Gender Differences in Early Communication, Language Acquisition and Development: A Descriptive Study

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Abstract

Parents pay a significant attention to the first words children utter. However, first words are not the actual beginning of communication. Much earlier, babies begin to communicate their feeling via making eye contact, pointing, crying, squealing, and other gestures. Furthermore, they perceive language earlier than making others understand them. The aim of this paper is to tackle the variations between the two sexes starting from the stages of language acquisition in normal children, the differences between the two genders in language vocalization within each stage. Next, the distinctions in acquiring a particular communicative competence and the causes behind this difference will be tackled. It has been found that females show superiority in bubbling, uttering the first word, number of vocabularies, sentence complexity, and clarity of articulation; however, the difference is only one- or two-months exceedance and it disappears by the age of four. Moreover, some domains of superiority in grammar and spelling disappear in adolescence. It is also found that parents play a vital role in the accelerating language acquisition. Boys are more physically played with by the fathers, while girls are more talked to verbally by mothers. Psychological studies of language acquisition argue that girls’ brain develops certain aspects of language faster than the boys’ and vice versa, other aspects are more developed in boys than in girls. Finally, differences in the communicative competence are caused by the styles that children acquire from their parents and/or peer groups.

Keywords: Language acquisition, genders, communicative competence, politeness
الفروق بين الجنسين في التواصل المبكر واكتساب اللغة وتطوير الكفاءة التواصلية

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المستخلص

قد يمكن ان يكون هناك اختلاف بين الذكور والإناث عند الانتساب للمادة. بدأ دراسة الاختلاف في المناهج الادراكية الاجتماعية والخصائص الشخصية منذ بداية القرن العشرين. وقد وجود الممارسات الادراكية وبعض الخصائص الشخصية تختلف الى حد ما. يجري بعضها واضحة للعين من وقت الرضا، ولا بد من بعضها الآخر بالظهور حتى وقت المراقبة.

توصل العلماء إلى أن هناك خطأ زمني لمراقبة الأطفال المختلفة بين الذكور والإناث منذ بداية حياتهم فقد وجدوا أن الأطفال تسببت الذكور في الرؤية والسمع والذاكرة والرائحة واللمس. وله أكثر استجابة للألوان البسيطة والوجوه وبيكين استجابة لبيكاء رضيع آخر. تهدف هذه الدراسة إلى استكشاف صحة هذه الفروض أو عدمها، إذ تشمل الנשק على مراحل اكتساب اللغة والفروق بين الذكور والإناث في اكتسابها وتطوير القدرات التواصلية والإسمية الكاملة وراء هذه الاختلافات التي اكتشفت على الممارسات الطبيعية ومعاملة الوالدين، ووصلت الدراسة إلى أنه على الرغم من تفوق الأطفال على الذكور في بعض نطق الكلمة الأولى وعدد المفردات وتعقيد الجملة ووضع التعبير، فإن هذه الفروق لا تتجاوز النهار أو الشهرين وتخفي في سن الرابعة. فتفوق الأطفال أيضا في قواعد اللغة والهجئة لكن سرعان ما يخفى هذا الفرق في المراقبة. وجد أيضا أن الأبناء يرتدون دوراً جمياعياً. إذ يميل الأبناء إلى اللعب البديع مع الذكور بينما يميلون إلى التحدث مع الفتيات. تقول الدراسات النفسية لألكس كثير أن الماء المقع في بعض جوانب اللغة تطور أسرع من الأولاد، ويعكس صحيح إذا ان هناك جوانب أخرى تكون أكثر تطورا عند الأولاد.

الكلمات المفتاحية: اكتساب اللغة، التأدب، الجنسين، الكفاءة التواصلية

Introduction

communication is a fundamental and mysterious aspect of people’s lives. Through them, they start manifesting themselves as a female or male (Sheldon, 1993, p. 83). The first point to start the discussion in the differences between the two genders is when does it all begin? Key (1975) cites Strong and Wallace’s statement (1935) that it commences before the birth of a baby, when this creature responds to a stimulus from the external world that it knows nothing about. The experiments arrived at the conclusion that the movement of the foetus increases, responding to the sounds made near the abdomen of the mother. This response starts on the eighth month of pregnancy and increases with the approach of the time of birth.

Furthermore, Savickienė & Kalėdaitė (2007, p.285) cite Zemmerman and west’s (1987) statement that “Gender is not something we are born with and not something we have, but something we do or perform”. They also indicate that the statement “women are not born but they are made” applies to men as well. They admit that this process precedes the baby’s birth, taking various procedures starting with the tradition of buying pink clothes.
and cups for girls and blue items for boys even though the gender of new born babies cannot be easily identified if they are dressed identically. From a linguistic perspective, gender attribution is identified when a baby is named.

