoms of Autistic Spectrum Disorder (ASD) was conducted by interviewing participant's parents to gain preliminary data about his language development problems. Observations took place during 108-hour language intervention sessions. The finding shows that early dual language exposure through early media viewing without adequate social interaction with peers and adults pertinently results in language development problems which are prone to be interpreted as symptoms of ASD rather than as a natural process of bilingualism.

Keywords: *Early media viewing, dual language acquisition, young learner, ASD*

ABSTRAK

Tidak bermaksud mengurangi kebermanfaatan teknologi, anak-anak yang sejak usia dini terpapar dua bahasa melalui media tontonan dapat mengalami masalah dalam perkembangan bahasanya. Dampaknya dapat mengakibatkan anak tersebut perlu diberikan terapi yang bertentangan terhadap tonggak perkembangan dua bahasa mereka. Penelitian ini bertujuan untuk menguji dampak menonton melalui media sejak usia dini terhadap pemerolehan dua bahasa bagi kanak-kanak di tahap awal. Penelitian ini merupakan studi kasus pebelajar dwibahasa kanak-kanak yang mengalami masalah perkembangan bahasa yang didiagnosis sebagai memiliki gejala 'Autistic Spectrum Disorder' (ASD). Data awal tentang masalah perkembangan bahasa anak dikumpulkan dengan cara mewawancarai orang tuanya. Data utama diperoleh melalui pengamatan langsung selama 108 jam sesi intervensi bahasa. Temuan menunjukkan bahwa paparan dua bahasa melalui tontonan media sejak usia dini tanpa adanya interaksi sosial yang memadai dengan teman sebaya dan atau orang dewasa secara konsisten menghasilkan masalah perkembangan bahasa yang cenderung ditafsirkan sebagai gejala ASD daripada sebagai proses kedwibahasawanan secara alamiah.

Kata Kunci: paparan tontonan media, penguasaan dua bahasa, kanak-kanak, AS

INTRODUCTION

Scientifically, being bilinguals at an early age is proven to give some benefits to children's cognitive development. Contrasted to monolingual children, bilingual children may have better attention, task-switching capacities, and adjustment to environmental changes (Lambert & Peal, 1962), (Bialystok, et.al., 2015) and (Fortune, 2012). To enhance early bilingualism of their children, parents mostly provide their children with various media and technology. Nevertheless, despite all benefits of bilingualism, it is commonly known that nowadays numbers of young children experience language development as well as social-emotional and behavioural problems as they have been exposed to media and technology since their very young age.

Studies about negative impacts of early media viewing on infants' language development during language exposure to English learning occurrence were mostly investigated on the perspective of neuroscience which does not highlight why early media viewing can counterproductively impact young children's language development. Little is revealed about the impacts of early media viewing on a young child's bilingual development on the psycholinguistic perspective. This current study aims to reveal why a young dual language learner may experience language development problems diagnosed as symptoms of ASD in the process of second language acquisition as the impacts of early media viewing. The present study was a case study in ZonaKata Language School.

Early bilingualism takes place before puberty and can be simultaneous or sequential (Montrul, 2008) and (Silva-Corvalan, 2014).

Simultaneous bilingual children acquire two languages at the same time from birth or, as some researchers propose, before 3 years of age.

The language development performed by young children who were exposed to two languages from their birth is identified as Bilingual First Language Acquisition (BFLA) (Houwer, 2009b). BFLA is defined as the acquisition of two languages simultaneously in early childhood. It is similar, if not identical, to the acquisition of only one language by monolingual children (Montrul, 2008). Thus, BFLA children are learning two first languages. There is not any chronological difference between these two acquired languages in terms of when the children started to hear them.

Language is a fundamental part of total human behaviour (Brown, 2000). Effective language behaviour is the production of correct responses to stimuli. If a particular response is reinforced, it then becomes habitual or conditioned. Then, children produce linguistic responses that are reinforced.

