

CHAPTER IV
FINDING AND DISCUSSION

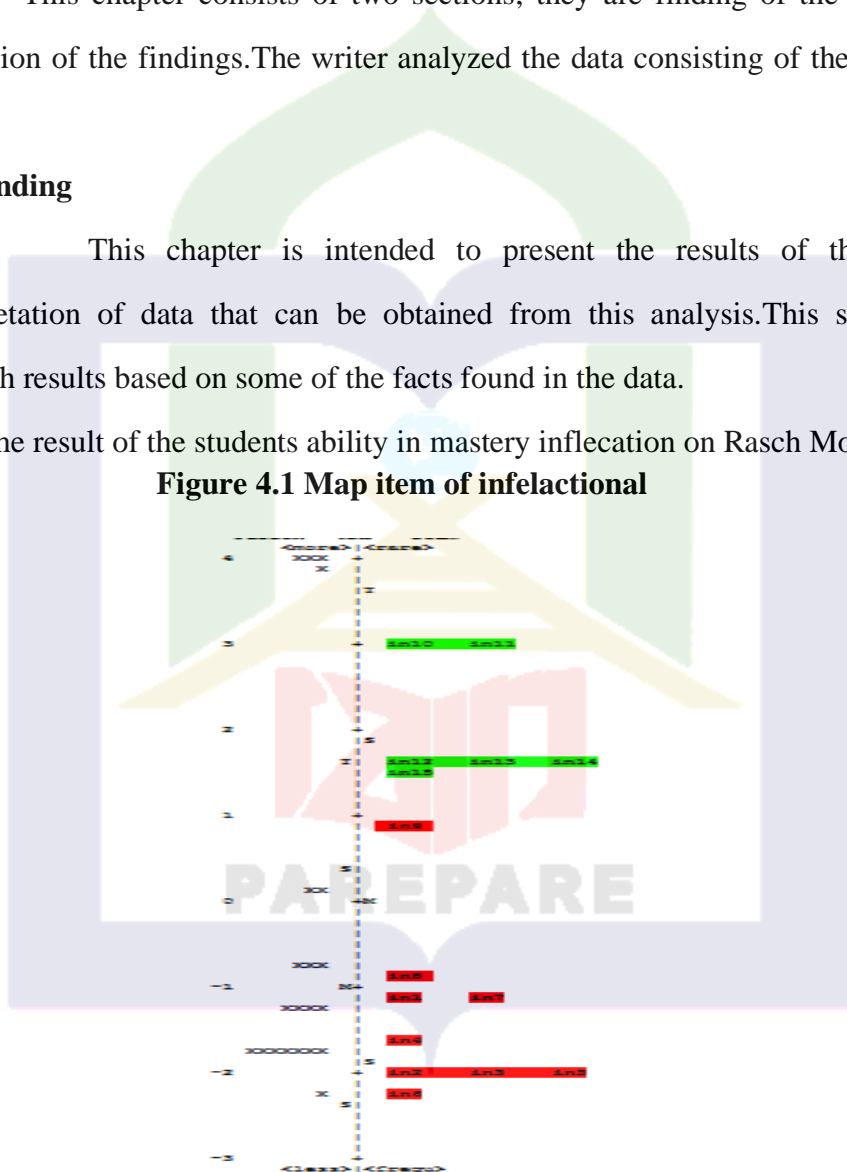
This chapter consists of two sections; they are finding of the research and discussion of the findings. The writer analyzed the data consisting of the result of the test.

A. Finding

This chapter is intended to present the results of the analysis and interpretation of data that can be obtained from this analysis. This section discusses research results based on some of the facts found in the data.

1. The result of the students ability in mastery inflection on Rasch Model

Figure 4.1 Map item of infelactional



Based on Figure 4.1 shows the most difficult items answered by the students, the items in10, in11, in13, in14, in15, the items most easily answered by in6 students. There

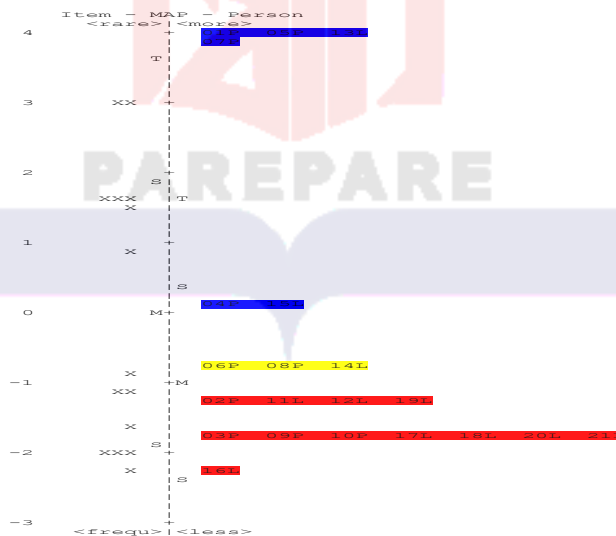
are 6 (40%) items in the difficult category, while 9 (60%) items in the easy category As details of the measurement results of the items are shown in table 4.2 below.