Men and women are social groups. During childhood, Girls and boys learn to signify themselves a member of one group or another via their gender-appropriate behaviour, including the linguistic behaviour. The process of adopting the qualities of a ‘proper girl is referred by social psychologists as the ‘acquisition of gender identity’ (Coates, 1993). Hence, it can be expected that gender significantly influences the way language is manipulated.

Language functions not only indicate novices but also enforce gendered behaviour by constructing social relationships among females and males in countless daily conversation. The process by which children learn how to use a language in what fits a culture’s norms of appropriateness with regard to feminine and masculine behaviour is called language socialization (Schieffelin & Ochs 1986), cited in Sheldon (1993, p.84).

The next section traces the stages of language acquisition in general without taking into account the variations between the two genders in this development. Due to resources availability, the focus will be on the acquisition of English as a first language.

1. Children Steps in First Language Acquisition

The process of first language acquisition takes place in a remarkable policy. When a child starts school, he/she is a completely competent language user. For all children, there is an innate readiness to acquire language. However, a child cannot carry out this mission alone, he/she needs interaction with other language users in order to develop a particular language. All normal children develop language at roughly the same schedule as if it were biologically determined (Yule, 2010). The stages children pass through during their first language acquisition can be summarised as follows:

1.1 Prelinguistic Development (Cooing and Babbling)

It is agreed among researchers that children commence learning a language at birth, if not before. Even though the Latin word infans means ‘without language’, babies learn tremendous amount about language during this first phase of life (Under the pink or blue blanket, www.oneworld-publications.com/pdfs/PinkBrainBluBrainchapter.pdf). Before speaking, at the age of one month, the child starts to pay attention to the outside environment and reacts in different ways. A three months old child can develop a range of crying styles for different needs, produce a big smile in response to a speaking person, and start to create distinct vocalization
During the first months of infancy, the child starts to produce speech sounds described as cooing. In this cooing phase, the child produces a sequence of vowels similar to /i/ and /u/. By the age of four months, a child can articulate the /k/ and /g/ sounds, combined with vowels described as cooing or going (ibid).

Between six and eight months, the child starts to produce different vowels and consonants like ba-ba-ba and ga-ga-ga. This period is called babbling. Depending on the types of sounds an infant makes, there are two primary types of babbling: the reduplicative form, occurring when an infant uses a sound repeatedly such as da-da-da-da and la-la-la-la-la. then, this leads to the early spoken words such as dada and mama. the second type of babbling is the variegated babbling, which occurs when simple sounds are produced by an infant without being based on repetition as in la-do-ma-ga-ba. While these sounds might seem or rhyme similarly, they demonstrate that an infant is using different word sounds (ibid).

This phase, i.e. babbling is very essential period of language development because infants are starting to understand some linguistic concepts. During this period, they often show different types of inflection while speaking, raising the pitch and volume of their voices throughout the string of sounds. They also learn turn-taking in a conversation with an adult, indicating that parents and caregivers are essentially encouraged to interact with infants during the phase of babbling to demonstrate how language is used in conversation (what is babbling?, www.wisegeek.com/what-is-babbling.htm).

1.2 The One-word Stage
Between twelve and eighteen months, children begin to produce a variety of recognizable one-word utterance. The period is characterized by uttering single terms for everyday objects such as milk, cookie, cat, cap. They may also recruit a single unit to stand for a phrase. For example, when a child wants to say what’s that, they simply say [ʌ sæ] as a one word. This case is called holophrastic, meaning a single term functioning as a phrase or sentence (Yule, 2010, p.174).

1.3 The Two-word Stage
This stage begins around eighteen to twenty months. When two distinct words are combined together, it represents the two-word stage. Examples of these combinations are baby chair, mommy eat. Nonetheless, the interpretations of these utterances are context tied. It must be noted that the number of a child’s vocabularies might exceed 50 words at this age (ibid).

1.4 Telegraphic Speech
Between two and a half years, a child starts to produce strings of words in phrases and sentences as cat drink milk and daddy go bye-bye. At this
stage, sentence building capacity, word order, and simple prepositions are significantly developed in children. (Gleason & Ratner, 2009, p.152)

1.5 Developing Morphology
At the same age of the previous stage, i.e. two and a half years, inflectional morphemes start to be formulated by children. The -ing morpheme is initially acquired to be used in expressions such as cat sitting, mummy reading. Then, plurals are learned with -s. Next, the child uses the regular past tense forms; hence, overgeneralization is a strategy that children adopt for irregular forms. Finally, the regular -s of the third person singular present tense appears first with full verbs and then with auxiliaries. However, in this period children, may produce good forms one day and odd forms the other. All what the child wants is to communicate the message he intends and not to utter grammatical forms (ibid, p.5).