One learns to comprehend an utterance by responding appropriately to it and by being reinforced to that response. Language acquisition is essentially assumed involving habit formation in a process of Stimulus-Response-Reinforcement (S-R-R) (Troike, 2006). Learners give a response to the stimulus (linguistic input), and the response is strengthened (habituated) through reinforcement. Mechanically, the learners imitate and repeat the language exposed to them. When they are reinforced for that response, learning occurs. It can be implied that "practice makes perfect".

Language use does not vary from first language situations to various acquisition so that the teacher's main role is to ensure that students receive comprehensible input. The factors defining comprehensibility include the ability of the native speakers (NS) to understand the pronunciation of the non-native speakers (NNS), the ability of the NNS to use the second language grammatically and the ability of NNS to contextualize the language by using appropriate vocabulary and linking devices. The interaction approach accounts for learning through the input (exposure to language), production of language (output), and feedback that comes as a result of an interaction.

Interaction involves negotiation, recasts, and feedback. Negotiation provides the participants with the means to respond to the interlocutor's utterance appropriately and to regain their places in a conversation after one or both have "slipped." In conversations involving NNSs, negotiations are frequent, at times occupying a major portion of the conversation (Gass & Selinker, 2008).

Regarding the age of acquisition effects in bilingual development, early bilingualism is crucial for modification of the underlying cognitive system through the linguistic experience (Marian & Kaushanskaya, 2007) and (Heinlein & Williams, 2013). A bilingual advantage on a word-learning task demonstrates an age-of-acquisition effect in the development of bilingual advantage and shows that bilingualism can shape the relationship between working-memory mechanisms and word-learning capacity. Fully proficient bilinguals outperform monolinguals in the areas of divergent thinking, pattern recognition, and problem-solving (Fortune, 2012). On the other hand, on average, children acquiring two languages will lag behind children acquiring only one-when the bilingual

second language situations. Input hypothesis is central to all types of the children's skills in only one of their languages are assessed (Core et al., 2012). The size of the difference between monolingual and bilingual children's skills in any language depends on how much of that language the bilingual children are exposed to.

Children are born ready to learn a language or languages of their environments without confusion or delay (Werker & Heinlein, 2008). In bilingual development, dual language input does not confuse children, and learning two languages takes longer than learning one; on average, bilingual children lag behind monolingual children in single language comparisons (Hoff & Core, 2015). The misunderstood behaviour which is often taken as the evidence for confusion is when bilingual children mix words from two languages in the same sentence (Heinlein & Williams, 2013), known as code-mixing. It is a normal part of bilingual development, and bilingual children have good reasons to code mix. Rather than being a sign of confusion, code-mixing can be seen as a path of least resistance: a sign of bilingual children's ingenuity. So, early bilingualism is not supposed to result in language development problems. On the contrary, bilingualism is a way to promote successful early bilingual development, even though in some cases, where families are not fluent in a second language, early bilingualism might be unrealistic.

Early exposing media and technology to young-aged children affects some negative impacts on their language development. The 8 to 16-month old infants who watched baby DVDs were reported having poor language skills and less knowledge about words for about 6-8 fewer words for each hour of baby DVD exposure

(Zimmerman & Christakis, 2007). Infants who were exposed to foreign language materials through standard television or audiotape were reported only showing no language learning process in their brain activities (Kuhl, 2010). Thus, the presence of a human being interacting with the infants during language exposure is critical for learning complex natural language-learning situations. The children who are exposed to two languages from birth do not say much in the first year of life (Houwer, 2009a). Through interactions with people who talk to them regularly, they do learn to understand words and phrases in two languages by their first birthday. Such a language comprehension grows and never stops, at least not in healthy, hearing individuals. It is argued that the effects of social interaction on language learning may be multiple and complex (Conboy, et. al., 2015). Social contexts supply important information, either non-existent or greatly reduced in non-social situations, such as passive video viewing or auditory-only presentations that fail to produce phonetic learning.

