

## CHAPTER 4

### DATA ANALYSIS

#### **The Validity and Reliability of the Items in the questionnaire**

All the items were checked to know whether they are valid or not by using SPSS 19.

##### **Validity**

From that analysis, the writer got the number of Corrected Item-Total Correlation or validity counting. This validity test is used to measure whether the question is valid or not. The statement was considered as valid when the value of significance is higher than the value in the R table. The formula used for the validity check is  $df = n - 2$ . N is the total participant of the piloting. The writer used 40 participants meaning that the df is 38 (40 - 2) with the significance level of 5% and the  $r\ table = 0.02638$ . The validity of a statement can be known if  $r\ counting > r\ table$  means the statement is valid and if  $r\ counting < r\ table$  means the statement is not valid. In checking the reliability of the data, the writer used Cronbach's Alpha. The writer tested the validity of each question based on the result of the respondents' answer using SPSS 24 program to know the validity of each question. From that analysis, the writer got the number of Corrected Item-Total Correlation or reliability counting.

For all the items, the writer found that all items are valid (see appendix 1). For all the statements, the corrected item-total correlation is above 0.2638, meaning that all items are valid and can be used to collect the data.

**Table 4.1 Validity**

No	Statement	R <sub>value</sub>	R <sub>table</sub>	Remark
1	English vocabulary and the picture on the t- shirt can help parents understand the meaning of the vocabulary below the picture	0.549	0.2638	VALID
2	English vocabulary and the picture on t-shirts can be used as vocabulary teaching materials for children.	0.493	0.2638	VALID
3	I tell my child the meaning of the English vocabulary below the picture on the t-shirt.	0.539	0.2638	VALID
4	Pictures on t-shirts can help children to memorize English vocabulary about the picture for a long time.	0.893	0.2638	VALID
5	The picture on the t-shirts serves to explain the vocabulary below the picture.	0.369	0.2638	VALID
6	T-shirts with English words and the pictures have the potential to be used as a medium for learning English.	0.378	0.2638	VALID
7	Pictures of transportation are more attractive than fruits and vegetables so that children remember more about the names of transportation.	0.384	0.2638	VALID

8	Children prefer pictures of vegetables than transportation and fruit so children remember the names of vegetables better.	0.617	0.2638	VALID
9	Children prefer pictures of fruits than vegetables and transportation so children remember the names of vegetables better.	0.338	0.2638	VALID
10	Parents understand the texts when they see the pictures.	0.710	0.2638	VALID
11	The English words are useful to the user.	0.714	0.2638	VALID
12	The design of the pictures on t-shirts help parents decide to buy t-shirts.	0.440	0.2638	VALID
13	T-shirts with English vocabulary help children remember words for a long time	0.590	0.2638	VALID

**Reliability**

To know the reliability of the questionnaire, the writer analyzed the statements by using cronbach's alpha. The questionnaire is reliable. The result of the value was more than.0.9 as it can be seen in figure I Cronbach Alpha Reliability Level. The Reliability Statistics table shows Cronbach's alpha coefficient is 0.731.

Cronbach's alpha	Internal consistency
$\alpha \geq 0.9$	Excellent
$0.9 > \alpha \geq 0.8$	Good
$0.8 > \alpha \geq 0.7$	Acceptable
$0.7 > \alpha \geq 0.6$	Questionable
$0.6 > \alpha \geq 0.5$	Poor
$0.5 > \alpha$	Unacceptable

Figure 1: Cronbach Alpha Reliability Level

Reliability Statistics	
Cronbach's Alpha	N of Items
.731	13

The internal consistency is acceptable so that the questionnaire is reliable. Therefore, all the items in the questionnaire are used and analyzed to find the answer to the problem formulation

#### Parents' Belief in the Use of Text and Picture on T-Shirts

A list of questionnaire of q3 items have been created and distributed to 40 parents whose children study in Sang Timur kindergarten School. The writer also interviewed 2 parents to get deeper data.

The following is the descriptive statistics that have been gotten by applying SPSS 24.