1.6 Developing Syntax
According to Yule (2010), there are several studies of syntax development in children’s speech. Yet, this study will only present the way children formulate interrogation and negations. In developing these forms, children pass through three stages: the first starts from 18 months till 26 months, the second stage lasts between 22 and 30 months, and the third one between 24 and 40 months.

a. Interrogations
At the first stage of forming questions, children simply attach a wh-word to the beginning of the expression or utter the expression with a rise intonation.

(1) Where Kitty?
(2) Sit chair?

More wh-forms come into use at the second stage with more complex expressions. Rising intonation is maintained at this phase of questions formulation.

(3) What book name?
(4) You want eat?

At the third and final stage, the child is capable of making the required movement of the auxiliary in English questions. Wh-questions are not fully acquired at this stage, questions, though, are quite close to those of adults

(5) Can I have a piece? (Yule, 2010, p. 178)

b. Negations
Stage one, in the formulation negative forms, involves adding no or not to the beginning of an utterance. As in:

(6) No rice.
(7) No sitting here.
At stage two, other negative forms start to appear such as can’t, while placing no or not ahead of verbs instead of before the whole expression as it was the case at stage one.
(8) I no eat it.
(9) I don’t want it.
At the third stage, a child begins to adopt other auxiliaries such as didn’t, won’t. Forms of stage one disappear.
(10) I did not catch it.
(11) She won’t let go.  

1.7 Developing Semantics
Two cases of semantic development are common in children between one and two years old. During this period, children use words in manners suggesting that they understand them differently. A word, such as apple, might stand to a wide category of things referring to any round fruit. This case is called overextension. On the other hand, underextension is another case when children might recruit a word to stand to too small category of things such as dog, which refers to the family’s pets and not for the neighbor’s (Wary & Bloomer, 2006). By the age of two and a half, such cases become less frequent. In order to determine the meaning of a particular word uttered by the child in his/her early development demands an attention to the context it is spoken in.
It is also found that a preschooler often tends to invent words referring to meanings. They might call a gardener as plant man or they might coin new words such by saying bee-house instead of bee-hive (Gleason & Ratner, 2009)

1.8 Phonological Development
Right from the stage of babbling, children start playing with sounds. When a child faces some difficult sounds in pronunciation, he/she solves this problem in various ways. In this period, children either show cases of regression in the acquisition of phonology when some older correct ways of saying things are temporarily lost or they acquire a word or two whose pronunciation is much closer to the adult model. The latter case is named as ‘progressive phonological idioms’. A theory of phonological development that deals with regression is called ‘cognitive or problem-solving theory’. In this theory, the child is seen as a somewhat intelligent creator trying to solve problems in pronunciation. He/she may temporarily either avoid difficult sounds or sound sequences, exploit favourite sounds, or a replace and/or rearrange sounds in the target word (ibid).

1.9 Communicative Development
Language development can also involve how children use language properly in different social situations. The system that governs the conventions of proper language use is called pragmatics. When children acquire syntax, morphology, semantics, they develop their linguistic competence; however, this is not sufficient. It is essential to learn the social rules of a language in different situations such as polite requests, apologies, greetings…etc. Here, speakers learn different variations of speech style that can mark their gender, regional origin, social class and occupation (ibid).

After presenting the stages of first language development, it is necessary to investigate if there are substantial variations between the two genders in this process.

2. Gender Differences in Language Acquisition and Development

Parents who raised both a boy and a girl can tell that there are key distinctions between the two genders in language development. Not only that, teachers and the National Centre for Infants and Toddlers have arrived at the conclusion that from a very early age there are developmental timetable differences between girls and boys.

Females’ superiority in language acquisition has been tackled since the 1950s when Anatasi (1958) has found out that from infancy through adulthood females are verbally and linguistically superior to males. Girls, in comparison with boys, are slightly more advanced in developing their five senses: hearing, vision, touch, memory, and smell. They also proved to be more socially affected by human faces, voices, and cry in response to other infants’ cry. Moreover, females are better in verbal tasks and in identifying facial expressions. Hence, they may exceed males in the emergence of language skills and fine motor. On the other hand, boys outperform girls in visual-spatial integration that involves solving puzzles and doing certain eye-hand tasks. They may also carry out certain tasks related to mental rotation better than girls. Due to the advanced spatial skills in boys, they might prefer physical activities represented by climbing or pushing trucks and cars, which further develop their visual and spatial skills. By contrast, girls tend to be engaged with siblings in dramatic and role play, leading to the enforcement of their verbal and social skills (White, www.ehow.com/list_6164218_gender-differences-language-develop).

