## CHAPTER IV

## FINDING AND DISCUSSION

In this chapter, the writer presents the data analysis phonology production of the consonant words done by three two-year-old Indonesian children in a form of phonetic transcription. She then analyzes all words are arranged and classified based on the theory of phonological process by Ingram in Fletcher and Garman (1997: 223-231). Thus there will be three research findings based on substitution, assimilatory, and syllable structure process. These processes are explained in a table to help the writer analyzes easily.

### 4.1 Research Findings

The data presentation and the analysis of the process which occurred in the consonant words production of three children are shown below with using of slashes / / around phonetic symbols indicate that everything between them is a phonetic transcription.

### 4.1.1. Substitution Process

The process of substitution in Ingram's theory is divided into five sub processes that are stopping, fronting, gliding, vowel neutralization, and vocalization but this research only shows three sub processes that occur to three two-year-old children's consonant words production. So that the sub processes are stopping, fronting, and gliding.

Table 4.1. Table of Substitution Process-Stopping

| Actual Word <br> (Subject Words) | Intended <br> Word | English <br> Translation | Explanation |
| :--- | :--- | :--- | :--- |
| The second subject | /tivi/ | television | /p/ sound substitutes /v/ sound |
| /tipi/ | /Fifi/ | One's name | /p/ sound substitutes /f/ sound |
| /pi:pi/ | /mas/ | brother | It/ sound substitutes /s/ sound |
| /mat/ | /Faiz/ | One's name | /p/ sound substitutes /f/ sound <br> /t/ sound substitutes /z/ sound |
| /pait/ | /sendo?/ | spoon | /d/ sound substitutes /s/ sound |
| /dendo?/ |  |  |  |

Stopping is the process of substitution of fricatives /f/, /v/, /s/, /z/, //J, /x/, $/ \mathrm{h} /$ or affricatives sounds $/ \mathrm{t} \mathrm{f} /$, /d3/ are substituted by a stop consonant $/ \mathrm{p} /$, $/ \mathrm{t} /, / \mathrm{k} /$, $/ \mathrm{b} /$, /d/, /g/. In analysis, the writer only finds stopping processes which is occurred to a child of three children in producing consonant word, she is the second subject (see table 4.1). There are the substitutions of fricative sound $/ \mathrm{v} /$ into $/ \mathrm{p} /$ which occur in the word /tivi/ and when she pronounces her writer's name, 'Fifi', the subject replaces /f/ with / $\mathrm{p} /$.

The other is the substitution $/ \mathrm{s} /$ into $/ \mathrm{t} /$ which occurred in the pronunciation of the word /mas/. Then, the process which occurred is the replacement of /f/ with $/ \mathrm{p} /$ and $/ \mathrm{z} /$ with $/ \mathrm{t} /$ in the word /faiz/. The last process is the word $/$ sendo $\mathrm{P} /$ is pronounced by /dendo?/. The second subject is difficult to bring her lower lip and upper front teeth and she cannot get the air stream moves over a comparatively long surface but she tends to articulate by stopping the flow of air with the two
lips pressed together. Another process of substitution can be shown by the table below:

Table 4.2. Substitution Process-Fronting

| Actual Word (Subject Words) | Intended Word | English Translation | Explanation |
| :---: | :---: | :---: | :---: |
| The first subject |  |  |  |
| /b^dat/ /tu:tfin/ | /bıdak/ <br> /ku:tfin/ | rhinoceros <br> cat | velar /k/replaced by /t/ |
| /unu:/ | /ugu/ | purple | velar / $\mathrm{n} /$ replaced by $/ \mathrm{n} /$ |
| /doi:j $/$ / | /gorila/ | gorilla | velar /g/ replaced by /d/ |


| Actual Word <br> (Subject Words) | Intended <br> Word | English <br> Translation | Explanation |
| :--- | :--- | :--- | :--- |
| The second <br> subject | kuniy/ | yellow | velar $/ \mathrm{y} /$ replaced by $/ \mathrm{n} /$ |
| /kunin/ |  |  |  |


| Actual Word <br> (Subject Words) | Intended <br> Word | English <br> Translation | Explanation |
| :--- | :--- | :--- | :--- |
| The third subject |  |  |  |
| /tolan/ | /koran/ | newspaper |  |
| /tula/ | /kura/ | turtle | velar /k/ replaced by /t/ |
| /tue/ | /kue/ | cake |  |
| /stu/ | /nku/ | I |  |