## Correlations

**Table 4.2. Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
VAR00001	40	3.00	5.00	4.3500	.62224
VAR00002	40	3.00	5.00	4.5250	.59861
VAR00003	40	2.00	5.00	4.2821	.75911
VAR00004	40	3.00	5.00	4.6250	.54006
VAR00005	40	4.00	5.00	4.4750	.50574
VAR00006	40	3.00	5.00	4.4750	.64001
VAR00007	40	2.00	5.00	4.2750	.81610
VAR00008	40	1.00	4.00	2.6500	.86380
VAR00009	40	2.00	5.00	3.1000	.87119
VAR00010	40	1.00	5.00	3.2250	1.14326
VAR00011	40	2.00	5.00	3.9500	.81492
VAR00012	40	2.00	5.00	4.2000	.68687
VAR00013	40	3.00	5.00	4.3750	.58562
Valid N (listwise)	40				

The table above shows that the mean of all items but variable 8 is higher than 3. This means that all the items, but 8 are perceived positively by the participants.

### **Variable 8 :**

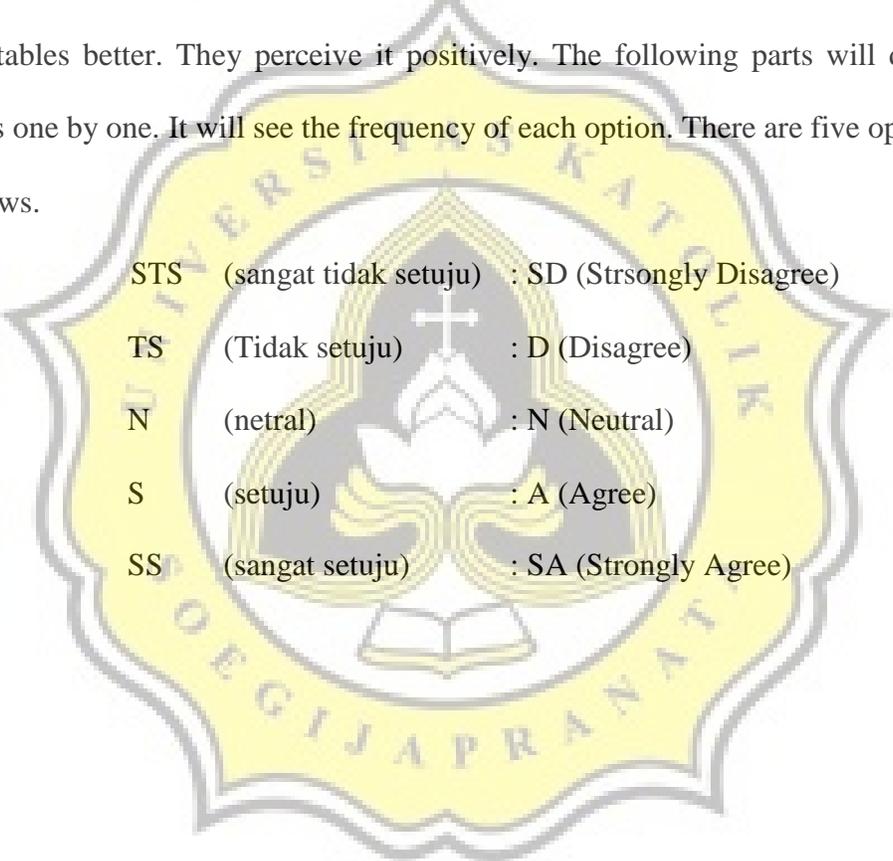
Children prefer pictures of vegetables than transportation and fruit so children remember the names of vegetables better.

This can be interpreted that parents perceive this statement negatively. They may think that the children may like to see and learn the picture of vegetables. It can be understood that they think that children prefer to see pictures and learn the vocabulary of transportation and fruit.

This fact can also be correlated to the next item, variable 9.

### Variable 9

Children prefer pictures of fruits than vegetables and transportation so children remember the names of vegetables better. The mean of item 9 is 3.1. This means that the parents as the respondents believe that their children prefer pictures of fruit than vegetable and transportation and it can make the children remember the names of vegetables better. They perceive it positively. The following parts will discuss the items one by one. It will see the frequency of each option. There are five options as follows.



STS	(sangat tidak setuju)	: SD (Strongly Disagree)	(score 1)
TS	(Tidak setuju)	: D (Disagree)	(score 2)
N	(netral)	: N (Neutral)	(score 3)
S	(setuju)	: A (Agree)	(score 4)
SS	(sangat setuju)	: SA (Strongly Agree)	(score 5)

**Table 4.3**

English vocabulary and the picture on the t- shirt can help parents understand the meaning of the vocabulary below the picture.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 3.00	3	7.5	7.5	7.5
4.00	20	50.0	50.0	57.5
5.00	17	42.5	42.5	100.0
Total	40	100.0	100.0	

The highest score is 5 showing that the participants agree with the statement (English vocabulary and the picture on the t- shirt can help parents understand the meaning of the vocabulary below picture). There are no participants who chose 1 or two, meaning there are no participants disagree with the statement.