In investigating the female and male babies’ behaviour during the first months of their life, which is also the preverbal phase of language development, it is found that they behave differently. Boys are observed to scream more often than girls, whereas girls vocalize spontaneously more than boys. Still, it is controversial if these vocalizations are of communicative functions and whether they are relevant to language
development or they only represent a vocal activity that has no importance to language development (Klann-Delius, 1981). Coates (1993) states that “On measures such as the onset of babbling [...] girls tend to do better than boys” (p.144). Nonetheless, the difference is small and there are exceptions for the rule. When researchers at San Diego state University have conducted a large study to investigate the different tendencies, they have documented a slight, yet significant, difference between boys and girls’ early stages of language development. Approximately, baby girls are one month ahead of boys in the number of words that they understand. A typical nine-month girl can understand about fifty words like dog, no, bottle, bath, while, the typical boy may reach this size of vocabulary at the age of ten months. A similar difference is found in babies’ early gesturing. Many researchers believe that speech evolves from gestures. Babies gesture before they start speaking. Throughout the studies, it is found that girls exceed boys in the number of gestures they produce during their late infancy. They start pointing, raising their arms to be picked up and waving bye-bye, few weeks earlier than boys. Nonetheless, this advantage is somehow small. A large Swedish study concluded that eighteen-month-old girls were found to produce only 5% more gestures than boys. (Under the pink or blue blanket, www.oneworld-publications.com/pdfs/PinkBrainBluBrainchapter.pdf)

In tackling the stages of language acquisition, more research was done by Maccoby (1966), who have found that during preschool females perform better on most aspects of verbal performance, including the utterance of their first word, the clarity of their articulation, and their sentence length. It is observed that children utter their first word on their first birthday. All the studies cited in Maccoby (1996), Coates (1993), Tanz (1987), Klann-Delius (1981) agree on girls’ superiority in first word uttering approximately one month earlier than boy will do. Reznick & Goldsmith (1989) have reported that females score higher than males on measures of vocabulary. Fenson et al (1994); Reynell & Gruber (1990) and Reznick & Goldfield (1992) have obtained these same results.

Concerning vocabulary development, Wallentin (2008, p.2) states:

The most frequently used tests for early language development are the Mac.Arthur-Bates communicative development inventories. Fenson et al. (1994) studied 1803 and Feldman et al. (2000) studied 2156 socio demographical diverse 1 and 2 years old American children. The children were assessed by their mothers using a check list questionnaire paradigm. Significant effects of gender were found in both 1 and 2 years old on both vocabulary comprehension and vocabulary production. Girls scored significantly higher than boys.
These studies have been reapplied on the Swedish language inspecting 18 months old children and arrived at similar results. Below is the study of gender differences in language development in different aspects of language:

2.1 Differences in Phonological Development

On the Phonological level, studies confirmed females’ advantage. Females acquire the phonological system of their language faster than boys. Between three and eight years old, girls show a higher achievement in Articulation. On the other hand, on the ability to differentiate sounds, there was no observable difference between the two sexes (Klann-Delius, 1981). Opposite to this opinion, Key (1975) indicates that studies on the phonetic development of sounds by infants in the process of language leaning do not show a significant difference in the ability and development of male and female infants. Some studies show a slight exceedance for girls and others show the opposite, i.e. a slight exceedance for boys.

On the other hand, McCormack et al (1996, p.337) cite a study conducted by Kenny & Prather (1986) who have investigated gender variation in speech production of three to five years old children. It is found that boys were significantly more variable in the production of words than girls, referring that girls have a superior mastery of speech sounds than boys. Another normative study on gender differences in speech acquisition has found that the difference is small, but often favouring girls (Ingram, 1989). The point with the contemporary analysis of children’s speech is that it is based on linguistics analysis of child’s overall phonological system. Contrary to this linguistic approach is the normative study adopted by Smit et al (1990), which reports findings based on individual speech sounds, without reference to how they were organized as a linguistics system. For example, they refer to the pattern of all fricatives being simplified to stops such as /s/ or /f/ pronounced as /t/ and /p/.

Relatedly, McCormack et al (1996) have carried out another study over speech production in expressive language and receptive language abilities of 50 children, whose ages range between two and two and a half years. 22 of them were females and 28 were males. It is found that there were no significant differences between boys and girls in the receptive or expressive language. The differences were found in clustering speech process related to the simplification of syllable structure. Boys tended to delete the final consonant, delete the weak syllables, and cluster reduction in the speech sounds.

2.2 Differences in the Development of Syntax

There are rare studies regarding the first stages of syntax development. A study made by Schachter, et al (1978) arrived at the conclusion that two
years old girls were ahead of same age boy in MLU, related to the level of syntactic development (Tanz, 1988). At the age of 24 months, both Tanz (1987) and Klann-Delius (1981) remark that girls change more rapidly from one- to two- word utterance. They also reach fifty words vocabulary in 18.0 months, while Boys reach this number in 22.1 months (Caotes, 1996). By the age of two and a half, girls take the lead in combining about eight words at a time, wherein boys make six. Girls’ sentences are longer and more complex than boys. Though the difference is not highly significant, it holds throughout the preschool period. Similarly, Ramer’s (1976) Observations demonstrated that girls transfer from two-word expression to subject-verb-complement structure faster than boys and that they show a different style of acquisition. She also found that boys use presyntactic forms, i.e. word combination without recognizable semantic relations, for a longer period of time than girls. Also, boys work out the more complex constructions gradually, whereas girls rarely use presyntactic forms. Immediately, after showing syntactic construction, they specify the relations of subject complement, verb complement, and subject-verb relation (Klann-Delius, 1981)