Fronting is the process shown above, it is the substitution of velar $/ \mathrm{k} /, / \mathrm{g} /$, and /n/ consonants or palatal /t/f, /dz/, /j/ with alveolar /t/, /d/, /s/, /z/, /n/, /r/ and /l/. The writer found nine processes that occur to all of subjects' word productions. The substitution processes are $/ \mathrm{k} /$ sound replaced by $/ \mathrm{t} /$ sound. They are occured to the first subject's words /bıdak/ in final position, and /ku:t $f \mathrm{in} /$ in
initial position that she pronounces /bлdat/ and/tu:tjig/. Next is the substitution of $/ \mathrm{y} /$ sound with alveolar one $/ \mathrm{n} /$ in the word $/ \mathrm{uyu} /$ that is pronounced as /unu/. The last is the process where alveolar /d/ sound substitutes $/ \mathrm{g} /$ and she pronounces /gorila/ to become /doi:j^/.

For the second subject, the writer finds that she replaces alveolar $/ \mathrm{n} /$ into velar $/ \mathfrak{y} /$ like sound $/ \mathrm{kunin} /$ is produced by sound /kunin/. Meanwhile, the third subject substitutes velar /k/ with alveolar /t/. She pronounces /koran/, /kura/, /kue/ which is in initial position become /tolan/, /tula/,/tue/ and / $\wedge \mathrm{ku} /$ in medial position becomes / $\mathrm{Atu} /$.

It shows that the subjects cannot produce the sound $/ \mathrm{k} /, / \mathrm{m} /, / \mathrm{g} /$ and replace into $/ \mathrm{t} /, / \mathrm{n} /, / \mathrm{d} /$. They put their tip tongue into the alveolar ridge before the air from the lung comes out. This process is articulated by subjects who have a difference of position in their speech.

Table 4.3. Substitution Process-Gliding

| Actual Word <br> (Subject Words) | Intended <br> Word | English <br> Translation | Explanation |
| :--- | :--- | :--- | :--- |
| The first subject |  |  |  |
| /tcjus/ | trrus/ | continue |  |
| /bojay/ | bəruay/ | bear | sound /j/ is replacing liquid /r/ |
| /u:juy/ | bu:ruy/ | bird |  |
| /ojay/ | /koran/ | newspaper |  |


| /ejoy/ <br> /doi:ja/ | /talur/ <br> /gorila/ | egg <br> gorilla | sound /j/ is replacing liquid /l// |
| :--- | :--- | :--- | :--- |
| /uwi:y/ | /guli:y/ | pillow <br> /u:wan/ | snake |


| Actual Word <br> (Subject Words) | Intended <br> Word | English <br> Translation | Explanation |
| :--- | :--- | :--- | :--- |
| The second subject |  |  |  |
| /koje?/ <br> /bu:juy/ | kore?/ <br> /buruy/ | match <br> bird | sound /j/ is replacing liquid /r/ |

Gliding is the substitution process when $/ \mathrm{r} / \mathrm{l} / \mathrm{w} /$, or $/ \mathrm{l} /$ are replaced into $/ \mathrm{w} /$ or $/ \mathrm{j} /$. The table above are the gliding of the first and second subjects. They replace liquid /r/ into sound /j/ for the words /tərus/, /bəruay/, /kore?/, and /bu:ruy/ are pronounced by /tcjus/, /bəjay/, /koje2/, and /bu:juy/. Then, the other words of the first subject are /gorila/ and /təlur/ changed into /doi:ja/ and /ejon/. She replaces the liquid /l/ into /j/ while /guli:y/ and /u:lar/ words which she pronounces it become /uwi:y/ and /u:way/. The sound /w/ is replacing liquid /l/.