Figure 4.2 item measure of infelactional

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL		INFIT		OUTFIT		PT-MEASURE		EXACT MATCH		Item
				S. E.		MNSQ	ZSTD	MNSQ	ZSTD	CORR.	EXP.	OB5%	EXP%	
10	4	21	2.94	1.40	.18	-.8	.04	-.9	.97	.90	100.0	96.7	in10	
11	4	21	2.94	1.40	.18	-.8	.04	-.9	.97	.90	100.0	96.7	in11	
12	5	21	1.58	.96	.68	-.2	.29	-.7	.90	.84	94.4	93.2	in12	
13	5	21	1.58	.96	.68	-.2	.29	-.7	.90	.84	94.4	93.2	in13	
14	5	21	1.58	.96	.68	-.2	.29	-.7	.90	.84	94.4	93.2	in14	
15	5	20	1.55	.96	.68	-.2	.30	-.6	.90	.84	94.1	92.9	in15	
9	6	21	.87	.75	.99	.2	.72	-.2	.78	.77	88.9	88.2	in9	
8	11	21	-.91	.52	.85	-.9	.78	-.2	.56	.51	77.8	67.0	in8	
1	12	21	-1.17	.51	1.52	3.2	9.69	5.1	.19	.47	38.9	64.6	in1	
7	12	21	-1.17	.51	1.08	.6	1.04	.3	.44	.47	61.1	64.6	in7	
4	14	21	-1.69	.51	1.02	.2	.92	.2	.39	.39	61.1	63.7	in4	
2	15	21	-1.96	.53	1.07	.4	1.22	.5	.32	.35	72.2	67.6	in2	
3	15	21	-1.96	.53	1.07	.4	1.22	.5	.32	.35	72.2	67.6	in3	
5	15	21	-1.96	.53	1.02	.2	.88	.2	.36	.35	61.1	67.6	in5	
6	16	21	-2.24	.55	.98	.0	.89	.2	.33	.31	72.2	72.4	in6	
MEAN	9.6	20.9	.00	.77	.84	.1	1.24	.1			78.9	79.3		
S. D.	4.6	.2	1.84	.31	.34	.9	2.29	1.4			17.6	13.5		

Based on table 4.2, the in10 item has a value of 2.94 logit, which means that this item is the most difficult item, while the in6 item has a value of -2.24 logit which means the easiest.

Figure 4.3 Person Map of infelactional



The high-ability student category is 6 (blue) 27.27%, while the middle student category 3 (yellow) is 13.63%). and the category of low student ability is 15 (low) 54.54%.

Figure. 4.4 Person Measure of inflectional

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT		OUTFIT		PT-MEASURE		EXACT MATCH		Person
					MNSQ	ZSTD	MNSQ	ZSTD	CORR.	EXP.	OBS%	EXP%	
1	15	15	5.21	1.85	MAXIMUM MEASURE								01P
5	15	15	5.21	1.85	MAXIMUM MEASURE								05P
13	15	15	5.21	1.85	MAXIMUM MEASURE								13L
7	14	15	3.85	1.10	1.43	.8	9.90	3.0	-.17	.32	93.3	93.1	07P
4	8	15	.16	.71	2.88	2.9	2.80	2.3	.04	.68	46.7	83.7	04P
15	8	15	.16	.71	.25	-2.3	.20	-1.9	.95	.68	100.0	83.7	15L
6	6	15	-.81	.68	1.32	.9	1.07	.3	.52	.63	73.3	79.7	06P
8	6	15	-.81	.68	1.32	.9	1.09	.4	.52	.63	73.3	79.7	08P
14	6	15	-.81	.68	.54	-1.5	.36	-.9	.81	.63	86.7	79.7	14L
2	5	15	-1.27	.68	.85	-.5	.54	-.3	.65	.58	73.3	77.4	02P
11	5	15	-1.27	.68	.85	-.5	.54	-.3	.65	.58	73.3	77.4	11L
12	5	15	-1.27	.68	.79	-.7	.53	-.3	.67	.58	86.7	77.4	12L
19	5	15	-1.27	.68	.79	-.7	.51	-.3	.67	.58	86.7	77.4	19L
20	4	14	-1.72	.69	.94	-.2	.61	.0	.54	.50	71.4	75.5	20L
3	4	15	-1.73	.69	1.05	.3	.65	.1	.51	.51	73.3	76.9	03P
9	4	15	-1.73	.69	.94	-.2	.57	.0	.55	.51	73.3	76.9	09P
10	4	15	-1.73	.69	.81	-.7	.49	-.1	.60	.51	86.7	76.9	10P
17	4	15	-1.73	.69	.81	-.7	.49	-.1	.60	.51	86.7	76.9	17L
18	4	15	-1.73	.69	.81	-.7	.49	-.1	.60	.51	86.7	76.9	18L
21	4	15	-1.73	.69	.94	-.2	.57	.0	.55	.51	73.3	76.9	21L
16	3	15	-2.23	.72	1.06	.3	.61	.2	.44	.44	73.3	79.8	16L
MEAN	6.9	15.0	-.10	.88	1.02	-.1	1.22	.1			78.8	79.2	
S.D.	4.0	.2	2.49	.41	.52	1.1	2.17	1.0			11.4	4.0	