With regards to words and their building up, Key (1975, p.62-63) has studied children’s language performance in accordance with certain morphological rules. To evaluate the children’s ability of expanding words by building linguistic construction such plurals, past tense, progressive forms and possessions, she made up non-sense words, then got responses from children. For instance, she showed a child a picture of a ‘make believe character’, saying “this is a wag”, then she showed the same child a picture of two of these characters and encouraged him/her to complete the sentence “now there are two-------”. The child added the plural morpheme saying “wags” as was expected. In verbal forms, she showed them pictures and said “this is a man who knows how to zib, what’s he doing? He is---------- -”. In a final analysis of the responses, it is found that boys’ and girls’ performance was practically equal.

2.3 Differences in Lexical and Semantic Development

the next distinction made between male and female children is the ability of developing semantic and lexical forms. In a study made by Kramer et al (1988), they tested 68 females and 68 males of similar age and education. In a test of verbal learning, subjects recalled word lists. On this task, females out performed males. The difference was also in the way the two genders approached that list. Females have shown a significant outperformance of semantic clustering, being an evidence that they were
possibly have the ability to actively organize the list of words on the basis of their semantic properties more than boys. By contrast, males were more likely to cluster the items in the list serially. That is to say, they are prone to recall the words in their same order in which they were presented. This conclusion suggests that females use a more active and effective method of organization during their initial learning (Wallentin, 2008).

As to the acquisition of vocabulary, Sause’s (1986) study in this area has manifested that boys can be more aggressive verbally. Their language reflected greater interest in quantity, space, and physical movement. Girls’ language, on the other hand, represents a greater interest in females’ interests. They prefer talking about illness and helpfulness, clothes, cleanliness, brothers and sisters.

With regard to logical semantic-relations, studies that tackle the cognitive structure of the lexicon and accomplishment of comprehending the logical connectives and negation in girls and boys have not arrived at significant sex differences (Klann-Delius, 1981).

In summing up the variation between the two genders on the aforementioned levels, Key (1975) states that despite any outperformance recorded by females, it is found that when children grow up girls’ superiority in language proficiency start to disappear, saying: Throughout preschool years and during the early years of school, it is found that girls show higher performance than boys in boys in most aspects of verbal activities. They utter their first word earlier, articulate sounds more clearly, start using longer sentences earlier, and are more fluent, when they join schools, though, there are not anymore consistent differences in vocabulary. However, they proved to have a faster ability of learning how to read, and there are more boys than girls who require special training in remedial reading programs. However, approximately, by the age of ten, a number of studies demonstrated that boys have developed their reading skills. During the school years, females outperformed males on tests of spelling, grammar, and word fluency.

After reviewing the studies that tackle gender variation in language acquisition, it is necessary to highlight if they develop their communicative competence differently, leading to the unique speech style stereotyped to males and females.

2.4 Differences in the Development of Communicative Competence

In this section, a review to be provided for the way children acquire gender-differentiated communicative competence related to verbosity, conversation dominance, cooperativeness, conversational style, and politeness. Tanz (1988), remarks that Bates (1976), Brunner (1975) and Hymes (1972) are among the early researchers who demonstrated that
children must learn how to use language in interaction as well as how to construct sentences.
As to verbosity, Smith and Connolly (1988) have concluded that girls are more fluent and are more talkative. Before the age of 4, they talk more both to their mothers and to other children, but after this age such difference disappears. Nevertheless, concerning conversational dominance, recent research suggests that, from an early age, boys dominate mixed conversations, i.e. conversations that include the two sexes. In this regard, Haas (1978) analyses the amount of speech girls and boys produce. the ages of her sample were aged 4, 8, 12, arranged in mixed sex pairs. She noted that boys use longer utterances than girls. Similarly, Swaann’s (1989) analysis of classroom talk, targeting 9-11 years old children, shows that boys talked far more than girls, both in terms of number of turns and the number of words uttered. She has also found that all participants in the classroom collaborate to achieve male dominance: the teacher by paying more attention to boys, the boys by using the interactional resources to contribute more, and the girls by using the same resources used by boys to contribute less (Coates, 1993).
In the domain of cooperativeness, a subject of general interest to the study of child language development is the genesis of general communicative abilities in children. Klann-Delius (1981) reports a study related to the children’s verbal cooperativeness. Children were divided into pairs. Each pair involves the two genders. The role of the first child is to describe an object, a word, a picture or play which the second child is supposed to identify it. Cooperativeness is measured by the respective reactions of the second child to the description given by his partner. These investigations manifested that, at least under these test conditions, boys and girls, between 3 and 11 years, are equally cooperative. This tells that verbal cooperative behaviour is acquired by the two sexes at roughly the same period.
As to the conversational style, it is found that young girls tend to use the collaborative, supportive, and mitigated speech, whereas young boys are more likely to use the controlling and unmitigated speech styles in their interaction with peers. Girls, on the other hand, tend to seek affirmation in their speech by saying will you be the doctor for a few minutes and she needs the little pill, right? instead of using commandments and directives. Boys, however, are more directive in their play by producing sentences such as come on be a doctor and Gimme your arm. Additionally, preschool girls’ stories are more likely to describe stable, harmonious relationship (as in families), whereas boys’ stories involve conflict, action, and disruption (Gleason & Ratner, 2009). Sacks (1988) has investigated the form of ‘obliges’ used by five years old middle-class children in their role play as
they play pretended games with each other. Obliges are the utterances that require a response on the part of the addressee. They include directives, prohibitions, and questions. Sacks analysed the form of these obliges in terms of their directness or the degree of their mitigation. Mitigated devices include tag questions, question imperatives, and imperatives with joined focus, as in: *let’s sit down*, pretended directives, and state questions, as in: *are you sick*. Sex differences were found in all categories except question imperatives, which are not used at this age by both sexes. The study found that girls used all the types of mitigated devices, except state question, more than boys. Boys, by contrast, produced five times as many prohibitions. They used more imperatives, information questions, and state questions.