After classifying the data into substitution process, the writer finds other words which are not suitable with the theory of phonological process. However, the writer is going to show and mention the other substitution processes that are happened to three two-year-old Indonesian children. They are:

### 4.1.1.1 The Substitution of Alveolar

The children change the alveolar consonant $/ \mathrm{s} /$ into palatal consonant $/ \mathrm{t} \mathrm{f} /$. These processes are opposite of fronting process in which the palatal consonants are substituted with alveolar consonants. The change of the sound $/ \mathrm{s} /$ into sound /t $\mathrm{f} /$ that is produced by the second and third subjects below (see table 4.4) shows that they articulate the same substitution processes of alveolar. It can be seen that
they cannot produce the sound $/ \mathrm{s} /$ and change to sound $/ \mathrm{t} / /$ because their back tongue is brought to the hard palate then released it away immediately. They are so difficult to pronounce the alveolar consonant which is occurred in final position while she is easy to product /s/ clearly without changing to palatal consonant $/ \mathrm{t} /$ /.

Table 4.4. Substitution Process of Alveolar

| Actual Word (Subject Words) | Intended Word | English Translation |
| :---: | :---: | :---: |
| The second subject |  |  |
| /batfal/ | /besar/ | big |
| /itjap/ | /nisa?/ | Nisa' |
| /pıtfal/ | /pısar/ | market |
| /tfutju/ | /susu/ | milk |
| /patfay/ | /pasay/ | install |
| /petfawat/ | /pasawat/ | plane |
| /kult $\mathrm{j}_{\mathrm{i}} /$ | /kursi/ | chair |
| /tfama/ | /sama/ | same |
| /tJədikit/ | /sədikit/ | little |
| /tfapi/ | /sapi/ | cow |
| /tJəmot/ | /səmut/ | ant |


| Actual Word (Subject Words) | Intended Word | English <br> Translation | Explanation |
| :---: | :---: | :---: | :---: |
| The third subject |  |  |  |
| /matfa?/ <br> /potfawat/ <br> /tJendo?/ <br> /pitfay/ <br> /tfepeda/ <br> /pıtfal/ <br> /metfin/ <br> /tfalapan/ <br> /tJakit/ <br> /tfini/ | /masar/ <br> /posawat/ <br> /sendo?/ <br> /pisay/ <br> /sepeda/ <br> /pısar/ <br> /mesin/ <br> /sarapan/ <br> /sa:kit/ <br> /sini/ | to cook <br> plane <br> spoon <br> banana <br> bicycle <br> market <br> machine <br> breakfast <br> sick <br> here | velar /t $/$ / is replacing alveolar /s/ |

### 4.1.1.2 The Substitution of Stop

This substitution is opposite of stopping process that is based on the theory. It is a process when the subject changes the stop consonants /p/, /b/, /t/, /d/, $/ \mathrm{k} /$, or $/ \mathrm{g} /$ with fricative $/ \mathrm{f} /$ / /v/, /s/, /z/, /h/ or affricative $/ \mathrm{t} / /$, /d $3 /$. It is done by three children.

Table 4.5. Substitution Process of Stop

| Actual Word <br> (Subject Words) | Intended <br> Word | English <br> Translation | Explanation |
| :--- | :--- | :--- | :--- |
| The first subject | /gigi/ | tooth | Stop consonant $/ \mathrm{g} /$ is substituted <br> by affricative $/ \mathrm{d} 3 /$ |
| $/$ dzidzi/ |  |  |  |


| Actual Word <br> (Subject Words) | Intended <br> Word | English <br> Translation | Explanation |
| :--- | :--- | :--- | :--- |
| The third subject |  | təŋkora?/ | skull | | Stop consonant $/ \mathrm{k} /$ is substituted |
| :--- |
| by affricative $/ \mathrm{t} \mathrm{f} /$ |

The intended word of stop consonant $/ \mathrm{g} /$ into $/ \mathrm{d} 3 /$ and $/ \mathrm{k} /$ into $/ \mathrm{t} / \mathrm{f} /$ is only found two words to the first and second subjects who bring their back of tongue to stop the air stream at the velum and let it flow through the side of their tongue so that they change the position between the back tongue with their hard palate is touched each other.