Half of the respondents (50%) agree with the statement and 42% strongly agree. Thus, it can be of the participants (92.5%) agree that “English vocabulary and the picture on the t- shirt can help the meaning of the vocabulary below the picture”.

Table 4.4 English vocabulary and the picture on t-shirts can be used as vocabulary teaching materials for children.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3.00	2	5.0	5.0
	4.00	15	37.5	42.5
	5.00	23	57.5	100.0
	Total	40	100.0	100.0

The lowest score is 2. This means that there are two parents who chose ‘neutral’ on the first statement (English vocabulary and the picture on t-shirts can be used as vocabulary teaching material for children). The highest score is 5, meaning that there are participants who consider the statement positive. However, other participants agree with the statement as more than half of the respondents (57.5%) strongly agree and 37.5 % agree with the statement. Thus, it can be said that the participants perceive it positively .

The majority of respondents (half (50%) agree with the statement and 40 % strongly agree with the statement. There are 5 % of the respondents choosing ‘disagree’, and ‘neutral’. Thus, it can be concluded that parents agree that if they tell their children the meaning of the English vocabulary below the picture on the t-shirt.

Table 4.6 Pictures on t-shirts can help children to memorize English vocabulary about the picture for a long time.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3.00	1	2.5	2.5
	4.00	13	32.5	35.0
	5.00	26	65.0	100.0

Total	40	100.0	100.0
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The highest score is 5 showing that the participants agree with the statement (*Pictures on t-shirts can help children to memorize English vocabulary about the picture for a long time.*). There are no participants who chose 1 or two, meaning there are no participants who disagree with the statement.

More than half of the respondents (65%) strongly agree with the statement and 32.5% agree. Thus, it can be concluded that most of the participants (97.5%) agree that “Pictures on t-shirts can help children to memorize English vocabulary about the picture for a long time.”

Table 4.7. The picture on the t-shirts serves to explain the vocabulary below the picture

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 4.00	21	52.5	52.5	52.5
5.00	19	47.5	47.5	100.0
Total	40	100.0	100.0	

There are no participants who chose 1, 2, or 3. This means that all the participants agree with the statement (The picture on the t-shirts serves to explain the vocabulary below the picture.). The highest score is 5 showing that there are participants who strongly agree with the statement.

The majority of respondents (half (52.5%) agree with the statement and 47.5 % strongly agree with the statement. Thus, it can be concluded that all parents (100%)

agree that the picture on the t-shirts serves to explain the vocabulary below the picture.

**Table 4.8 T-shirts with English words and the pictures have the potential to be used as a medium for learning English**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3.00	3	7.5	7.5	7.5
	4.00	15	37.5	37.5	45.0
	5.00	22	55.0	55.0	100.0
	Total	40	100.0	100.0	

The highest score is 5 showing that the participants agree with the statement (T-shirts with English words and the pictures have the potential to be used as a medium for learning English). There are no participants who chose 1 or 2, meaning there are no participants who disagree with the statement, but there are three who chose “neutral”

More than half of the respondents (55%) strongly agree with the statement and 37.5 % agree. Thus, it can be concluded that most of the participants (92.5%) agree that “T-shirts with English words and the pictures have the potential to be used as a medium for learning English”.

**Table 4.9 Transportation pictures are more attractive than fruits and vegetables so that children remember more about the names of transportation**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.00	2	5.0	5.0	5.0

	3.00	3	7.5	7.5	12.5
	4.00	17	42.5	42.5	55.0
	5.00	18	45.0	45.0	100.0
	Total	40	100.0	100.0	

The lowest score is 2. This means that there are 2 out of 40 participants who disagree with statement (*Transportation pictures are more attractive than fruits and vegetables so that children remember more about the names of transportation*). The highest score is 5 showing that there are participants who strongly agree with the statement.