In addition to the aforementioned styles, aggression and assertiveness are other aspect of language use. Whilst aggression is usually directed against someone or something, assertiveness is being self-confident and speaking up for oneself. At an early age, boys are physically more aggressive and more active than girls through hitting and kicking. This diversity last from childhood to adulthood. As to assertiveness, they, i.e. boys, show levels of assertiveness higher than girls. The difference is not as great as for aggression, though. upon attempting to influence others, boys are more likely to use verbal persuasion and when it does not work, they cease their efforts of influencing the other person (Cook, 2009)

Politeness is another dimension of communicative competence. It can be divided into two areas: recognizing polite expressions from less polite ones and producing polite expressions. In the first part of recognizing polite expressions, Bates (1986) found that there was no sex difference in her polite-frog study; both boys and girls were capable of judging which of the two requests forms is more polite. Nevertheless, she found that girls adopt politeness devices more often than boys. The latter, however, showed good awareness of politeness conventions. Similarly, Bock &Hornsby (1981) remarked that girls are more polite but not significantly so. It is also concluded that the gender of the addressee plays a role in using politeness by children. Both boys and girls were more polite when the addressee is a female than when the addressee is a male (Coates, 1993)

Having highlighted the differences between male and female children, it is time to investigate the causes that lie behind such variation in language acquisition and the development of the communicative speech style.

3. Causes behind Gender Differences in Language Acquisition

It is argued by many scholars among whom is Sax (2008) that since early infancy boys and girls show distinct tendencies in their language development. These tendencies can be attributed to either cognitive effect
or to social effects, represented by the parents’ role. Below is a presentation for these two effects:

3.1 Cognitive Effects

a. Girls Develop Language Skills Sooner Than Boys

It has been stated by Sax (2008) that cognitive changes that influence language acquisition starts to occur in girls before boys. These changes commence from 14 to 20 months in girls, whereas boys experience these changes between 20 and 24 months of age. This evidence can explain what has been arrived at by other studies that girls often speak sooner than boys, use larger vocabulary, and speak in multiple-word sentences or phrases.

b. Girls Use Different Parts of their Brain to Process Language.

Neuroscientists in Georgetown University Medical Centre state that girls and boys use different parts of their brains upon processing some basic grammatical aspects. This study suggests that gender is an influential factor in language acquisition and use. It is realised that girls mainly use a system that is based on words memorisation and building associations between them, whereas boys, primarily, rely on a system that governs the rules of language.

In a study that examined brain activity related to phrases such as *I holded the bunny*, researchers hypothesized that girls can exceed boys at remembering the irregular past-tenses of verbs, ‘held’ here, as these words are memorized in the declarative memory. If girls can recall ‘held’ better than boys, then they should make less errors such as ‘holded’. It is found that these errors are made when children cannot remember the irregular past-tenses, and hence, they resort to combing the verb with an *ed* ending just as they do for regular verbs.