### 4.1.1.3 The Substitution of Retroflex

The subjects pronounce the retroflex /r/ in which replaced into the lateral consonant /l/. It is often acquired in initial, medial or final positions. They produce the words below:

Table 4.6. Substitution Process of Retroflex

| Actual Word (the second subject) | Intended Word | English | Actual Word (the second subject) | Intended Word | English |
| :---: | :---: | :---: | :---: | :---: | :---: |
| /motol/ <br> /balu/ <br> /dzolapa/ <br> /dambal/ <br> /pstfal/ <br> /dっktəl/ <br> /kəbakalan/ <br> /lımbot/ <br> /mondol/ <br> /bolajal/ <br> /ol^laga | /motor/ <br> /baru/ <br> /dzərapa/ <br> /gambar/ <br> /pısar/ <br> /dっktər/ <br> /kəbakaran/ <br> /rımbut/ <br> /mundur/ <br> /bəlajar/ <br> /olıhraga/ | $\begin{array}{\|l\|} \hline \text { motor } \\ \text { new } \\ \text { giraffe } \\ \text { picture } \\ \text { market } \\ \text { doctor } \\ \text { fire } \\ \text { hair } \\ \text { go back } \\ \text { to study } \\ \text { sport } \\ \hline \end{array}$ | /betfal/ <br> /kolata/ <br> /u:1nl/ <br> /pelas/ <br> /keltas/ <br> /bilu/ <br> /kult j / <br> /tidul/ <br> /pintal/ <br> /bubul/ | /bəsar/ /kəreta/ /ular/ /paras/ /kartas/ /biru/ /kursi/ /tidur/ /pintar/ /bubur/ | big train <br> snake to press paper blue chair to sleep clever porridge |


| Actual Word (the third subject) | Intended Word | English | Actual Word (the third subject) | Intended Word | English |
| :---: | :---: | :---: | :---: | :---: | :---: |
| /tslompet/ /nelaka/ /kelbu/ /solga/ /telbay/ /kelopo?/ /tfalapan/ /palahu/ | /terompet/ /neraka/ /kerbau/ /surga/ /terbay/ /kerupuk/ /sarapan/ /perahu/ | market <br> doctor <br> buffalo <br> heaven <br> to fly <br> crackers <br> breakfast <br> canoe | /patfal/ <br> /doktal/ <br> /lame/ <br> /tfelita/ <br> /batfal/ <br> /lali/ <br> /mala/ <br> /bulun/ | /pasar/ <br> /doktər/ <br> /ramai/ <br> /cerita/ <br> /basar/ <br> /lari/ <br> /marah/ <br> /burun/ | market <br> doctor <br> noisy <br> story <br> big <br> to run <br> angry <br> bird |

There are many examples above of retroflex consonant which is articulated by the second and third subjects such as sound /pısar/, /doktər/, /bətfar/
change to sound /pstfal/, /doktəl/, /bot $\int \mathrm{al} /$ in final position, /rımbut/, /ramai/ to /lımbot/, /lame/ in initial position, and sound /buluy/ to /buruy/ in medial position. They do not produce to vibrate the front part of tongue to produce the retroflex consonant $/ \mathrm{r} /$ at that time. Their tongue tip is not curled backward in the mouth yet.

### 4.1.2. Assimilatory Process

Assimilatory process is consists of three sub processes: voicing, consonant harmony that are velar assimilation, labial assimilation, denasalization, and also progressive vowel assimilation but the writer only wants to find the subjects' voicing and consonant harmony which are related by her analysis.

The writer's subjects don't make a consonant voiced when it precedes a vowel or devoiced at the end of the syllable such as voiceless consonant $/ \mathrm{p} /$ is assimilated /b/ or /t/. Thus, velar assimilation is alveolar consonants to assimilate to a neighbouring velar consonant.