It is important to distinguish language delay or disorder from sequential bilingualism. Children learning a second language will normally have delays and inaccuracies in syntax that monolingual child may not have. These usually result from 'learning errors' derived from common underlying, learning strategies (Sudarsono, 2018) (the methods used to teach a child a language) and are not language disorders. The progress in the first language of bilingual children sometimes appears to slow down compared with that of a monolingual child, but this relative delay is usually not significant. There may be some periods of language mixing, but having a solidly developed language can only help with the master of the second language. When first

language acquisition stagnates (usually because support for its maintenance is lacking), the second language is often developed enough to take over (Fierro-Cobas, 2001).

It is commonly argued that the consistent problem area of autism deals with the acquisition and use of language (Flusberg, et.al., 2000). The language problem that is indicated as ASD symptoms to joint attention is argued against the delayed onset of speech, the deficits in the comprehension and the use of prosody (Schwartz & Gorbatt, 2017).

Prosody can be examined in three general categories. They are (1) grammatical prosody, marking syntactic information within a sentence, (2) pragmatic prosody used to carry social information beyond what is conveyed in the sentence, and (3) affective prosody, the change in register conveying speaker's general feelings. Autistic children demonstrate a severe cognitive-semantic deficit (Menyuk & Quill, 1985).

There are two aspects to the acquisition of relational terms that make them particularly difficult for autistic children to acquire. They are (1) the need to process contextual and linguistic material simultaneously for the understanding of relational terms, a difficulty that severely affects many aspects of language development by autistic children and (2) the gestalt or associative manner in which relations are encoded in the memory of autistic children. Autistic children's language is characterized by slow acquisition and restricted use of relational word classes. They have particular problems in generalizing meaning across settings and, therefore, use certain word classes in all absolute rather than relational manners, even though the terms themselves are relational.

METHODOLOGY

This present research was a case study. It investigated the bilingual development of a young learner undergoing the impacts of early media viewing in a classroom involving two instructors, one tutor, the selected participant and at least four other regular students to gain all in-depth exploration of why early media viewing can counterproductively impact on the dual language acquisition of a young learner. The young learner undergoing language development problems as consequences of early dual language acquisition through early media viewing is selected as a case of this study.

The present research was administered in ZonaKata, an inclusive language school which commences an early literacy program for 2-8-year-old children. ZonaKata has been serving for more than 100 students; 20% of them were young children experiencing language development problems. These children have been exposed to early media viewing under 2 years of age and have been suspected, identified and even diagnosed to have language development problems as symptoms of Autistic Spectrum Disorder (ASD). The diagnoses led them to undergo therapies which happened to be counterproductive to their developmental milestones, especially to their dual language development. Parents reported that the therapies did not result in any significant signs of progress to their children's language development. They got tantrum easily and had difficulties in communicating and interacting with other people. One of these children is R, a 6 years old boy. He and his mother were selected as the case.

To collect data, this study addressed the one-on-one interview to the participant's mother before the language intervention sessions using a guided and open-ended list of

questions to gain preliminary data about participant's historical and chronological language development problems. This study also applied a changing observational role to observe the process and the outputs of language intervention including the method applied and the aids used the participant's response, gestures, emotion, speech, social skills, pragmatic skills, language skills and communication skills. For a deeper insight about participant's bilingual progress in the first 6 months of observation, this study used the participant's progress reports recorded by the tutor and the language instructors. The tools used in the present research included a video recorder and a camera. Guided list of questions for the interview was adapted and modified from Assessment day, namely, questions about the communication development of your young child with an Autism Spectrum Disorder (Vicker, 2003) and DSM-5 Autistic Spectrum Disorder Guidelines and Criteria Exemplar (Carpenter, 2013).

This study applied Descriptive and Simultaneous Coding since the intentional findings were about participant's real problems in his bilingual language acquisition and how the language intervention improved his dual language development (Saldana, 2009) as well as analyzed the language intervention and the language development condensed into simple categories. The findings of this study were represented in visual displays such as pictures with captions and illustrative tables and reported in descriptive and explanatory discussions.