Another experiment examined the usage of regular and irregular past-tense forms in two groups of children, 10 of them are boys and 15 of them are girls, whose age ranges from 2 to 5 years old. Contrary to the researcher’s predictions, it was girls who over-regularized far more than boys. Upon investigating the verbs that girls were mistaken, there was an association between the number of similar sounding regular past-tense verbs and the verbs that were over-regularized. For instance, girls are prone to say ‘holded’ or ‘blowed’ since many other rhyming verbs have the regular past-tense form, as in ‘folded’, ‘rowed’ and ‘molded’. The researchers contend that this kind of analogy-based processing, suggesting that girls were depending on their declarative memory when they create the past tense. Their memory is not merely a list of words, instead it encompasses common patterns between words that can be used to generalise these patterns. Hence, girls had memorised the regular past tenses of rhyming
words, and were generalising these patterns to new words, resulting in over-regularisation errors as in ‘holded’ and ‘blowed’. By contrast, for boys, there was no association between the number of similar sounding regular past-tense verbs and the verbs that were over-regularised. Thus, boys did not make over-regularisations on verbs like ‘holded’ or ‘blowed’ that have many rhyming regular past-tenses. This implicates that boys were not forming these words in the declarative memory, instead they probably were using the rule-governed system in combining verbs with ed endings (Sax, 2008).

Ullman (2001), cited in Melville (2006), concludes that “Although the two sexes seem to be doing the same thing, and doing it equally well, they are using two different neurocognitive brain processes to do it.” He also notes that brain areas, tested in his study are responsible for more than just language use. This opinion reinforces the belief that men and women may process information in fundamentally different manners.

Another study conducted by researchers from North Western University and the University of Haifa. They adopted functional magnetic resonance imaging (fMRI) in measuring brain activities in 31 boys and 31 girls; their ages ranged from 9 from 15. Those children perform various writing and spelling skills. The tasks were given in two modalities: auditory and visual. As to the visual test, children read certain words without hearing them and in the auditory mode, they heard words aloud without seeing them. The researchers have recruited a complex statistical model, accounting for the differences associated with each gender, age, performance accuracy, the type of the linguistic judgment, and the written or spoken method in which words were presented. For the first time, and in unambiguous findings, researchers realised that areas in girls’ brain, which are associated with language work harder than in boys’ during language tasks. They, i.e. girls demonstrated significantly greater activation than boys. The information in the tasks went through the girls’ language areas in the brain associated with abstract thinking, and their performance accuracy correlated with the degree of activation in some of these language areas. Nonetheless, the researchers figured out that this was not case for boys. When reading words, accurate performance in boys relies on how hard visual areas of the brain worked. When hearing words, the boys’ performance depended on the hard work of the brain’s auditory areas. Burman (1996) rationalises this difference by saying, "One possibility is that boys have some kind of bottle neck in their sensory processes that can hold up visual or auditory information and keep it from being fed into the language areas of the brain". This difference might simply stem from girls’ ability to develop faster than boys. Nonetheless, these differences between the two sexes
could disappear by the age of adulthood. There is an alternative explanation stating that boys create visual and auditory associations in the sense that meanings which are associated with a word are brought into the child’s mind simply upon hearing or seeing the word. If the females’ reliance on an abstract language network and sensory areas of the brain extends into adulthood, a still unresolved question, this could explain why women tend to provide contextual and abstract representation more than men. Contrary to this opinion, Sax (2008) states that the difference between boys and girls is not in the brain structure, it is in the sequence of development of the different regions in the children’s brain. Compared with boys’ brain, the regions in girls’ brain develop in a different sequence. Hanlon and her associates at Virginia Tech have examined brain activity in 508 children, 224 of them are girls and 284 are boys. Their ages ranged from two months to 16 years. This study is considered one of the largest and most carefully executed of its kind as it reflected a striking and consistent sex differences in the speed with which the children’s brain matures. The researchers have concluded that the areas of the brain involved in language development, motor coordination, spatial memory, and getting along with others develop in a different pace, order, and rate in girls in comparison with boys. Language and fine motor skills mature approximately six years earlier in girls than in boys, whereas targeting and spatial memory mature about four years earlier in boys than in girls. Thus, a two years old boy might be about three times more capable than a girl of the same age to build a bridge out of blocks. By contrast, a three years old girl could interpret facial expressions as well or better than a five years old boy could (Cook, 2009).