Table 4.7. Assimilatory Process-Consonant Harmony-Velar Assimilation

| Actual Word (Subject Words) | Intended Word | English Translation | Explanation |
| :---: | :---: | :---: | :---: |
| The first subject |  |  |  |
| /apəy/ /botoy/ | /apol/ /botol/ | apple <br> bottle | velar / $\mathrm{y} /$ is replacing alveolar /l/ |
| /alay/ /2mpoy/ /ojay/ /utay/ | /dzalan/ <br> /telepon/ <br> /koran/ <br> /hutan/ | street <br> phone <br> newspaper <br> jungle | velar $/ \mathfrak{y} /$ is replacing alveolar $/ \mathrm{n} /$ |
| /moton/ /uwan/ | /motor/ /u:lar/ | motor <br> snake | velar $/ \mathrm{y} /$ is replacing alveolar /r/ |

The table above explains that apical consonants $/ \mathrm{l} / \mathrm{l} / \mathrm{n} / . / \mathrm{r} /$ assimilates into neighboring velar consonant $/ \mathfrak{y} /$.The first subject often pronounces the velar sounds $/ \mathrm{l} /$ to assimilate sound $/ \mathrm{y} /$. However, she does not only articulate /apəy/ and /botoy/ of the words /apal/ and /botol/ but also has the assimilation happened like the other examples /dzalan/, /telepon/, /koran/, /hutan/, /motor/, /u:lar/ are the assimilation of apical consonant $/ \mathrm{n} /$ is influenced by its neighboring velar consonant /y/ with her words that is produced /alay///əmpon/, /ojay/, /utay/, /moton/, and /uway/.

In labial assimilation process that is apical/alveolar consonant tends to assimilate to a neighbouring labial consonant, the writer cannot find to her subjects' consonant words. Thus, and labial assimilation is alveolar consonants tend to assimilate to a neighbouring labial consonant. Yet, the consonant harmony-denasalization that is a process when a nasal consonant denasalizes in the neighborhood of nonnasal consonant is found five words of the first subject. It can be seen in the table below.

Table 4.8. Assimilatory Process-Consonant Harmony- Denasalization

| Actual Word (Subject Words) | Intended Word | English <br> Translation | Explanation |
| :---: | :---: | :---: | :---: |
| The first subject |  |  |  |
| /padza/ | /pandzan/ | long | nasal $/ \mathrm{n} / \mathrm{and} / \mathrm{y} /$ is denasalized |
| /ad3i:y/ | /andzi:y/ | dog | nasal /n/ is denasalized |
| /^plop/ | /smplop/ | envelope | nasal $/ \mathrm{m} /$ is denasalized |
| /sıpa/ | /sımpa/ | rubbish |  |
| /nbut/ | /rambut/ | hair |  |

Nasal $/ \mathrm{n} /$ and $/ \mathrm{y} /$ are produced by lowering the velum and letting the air escape both through the mouth and nasal cavity. The first subject denasalizes the words /pandzay/ and /andzi:y/ by dropping the nasal /n/ in the middle position while others subject can produce nasal $/ \mathrm{n} /$ or $/ \mathrm{y} /$ in the middle position while the words / $\wedge$ plop/ and /sıpa/ are denasalized by dropping the nasal $/ \mathrm{m} /$. Her lower and upper lips cannot touch and press each other which in middle position for the consonant $/ \mathrm{m} /$ neighboring with the bilabial consonant do simultaneously.

### 4.1.3. Syllable Structure Process

Syllable structure process is sound changes that cause sounds or syllables to be reduced in number, deleted, or repeated while it has not been explicitly mentioned, it is clear that the notion of syllable is quite important in understanding all the processes discussed so far. In this process is divided to be four sub-processes, they are cluster reduction, deletion of final consonant, deletion of unstressed syllables, and reduplication.

Cluster reduction is reduced to a single consonant or is the deletion of one or more consonants from a two or three consonant cluster. The first subject tends to delete a one of consonant cluster that is initial position when she pronounces it. Below is example of cluster reduction that is articulated by the first subject.