Almost the same number of participants (42.5% and 45%) agree and strongly agree with the statement respectively. There are 2% of the respondents choosing ‘disagree’, and 7.5% ‘neutral’. Thus, it can be concluded that parents agree that according to the parents “*Transportation pictures are more attractive than fruits and vegetables so that children remember more about the names of transportation*”

**Table 4.10 Children prefer pictures of vegetables than transportation and fruit so children remember the names of vegetables better**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	3	7.5	7.5	7.5
	2.00	15	37.5	37.5	45.0
	3.00	15	37.5	37.5	82.5
	4.00	7	17.5	17.5	100.0
	Total	40	100.0	100.0	

The highest score is 4 showing that the participants agree with the statement (Children prefer pictures of vegetables than transportation and fruit so children remember the names of vegetables better) although there are no participants chose 'strongly agree'.

Almost half of the respondents (7.5% and 37.5%) strongly disagree and disagree with the statement. On the other hand the rest (37.5% and 17.5%) agree and strongly disagree respectively. Thus, it can be concluded that almost the same number of participants agree (55%) and disagree (45%) that “*Children prefer pictures of vegetables than transportation and fruit so children remember the names of vegetables better*”. It seems that the parents choose the option based on their preference on the topic of the English words, vegetable or transport and fruit.

Table 4.11 Children prefer pictures of fruits than vegetables and transportation so children remember the names of vegetables better.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.00	11	27.5	27.5	27.5
	3.00	16	40.0	40.0	67.5
	4.00	11	27.5	27.5	95.0
	5.00	2	5.0	5.0	100.0
	Total	40	100.0	100.0	

The highest score is 5 showing that the participants strongly agree with the statement (*Children prefer pictures of fruits than vegetables and transportation so children*

*remember the names of vegetables better*). There are no participants who chose 1, meaning there are no participants who strongly disagree with the statement.

More than half of the respondents (27.5% and 40%) Disagree and Neutral with the statement and 5% Strongly Agree. Thus, it can be concluded that most of the participants (32.5%) Agree that *“Children prefer pictures of fruits than vegetables and transportation so children remember the names of vegetables better”*. This relates to the previous number where more parents agree that *Children prefer pictures of vegetables than transportation and fruit so children remember the names of vegetables better*.

4.12 English vocabulary on t-shirts makes the price of t-shirts more expensive

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	2	5.0	5.0	5.0
	2.00	10	25.0	25.0	30.0
	3.00	11	27.5	27.5	57.5
	4.00	11	27.5	27.5	85.0
	5.00	6	15.0	15.0	100.0
	Total	40	100.0	100.0	

Participants chose all options, showing that some participants Agree, some other Disagree and still some others “Neutral” with the statement (English vocabulary on shirts makes the price of t-shirts more expensive).

The number of participants who Agree is higher than those who Disagree or Strongly Disagree with the statement. 30% Disagree or Strongly Disagree and 42.5% Agree or

Strongly Agree. 27.5% chose Neutral. Thus, it can be concluded that participants have different ideas on the price. Some agree that the price of the t-shirt with English vocabulary can more expensive, but some do not agree.

Table 4.13 English words on t-shirts give prestige / pride to its users

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.00	2	5.0	5.0	5.0
	3.00	8	20.0	20.0	25.0
	4.00	20	50.0	50.0	75.0
	5.00	10	25.0	25.0	100.0
	Total	40	100.0	100.0	

The lowest score is 2. This means that there are two out of 40 participants who Disagree with statement (English words on t-shirts give prestige / pride to its users). The highest score is 5 showing that there are participants who Strongly Agree with the statement and 2p % chose “neutral”. Half of respondents (50%) Agree with the statement and 25 % Strongly Agree with the statement. There are 5 % of the respondents choosing ‘Disagree’, and 8 ‘Neutral’. Thus, it can be concluded that parents Agree that English words on t-shirts give prestige / pride to its users.

Table 4.14. The design of the pictures on t-shirts help parents decide to buy t-shirts.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.00	1	2.5	2.5	2.5
	3.00	3	7.5	7.5	10.0
	4.00	23	57.5	57.5	67.5

	5.00	13	32.5	32.5	100.0
	Total	40	100.0	100.0	

The lowest score is 2. This means that there is one out of 40 participants who Disagree with statement (The design of the pictures on t-shirts help parents decide to buy t-shirts.). The highest score is 5 showing that there are participants who Strongly Agree with the statement.