3.2 Parent Effect
One of the newest theories related to language acquisition states that Infant Directed Speech (IDS) is used by mothers with their infants leads to diversity in language acquisition. IDS includes higher pitch, slower speech rate, shorter utterances, longer pauses, and hyper-articulated vowel. It has been proved that this speech facilitates language acquisition. Kitamura and Burnham (2003) have published a study in which they concluded that mothers use IDS more towards females than they do towards males. They argue that they do so to encourage attention, to express affection more with female infants, and to suggest that this difference arises because of the mothers’ intuitive adaptation of her speech to match her child’s perceived developmental needs. Burnham and Harries (1992) have proved in a study that mothers judge female infants to be more sensitive and weaker than males. Therefore, they speak to them in a more sensitive manner (Kane, 2002).
Another study is carried out by Clark-Stewart (1973) who observed American mothers and first-born children for nine mothers, since when their children are nine months until they are eighteen months. She has found that girls’ linguistic skills in comprehension and vocabulary usage were higher than the boys’. Likewise, girls have positive involvement with their mother. The girls’ mothers differed from the boy’s mothers treat their children differently. With females, they spend more time, use more directive and restrictive behaviour with higher rate of social referential speech that involves thanking, greetings, apologies, … etc. (Coates, 1993). This adds a possibility to why girls acquire language faster. Studies done by the University of Michigan, Department of psychology on children and primary language acquisition show that children’s gender is affected by parent’s treatment. Different treatment impact language development. For example, fathers are prone to play more with male children, which takes a more physical nature. Upon playing with girls, they adopt the communicative tendency. Thus, boys will have more opportunity to develop physical skills, while girls will obtain more opportunity to develop their speech. Kane (1993) highlights the frequency hypothesis, which states that, from a young age, children are conversed to in a different manner, relying on their sex. boys and girls hear different features due to the different perspectives of their caretakers. Ledegaard and Bleses (2003) demonstrate that caregivers recruit direct imperatives with boys more than with girls, which can lead to gender differences in language later in life. Among the convincing arguments related to gender differences in language acquisition is the influence of stereotypes assigned to children. Mostly, boys are encouraged to play with cars and trucks rather than ethological toys like dolls, which are usually given to girls. Trucks elicit animated sounds, such as beeps and engine noises, and are associated with a reduced level of conversation. On the contrary, playing with dolls requires interaction and promote conversation, hence, granting children different language characteristics (Kane, 2002). Furthermore, Kay (1975) indicates that the personality of the new born and the caretaker can also affect language acquisition. The amount of time the caretaker stimulates and responds to the baby can plays a significant role. If there are other children to care for and if house duties are very demanding, the mother will not have much time to interact with the baby who elicits vocal responses. Many researchers have suggested that family members contribute to the acquisition of communicative competence in different ways: fathers of infants have been observed to have more breakdowns in communication; they spend less time focused on the same object or action, make more off
topic reply and request clarification. Fathers of preschool use more imperatives with children than do mothers. Mothers, on the other hand, are more supportive; in their interaction with children, they praise and acknowledge more than fathers. Fathers are less tuned to children than mothers are (Gleason & Ratner, 2009). Implications on interruption and simultaneous speech have been arrived at via Greif’s (1980) study of sixteen middle-class children, aged two and five, in their conversation with fathers and mothers. He found that children are interrupted by fathers more than mothers. Moreover, parents of both sexes interrupt girls more than they interrupt boys (Tanz, 1988). In terms of simultaneous speech, i.e. both speakers starting to speak at the same time, it is noted that parents usually continue talking rather than children. Interruptions and simultaneous speech can be interpreted as a way to control conversation. Fathers might try to control conversations more than mothers and both parents try to control daughters more than sons. This implies for girls are subject to more interruptions and that they have a less right of expressing themselves than the boys.’ (Coates, 1993).

Besides the influence of parents, siblings can substantially affect the communicative competence in their young brother or sister. Researchers found that children are motivated to participate in conversation held between their mother and older siblings. Therefore, they learn how to commence a conversation effectively, topic maintenance, and turns-taking in conversations. If the case is so, one would expect first-born children to differ from later born children in their communicative skills. Hoff-Ginsberg (1998) investigated this in one and a half and two and a half years old children. Although first-born children exhibit a more advanced lexical and grammatical development, the later-born children have more better skills in their interaction with adults (Gleason & Ratner, 2009).

Conclusion
Throughout this research, the following conclusions have been arrived to: Firstly, during the early years of childhood, girls exceed boys in language acquisition, starting from prelinguistic gestures, cooing and babbling to first word utterance, two-word formation, number of vocabulary, clarity of articulation and developing longer expressions. This superiority is not very significant, though, and it disappears in some respects at the age of four. Secondly, at school age, girls demonstrate a significant superiority in spelling, writing skills, and grammar. This superiority can also disappear at the age of adolescence.

As to the development of the communicative competence, females, from young age, can use the mitigated language as a result of the types of toys played with and the interaction with same sex peers. On the other hand,
boys use a more aggressive language depending due to the types of toys and the physical play with same-sex children.
Regarding their cognitive skills, studies concluded that the girls’ brain develops in certain aspects of language faster than the boys’. Meanwhile the boys’ brain is developed in other aspects of language faster than the girls’.
On the social level, family members, including father, mother, and siblings, play an essential role in enhancing the speed of language acquisition. A child who is more interacted with, acquires the language sooner than the one who does not receive the same rate of interaction. A child who has older brothers and sisters will talk better than first born child.

References


Internet Resources

Under the pink or blue blanket. www.oneworld-publications.com/pdfs/PinkBrainBluBrainchapter.pdf retrieved in 15/1/2012.