Table 4.9. Syllable Structure Process-Cluster Reduction

| Actual Word <br> (the first subject) | Intended <br> Word | English <br> Translation | Explanation |
| :--- | :--- | :--- | :--- |
| /top/ | /stop/ | stop | /st/reduced into /t// |


| /wæba/ | /zebra/ | zebra | /br/ reduced into /r/ |
| :--- | :--- | :--- | :--- |
| /tfo:lat/ | /tfoklat/ | chocholate | /kl/ reduced into /l/ |

The second process of syllable structure is deletion of final consonant. It is only happened to the third subject who deletes some of certain final consonant.

Table 4.10. Syllable Structure Process-Deletion of Final Consonant

| Actual Word <br> (Subject Words) | Intended <br> Word | English <br> Translation | Explanation |
| :--- | :--- | :--- | :--- |
| The third subject | /balon/ | ball | deletion of final consonant /n/ |
| /balऽ/ | /monjet/ | monkey | deletion of final consonant /t/ |
| /monje/ | /psnas/ | hot |  |
| /nu:lis/ | write | deletion of final consonant/s/ |  |
| /psna/ <br> /nole/ |  |  |  |

From the data above that the writer analyzes, deletion of final consonant occurred only four words in the pronunciation of a subject. When the third subject says /balo/, /monje/, /pına/, and /nole/ instead of /balon/, /monjet/, /pınas/, /nu:lis/, the subject deletes liquid consonant /n/, /t/, /s/. She cannot move her tongue yet to produce alveolar consonant in which final position.

The other syllable structure process is deletion of unstressed syllables is sometimes occured process in word pronunciation of the subjects who are analyzed. The writer finds many words that the first subject deletes the unstressed syllables and she finds a word to the second subject The examples of the deletion of unstressed syllables done by the subject are shown in the table below.

Table 4.11. Syllable Structure Process-Deletion of Unstressed Syllables

| $\begin{aligned} & \text { Actual Word } \\ & \text { (the } 1^{\text {st }} \\ & \text { subject) } \\ & \hline \end{aligned}$ | Intended Word | English | Actual Word | Intended Word | English |
| :---: | :---: | :---: | :---: | :---: | :---: |
| /puwu/ <br> /^pan/ <br> /sæŋka/ <br> /abon/ | /səpuluh/ <br> /dəlapan/ <br> /sæmıŋka/ <br> /kəcebon/ | ten <br> eight <br> watermelon tadpole | /əmpon /ojen/ /owa?/ | /telepon/ /oranje/ /ketJowa?/ | phone orange cockroach |


| Actual Word <br> $($ Subject Words $)$ | Intended <br> Word | English <br> Translation | Explanation |
| :---: | :--- | :--- | :--- |
| The $2^{\text {nd }}$ subject | /boneka/ | doll | /on/ syllable is deleted |
| /bæka/ | loll |  |  |

The last process of syllable structure is reduplication. It is in a multisyllabic word; the initial CV syllable is repeated. Actually, the writer just finds two words articulated by first and third subjects. They change the consonant words with repeating them.

Table 4.12. Syllable Structure Process-Deletion of Reduplication

| Actual Word ( $1^{\text {st }}$ Subject) | Intended Word | English | Actual Word ( $3^{\text {rd }}$ Subject) | Intended Word | English |
| :---: | :---: | :---: | :---: | :---: | :---: |
| /pu:pu/ | /ku:pu/ | butterfly | /dzadza/ | /gadza/ | elephant |

After analyzing the syllable structure process, the writer finds another process that a consonant word is deleted in the initial sound. In the tables below, the writer shows the syllable structure process which is deletion of initial consonant.

Table 4.13. Syllable Structure Process-Deletion of Initial Consonant

| Actual Word | Intended Word | English | Actual Word | Intended Word | English |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1{ }^{\text {st }}$ subject |  |  | $1^{\text {st }}$ subject |  |  |
| /abu?/ <br> /onduy/ <br> /opi/ <br> /ati/ <br> /u:pin/ /umbay/ <br> /skit/ <br> /utay/ <br> /inja?/ | /ssbup/ <br> /mənduy/ <br> /topi/ <br> /roti/ <br> /ku:piy/ <br> /kumbay/ <br> /sskit/ <br> /hutan/ <br> /minja?/ | belt <br> cloud <br> cap <br> bread <br> ear <br> bettle <br> sick <br> jungle <br> oil | /ita/ /o:njet/ /stu/ /u:wa/ /u:nin/ /adza/ /sta/ /edza/ / $n$ ntal/ | /pita/ <br> /mo:njet/ <br> /sstu/ <br> /du:wa/ <br> /ku:niy/ <br> /gadza/ <br> /msta/ <br> /kedza/ <br> /bıntal/ | ribbon monkey <br> one <br> two <br> yellow <br> elephant <br> eye <br> work <br> pillow |