There were 3 people who were able to answer all with a score of 5.21 logit, while students with low abilities had a score of -2.23. The average ability of morphology students in the inflection section -.10

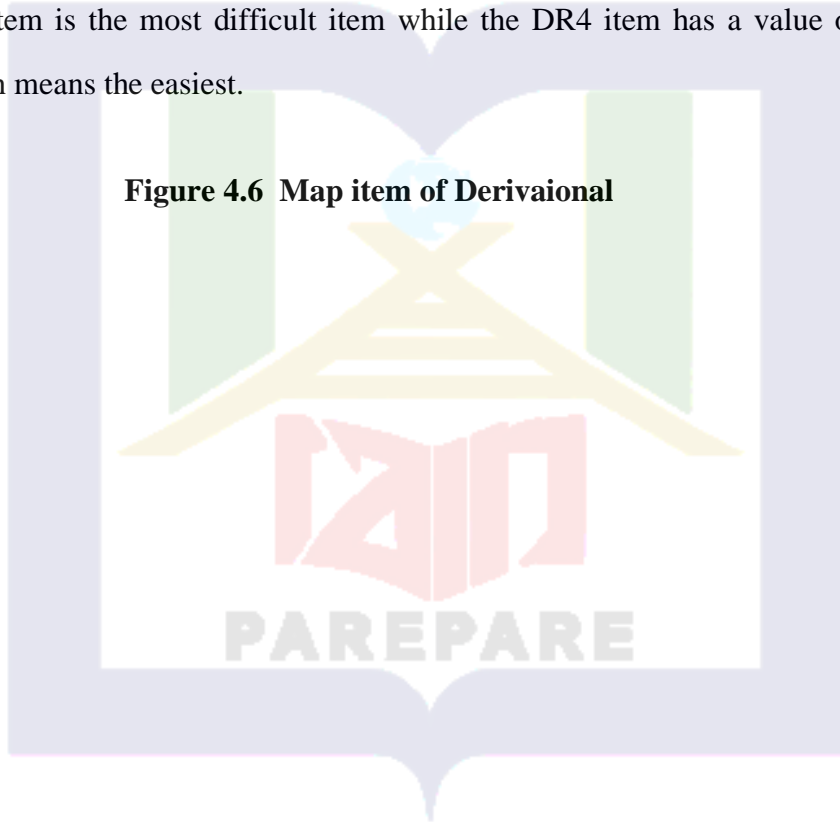
2. The result of the students ability in mastery Derivational on Rasch Model