FINDINGS AND DISCUSSION

During the first 36-hour observation in ZonaKata, R showed his ability to respond better in English than in Indonesian. He also showed good

progress in responding to simple instructions and producing words, phrases and sentences in both Indonesian and English after 6-month language intervention.

The initial interview with R's parents taken before the language intervention revealed that R had some communication, social-emotional and behaviour problems. R has been exposed to media viewing, gadgets, TV and video since he was under the age of 2 years. He produced more English words than Indonesian words. He understood only limited simple instructions either in Indonesian or in English. At the age of 5, R was diagnosed to have ASD and therefore he had to undergo therapy for 2 weeks. The therapy happened to be counterproductive to his social-emotional development and behaviour so that his parents stopped enrolling him in the therapy sessions. Then, he enrolled in a special needs education preschool for 6 months. Still, R did not have any language development progress so that he started enrolling in ZonaKata School of Language on April 5, 2017. He was diagnosed to have Autistic Spectrum Disorder (ASD) but has never taken any IQ test.

According to his mother, R has been exposed to television, computer or gadgets since he was below the age of 2 years with no parents' supervisions for more than 5 hours a day. He watched videos or games in English and while doing so he did not have any interaction with people around him. His only focus was on the media. R's mother reported that most people around R used Indonesian to communicate. Three people lived in the house. They were R, his 8-year-old sister and his mother. R's father did not live in the same city and spent time with R only during holidays or his days off. R's mother was a working mother and she spent the most time with her children early in the morning before

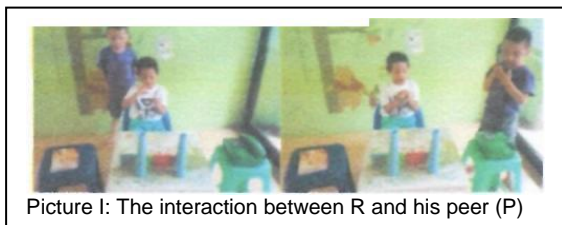
school and at evening time (6-9 pm) on weekdays. R spent his time with his caregiver during his mother's working hours.

This study found the phenomena of improper early dual language acquisition through early media viewing without any presence of other people to give any comprehensible inputs or corrective feedback. It consequently caused R to undergo language development problems which perceived as ASD symptoms. Based on the observation in early sessions of the language intervention, R did not show any emotional expressions and comprehensible utterances in communicating with others. R had difficulties in responding to people who talked to him appropriately and properly expressing his needs and thoughts, and speaking in Indonesian. Overall, R displayed difficulties which extended beyond speech and language to other aspects of social communication, both receptively and expressively. Nevertheless, it was easier for R to utter English words than Indonesian words, for example, he used the word "yellow" instead of "kuning" in identifying the colour of an object being asked to him. It indicated that he was able to produce L2 as much as the inputs he had already acquired.

In the aspect of pragmatic skills, the social language skills to interact with others, R showed that he did not have any difficulties in responding or doing activities appropriately based on the instructions given as long as he understood the instructional language. Most of the time, the language instructor needed to use English as a bridging instructional language along with appropriate gestures and facial expressions. When R spoke either in Indonesian or in English, he used telegraphic speech such as "Mamakcockroach", "no ok". "main ... ayo". R also did code-switching and

code-mixing in his utterances, for example mentioning fruits: "apel, jeruk, pineapple", counting in Indonesian and English alternately: "one, two, three, four, five, enam, tujuh, eight ... and spelling words "mobil" as em-o-bi-ai-el.

In the aspect of social participation, R also displayed difficulties or differences or both in interacting with other people. Most of the time, he did not show any interests or enjoyment of activities with others as he had difficulties in making and maintaining friends. R appeared to be more interested in objects than people and tended to avoid social contacts with others as seen in Picture 1.