| Actual Word | Intended Word | English | Explanation |
| :---: | :---: | :---: | :---: |
| $2^{\text {nd }}$ subject |  |  |  |
| /oti/ <br> /^jay-ajay/ <br> /u:wa/ | /roti/ <br> /1ıjay-lajay/ <br> /du:wa/ | bread kite two | the initial consonants of $/ \mathrm{r} /, / 1 /, / \mathrm{d} /$ syllables are omitted |

The writer explains that the first subject's words above are the initial consonants of /b/, /s/, /m/, /t/, /r/, /k/,/p/,/m/, /d/, /g/, and /h/ syllables which are omitted by the first subject whereas the second subject who pronounces the words tends seldom to omit her initial syllable and only deletes the initial /r/, /l/, /d/ syllable.

### 4.2 Discussion

In this sub chapter, the writer wants to discuss about the findings she found after analyzing her subjects' phonological processes. The result of the analysis shows that there are phonological processes which are occurred to three two-year-old children in acquiring the Indonesian consonant words based on

Ingram's theory. However, the writer also includes her findings which are not based on this theory in children phonological acquisition.

### 4.2.1. Substitution Processes

From analyzing and finding in the previous chapter, the writer has found the process of substitution done by all subjects. The first process is stopping, the writer finds five processes of stopping which are only occurred by the second subject. The substitution of /f/, /v/, /s/, and /z/. The fricatives sounds are changed into stop sounds. These processes are /f/ or /v/ sound is replaced by /p/ instead of /tivi/, /fifi/, and /s/ or /z/ sound is replaced by /t/ or /d/ sound instead of /mas/, /sendo?/, /faiz/ .

Thus, all subjects pronounce the substitution process of fronting. Their velar consonants $/ \mathrm{k} /, / \mathrm{g} /, / \mathrm{y} /$ commonly is substituted by $/ \mathrm{t} /$, $/ \mathrm{n} /$, /d/. Meanwhile, the substitution process of gliding is just found to the first and second subjects. They replace liquid consonant $/ \mathrm{r} /$, or $/ \mathrm{l} /$ with sound $/ \mathrm{j} /$ or $/ \mathrm{w} /$ such as when they pronounce /bu:juy/, /ejoy/, and /u:way/ instead of /bu:ruy/, /təlur/, and /u:lar/.

Beside those substitution processes which reflect Ingram's theory, the writer also has find three substitution processes which is not based on Ingram's theory, the first and the third subjects substitute affricative /d3/ with stop consonant $/ \mathrm{g} /$ such as in the word /dzidzi/ instead of /gigi/, it is called substitution process of stop. Meanwhile, the second and the third subject replace alveolar /s/ with velar /tf/ as like words /bətfal/, /tfutfu/ or /pstfal/ instead of /bəsar/, /susu/, or /pssar/, it is called substitution process of alveolar and the substitution process of
retroflex or lateralization is also occurred by them that they pronounce the retroflex $/ \mathrm{r} /$ in which replaced into the lateral consonant $/ \mathrm{l} /$. It is often acquired in initial, medial or final positions. Both of them say /lımbot/, /telb $\wedge$ y/ or /bəlıjal/ instead of /rımbut/, /terb^y/ or /bəlıjar/.

### 4.2.2. Assimilatory Processes

In assimilatory process, the writer just finds two processes which reflect Ingram's phonological process theory. Those processes are consonant harmonyvelar assimilation and denasalization. Yet, in assimilation process of voicing which is voiced consonant at the end of syllable tend to be devoiced because of the influence of its neighbouring sound such as a voiced consonant /b/ is changed into a voiceless consonant / p / since it follows the vowel and its position at the end of syllable is not found while labial assimilation process which is alveolar consonant tends to assimilate to a neighbouring labial consonant, the writer cannot find too to her all subjects' consonant words.