The majority of respondents (57.5 %) Agree with the statement and 32.5% Strongly Agree with the statement. There are 2.5 % of the respondents choosing ‘Disagree’, and 7.5% chose ‘Neutral’. Thus, it can be concluded that parents Agree that *‘The design of the pictures on t-shirts help parents decide to buy t-shirts.’*

Table 4.15. T-shirts with English vocabulary help children remember words for a long time

			Valid Percent	Cumulative Percent
Valid	3.00	2	5.0	5.0
	4.00	21	52.5	57.5
	5.00	17	42.5	100.0
	Total	40	100.0	100.0

The lowest score is 3, meaning that there are 2 participants who chose “Neutral” for the statement (T-shirts with English vocabulary help children remember words for a

long time) and the highest score is 5 showing that the participants strongly Agree with the statement There are no participants who chose 1 or two, meaning there are no participants who Disagree with the statement.

Almost all of the respondents (95%) Agree or Strongly Agree with the statement and only 5% chose “Neutral”. Thus, it can be concluded that most of the participants believe that “English vocabulary and the picture on the t- shirt can help parents understand the meaning of the vocabulary below the picture”.

#### **4.3. General Discussion**

From the 13 items of the questionnaire, the writer classifies into 2. The first part (statement 1 to 10 ) are used to see whether the parents believe that the picture and the English words on the t-shirts that the writer produce can help their children studying English words. In order to give deeper data, the writer also conducted an interview with two parents.

Based on the means of items one to ten, it can be implied that parents really believe that the writer’s products (a t-shirt with a picture and an English word) can help their children learn and memorize the words for a long time.

Because the means are above three, meaning that they agree with statement 1 to 10, except item 8 with the mean below three meaning that they perceive it negatively. They do not believe that their children like a picture of vegetable better than a picture of transport or fruit. It can be a medium for the parents to teach their children English words. The t-shirts with the pictures and English words have potential to be used as a medium for teaching children vocabulary and it will work as

they believe the picture and the words make the children memorize the words for a long time.

The following is the interview with two parents:

*Saya suka karena lebih menarik dan lucu juga akan memberikan efek edukasi kepada anak. karena gambar di kaos biasanya lebih besar dan mudah dilihat oleh anak anak sehingga anak anak dapat belajar dari situ. Gambar ini dapat diingat karena anak anak biasanya mengingat gambar yang dilihatnya. [I like it because it's more interesting and funny, it will also have an educational effect on children. because the picture on the T-shirt is usually bigger and easier to see by children so that children can learn from it. This picture can be remembered because children usually remember the images they saw]. (P1 interviewed on 5th July, 2019)*

*Ya. bagus sih soalnya anak saya bisa menghafalkan satu-dua kata dari melihat kaos ini. Jadi waktu anak saya pergi terus dia pake baju yang ada kata inggrisnya sama ada gambarnya, saya jadi sesekali tanya ke anak saya ini gambar apa, bahasa inggrisnya apa? Gitu-gitu sih. kalo di kaos tu gambarnya paling Cuma 1 atau 2 gambar aja, jadi dia gak biingung. Dia liat itu-itu terus lama-lama hafal. Tapi kalau saya sengaja ngajari dia pake poster gambar2 gitu malah dianya susah hafal. [Yes. it's good because my child can memorize a word or two from seeing this t-shirt. So when my child left and he used the*

clothes that had the same English word, there was a picture, so I occasionally asked my child what picture, what English is it? That's the way it is. if in the t-shirt the picture is at least 1 or 2 images only, so he doesn't get confused. He saw it, it kept memorizing for a long time. But if I intentionally taught him to use the picture posters, then he would have difficulty memorizing it.].( P2 interviewed on 5<sup>th</sup> July 2019]

Interviews with two parents also support this finding. P1 stated that she likes the t-shirts with picture and words because it is interesting and funny , and also it has an educational effect to the children. She also believes that it can be used to teach English to the children because the picture is big and clear that makes the children able to memorize it for a long time. She also says that she likes to buy the t-shirt because it can be used to educate children.

Meanwhile P2, also believes that she likes the t-shirt because she can memorize the words on the t-shirts and she also can ask her child about the word when she is wearing it. Through this way, the child can memorize it for a long time better than words from poster which are hard for her child to memorize them. He decides to buy the t-shirt because the picture and the color is interesting and it can be used by the child to learn the English word.

Items 10 to 12 are about the products as business items. Based on the data it can be concluded that the writer may produce the t-shirts because the parents believe

that the English words make the price higher and it also can give prestige to the children who are wearing them and also the design is interesting.