Picture 1: The interaction between R and his peer (P)

Transcript 1: The social interaction between R and his peer

P:	(approaching and picking up the phone)	
R:	huaaaa ... (got angry) ... no .. .no	Output
LI:	It's ok'.El wants to join you. Main sama-sama	Input
R:	(pushing away his peer)	Process
P:	Ngape kau ni? (moving out of the room)	
R:	(moving his hand) Go away.	verbal output

R mostly expressed his anger and sadness by shouting and crying. R misunderstood others easily which eventually made him angry, sad and frustrated easily. He got even more frustrated every time he was not understood by others. R did not give any proper and appropriate responses when the tutor or instructors spoke in Indonesian. He started giving responses when the language instructor asked yes/no questions and optional questions in both Indonesian and English by making all eye contact and nodding or shaking his head while

saying "yes" or "no" or choosing the given options. By the time the language tutors/ instructor understood what R was trying to utter and helped him to articulate the words appropriately, he tried to articulate the word and started to feel at ease in communicating with the tutors and the language instructor. When English and Indonesian were used alternately to communicate with R, the language tutor and instructors could communicate more smoothly with him as he could comprehend the instructions more and become more understandable. He then started to be able to respond in both Indonesian and English with clearer articulations. Given a chance to involve in comprehensible communication, R can activate his brain to do verbal interaction with other speakers. Sudarsono (2014) argues that one's brain will good at language acquisition if his brain is given a chance to do it.

To assess R's pragmatic skills, the language instructor asked R to take the correct blocks as instructed and to insert them into the box as transcribed in Transcript 2.

Transcript 2: Assess participant's pragmatic skills

T:	Mana anggur?	Question
R:	(taking and inserting the grape block to the box correctly)	pragmatic skill
T:	(giving R watermelon block) Ini ... semangka	Input
R:	Sememang verbal	Output
T:	Semangka ... watermelon	Corrective feedback
R:	watermelon	verbal output

The language development problems experienced by R were found due to the poor social context in the early dual language acquisition through early media viewing. The language intervention given to R resulted in progress on his dual language development. The intervention was rich with social and emotional contexts

which were equipped with appropriate vocabulary inputs, language contextualization, feedbacks and negotiation to enhance R's L1 and L2 production after certain periods of intervention. R was conditioned to interact with other people using both languages, English and Indonesian simultaneously, in a 30m² air-conditioned classroom.

When the language instructor asked questions with an unfamiliar context, R mostly failed to respond and produce verbal language appropriately. On the other hand, when the language instructors provided the social contexts through 'pretend' plays while R was playing among his peers, the intervention enhanced his language production productively. R was stimulated to produce language as a response to the situation occurred during the play. Such language contextualization could not be acquired through early media viewing.

Transcript 3: Language contextualization in a pretend

LI:	R, what are you doing'?	Input
R:	(busy setting up the playing spot)	Process
LI:	Ooohh.. Is this your study room?	Input
R:	(smile and kept busy)	Non-verbal output
LI:	(observing)	
R:	(done with the setting and sat down)	Process
LI:	Wow ... It's your study room.	Contextual input
R:	Ok (smile)	contextual input
LI:	Kriiiiing ... kriiiiing ...	Contextual input
R:	(picking up the phone) Hallo.	Output
LI:	Hallo, R sedang apa? Sedang main ya?	Contextual input
R:	Ya	Verbal output
LI:	Tut ... tut Tut	Contextual input
R:	Hmmmm .. (hang up the phone)	Output

Transcript 3 shows that R could already express his thought verbally in

words. Even though R used more non-verbal language than the verbal to communicate, it is obvious that he could already perform a two-way communication in his social interaction in line with his social-emotional and pragmatic skills progress.