As the explanation of the theory, consonant harmony of velar assimilation is alveolar consonant to assimilate to a neighbouring velar consonant. The writer finds to the first subject's words that apical consonants $/ 1 /$, /n/. /r/ assimilates into neighboring velar consonant $/ \mathrm{y} /$ such as /apəy/ and /botoy/ instead of /apəl/, /botol/. She pronounces the velar sounds /l/ to assimilate sound $/ \mathrm{y} /$ in final position. Meanwhile, the assimilation process of denasalization is only acquired by the first subject's words. As a result, she denasalizes her words and pronounces them without any nasal consonants because she seems hard to produce a
consonant directly followed by other consonant in the next syllable while the others subjects are not so difficult to articulate them.

### 4.2.3. Syllable Structure Processes

The writer finds that all of the sub processes of syllable structure are found in the some of subjects' word productions. Those sub processes involve cluster reduction, deletion of final consonant, deletion of unstressed syllable, and reduplication.

In the cluster reduction, the writer finds that the first subject is still not able to say a cluster consonant which occurs in a word. Thus, the subject tends to eliminate one consonant in a cluster and makes it into a single consonant to overcome it. For instance, in the word /stop/, there is a consonant cluster of /st/ in which the subject gets difficulty to pronounce it altogether. So, she eliminates consonant /s/ and makes a single consonant $/ \mathrm{t} / \mathrm{in}$ that word. Then, she pronounces it as /top/ instead of /stop/. For the consonant that is eliminated, the writer finds a pattern that the first consonant in the consonants cluster tends to be reduced.

The second process is the deletion of final consonant occurred by the third subject who deletes some of certain final consonant. This process occurs in the words /monjet/, /p^nas/, /balon/. Those words are divided into two syllables; they are mon-jet, p $\wedge$-na, ba-lo. The last syllable in that word is /jet/, /nas/, /lon/ which patterns are CVC syllables. Then, those are simplified by the third subject by deleting the final consonant $/ \mathrm{t} /$, $/ \mathrm{s} /$, and $/ \mathrm{n} /$ in the last syllable. Therefore, it makes
the pronunciation of the word /monje/, /p $\wedge n a /, / b a l s /$ without producing the final consonant.

The next process of syllable structure is the deletion of unstressed syllable. This process occurs in the first subject's word production. She tends to delete unstressed syllables which occurs within a word and deletes the first syllable which is unstressed and pronounces it becomes /səpuluh/ instead of /puwu/. She is deleting the first unstressed syllable /so/. Then, the second subject also pronounces a word, /bæka/ instead of /boneka/. Therefore the writer assumes that the first syllables of a word tend to be eliminated.

The last process is reduplication that is a tendency for young children to simplify their word by repeating the syllable. It occurs in a multisyllabic word in which for children they still have a difficulty in pronouncing the word correctly. It can be seen in the pronunciation of a multisyllabic word /ku:pu-ku:pu/ or /gadza/. The first and second subjects tend to simplify it by taking just the last syllable and then repeat it becomes /pu:pu/ instead of /ku:pu/ and /dzadza/ instead of /gadza/. In the pattern of this process of reduplication, subjects do not articulate initial of a word, but the final syllable of it.

Beside those four processes based on to Ingram's theory, the writer also finds another process of syllable structure of deletion in initial sound. For the first process, there is a tendency to eliminate all consonants which occur at the beginning of a word. The writer finds that bilabial sounds $/ \mathrm{p} /, / \mathrm{b} /, / \mathrm{m} /$; alveolar $/ \mathrm{t} /$, $/ \mathrm{d} / / \mathrm{s} /$, /l/, /r/; velar /k/, /g/, and glottal /h/. Thus the first and second subjects' pronunciation becomes /oti/ and /u:wa/ instead of /roti/ and /du:wa/.