Having conducted a 108-hour observation on R's language development during the teaching-learning sessions, the research did not find any symptoms of pragmatic, effective and grammatical prosody which led to the context blindness and problem-solving disabilities which both were the main characteristics of ASD. Having sufficient dictions and repertoire to express what he needed and thought as well as being able to identify and express his feelings appropriately. R could get involved in the communication and interact well using telegraphic speech with facial expressions showing his emotions. He could easily make a joke and be involved in-jokes with the peers and tutor/ instructor in his social interaction. Code-switching and code-mixing were performed occasionally when he communicated. Improper behaviours such as tantrums, throwing objects and hitting peers who were mostly caused by emotional problems were more manageable and frequently lessen.

Having been exposed to English through early media viewing, R has been undergoing a process of dual language acquisition simultaneously in his critical period. Unfortunately, it was an improper simultaneous acquisition in term of the poor social-context inputs which could not support R to communicate interactively with people around.

R could easily imitate the NSs' pronunciation, but as NNSs, he was lost in contextualizing the language by using the appropriate vocabulary and linking devices. Since English was acquired almost without any interaction, only through media

exposures, he missed feedbacks, negotiations and recasts that came as a result of an interaction. This condition made him have a poor ability to respond appropriately to other people's utterances and to regain his places in a conversation.

Being exposed to the media viewing in his infancy with limited social interactions, R experienced the impacts of early media viewing on his dual language development as he was not adequately and properly stimulated and reinforced to produce words (Kuhl, 2010). When R was exposed to English through the media, the learning process did not occur even though he listened to the words from the media. The inputs became incomprehensible. Consequently, R did not have sufficient vocabulary to produce utterances. In this case, R did not have any difficulties in articulating the words, but he did not have the words that what he needed to express.

Challenging behaviour and emotional problems demonstrated by R occurred as a result of communication failures, not as symptoms of ASD. The failures were mostly caused by his insufficient vocabulary either of L1 or of L2 which was prone to be misinterpreted as language lag. Social and emotional difficulties were common during the preschool years as young children were just beginning to develop language skills as well as capacities to regulate their thoughts, feelings, and behaviours (Egger & Angold, 2006) and (Caldarella, et.al., 2012).

Nevertheless, parents and adults had difficulties in figuring out R's utterances which were mostly in poor-articulated L2. R tended to avoid eye contact to manifest his failure in comprehending the instructional language. It is important to differentiate language delay or disorder from sequential bilingualism (Fierro-Cobas, 2001). A child learning a second

language would normally have delays and inaccuracies in syntax that monolingual child might not have. These usually resulted from 'learning errors' derived from common underlying, learning strategies (Sudarsono, 2018) (the methods used to teach a child a language) and are not language disorders.

R did not have any of such language problem symptoms as Autistic Spectrum Disorder symptoms covering joint attention, delayed onset of speech, deficits in tile comprehension and use of prosody (Gerenser, 2008). What R needed was an interacting partner. This partner would ensure that he could receive 'lots of comprehensible inputs, predictable topic or scripts, repetition, meaningful exposure in a variety of social setting, and chances to negotiate to mean with native speakers' (Sudarsono, 2014).

CONCLUSION

Providing a child with early dual language exposure through early media viewing without adequate social interactions with adults pertinently results in language development problems which are prone to be interpreted as symptoms of Autistic Spectrum Disorder (ASD) rather than as improper early dual language acquisition because early media viewings without the presence of other people potentially expose a young learner to incomprehensible inputs which consequently cause problems for the learner to develop his pragmatic and communication skills properly.

In this millennial era, it cannot be denied that children must live with modern media and technology. However, children cannot be isolated from other people to interact with. Media and technology cannot replace human beings as partners interacting with their children. Giving children no chance to have social and emotional

interaction with others may constrain their thought dan language development. Finally, children cannot learn well if their brain is not given a chance to do what it needs to do.

RECOMMENDATION

It is recommended that parents provide their children with media and technology wisely to support their children's language and brain development. It will be wise for parents to provide their children not only media and technology but also with human being friends. The latter can create and manage social and emotional interaction and contexts as well as give inputs properly and appropriately.

It is also recommended that the government take a legal role to regulate the use of media and technology, particularly for its people including children and parents.

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