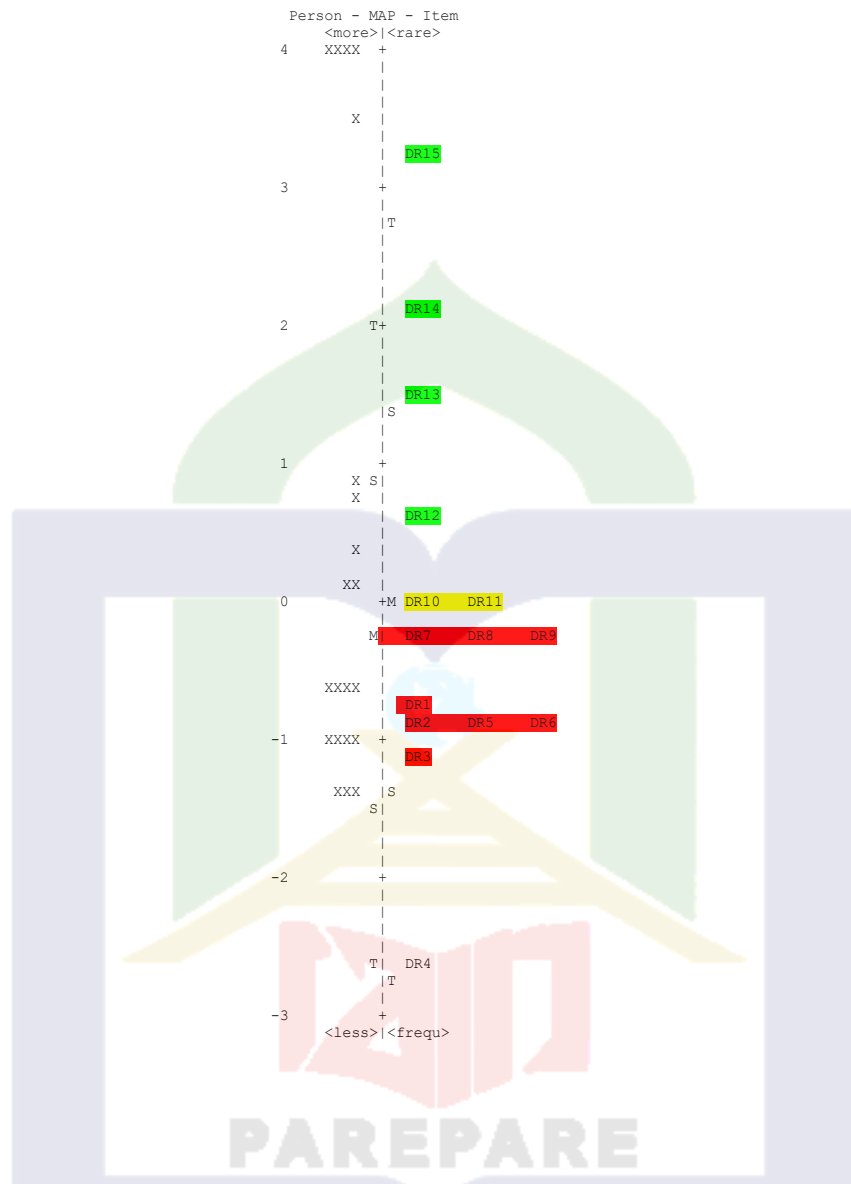
Figure 4.5 item measure of derivional

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL		INFIT		OUTFIT		PT-MEASURE		EXACT OBS%	MATCH EXP%	Item
				S. E.	MNSQ	ZSTD	MNSQ	ZSTD	CORR.	EXP.				
15	5	21	3.23	1.20	1.69	1.0	.79	.3	.82	.88	88.2	94.6	DR15	
14	6	21	2.18	.89	.63	-.4	.33	-.7	.90	.83	94.1	91.4	DR14	
13	7	21	1.54	.74	.71	-.5	.43	-.9	.85	.77	88.2	86.6	DR13	
12	9	21	.67	.60	.68	-1.1	.58	-1.0	.76	.67	88.2	76.4	DR12	
10	11	21	.03	.54	.80	-.9	.72	-.7	.65	.58	82.4	70.0	DR10	
11	11	21	.03	.54	.75	-1.2	.67	-.8	.66	.58	82.4	70.0	DR11	
7	12	21	-.26	.53	1.10	.6	1.06	.3	.51	.54	64.7	68.1	DR7	
8	12	21	-.26	.53	.86	-.7	.81	-.3	.58	.54	76.5	68.1	DR8	
9	12	21	-.26	.53	.82	-1.0	.76	-.5	.60	.54	76.5	68.1	DR9	
1	13	20	-.76	.54	1.29	1.8	1.19	.5	.38	.47	25.0	64.3	DR1	
2	14	21	-.82	.53	1.31	1.8	1.29	.7	.35	.45	29.4	65.4	DR2	
5	14	21	-.82	.53	1.24	1.4	1.30	.7	.37	.45	64.7	65.4	DR5	
6	14	21	-.82	.53	1.08	.5	1.02	.2	.43	.45	64.7	65.4	DR6	
3	15	21	-1.10	.54	1.11	.6	.99	.2	.38	.41	58.8	67.1	DR3	
4	18	20	-2.61	.78	1.16	.5	2.43	1.3	.11	.23	87.5	87.6	DR4	
MEAN	11.5	20.9	.00	.64	1.02	.2	.96	-.1			71.4	73.9		
S. D.	3.4	.3	1.39	.18	.29	1.0	.48	.7			20.2	10.3		

Based on table 4.5, the DR15 item has a value of (3.23) logit which means that this item is the most difficult item while the DR4 item has a value of (-2.610) logit which means the easiest.

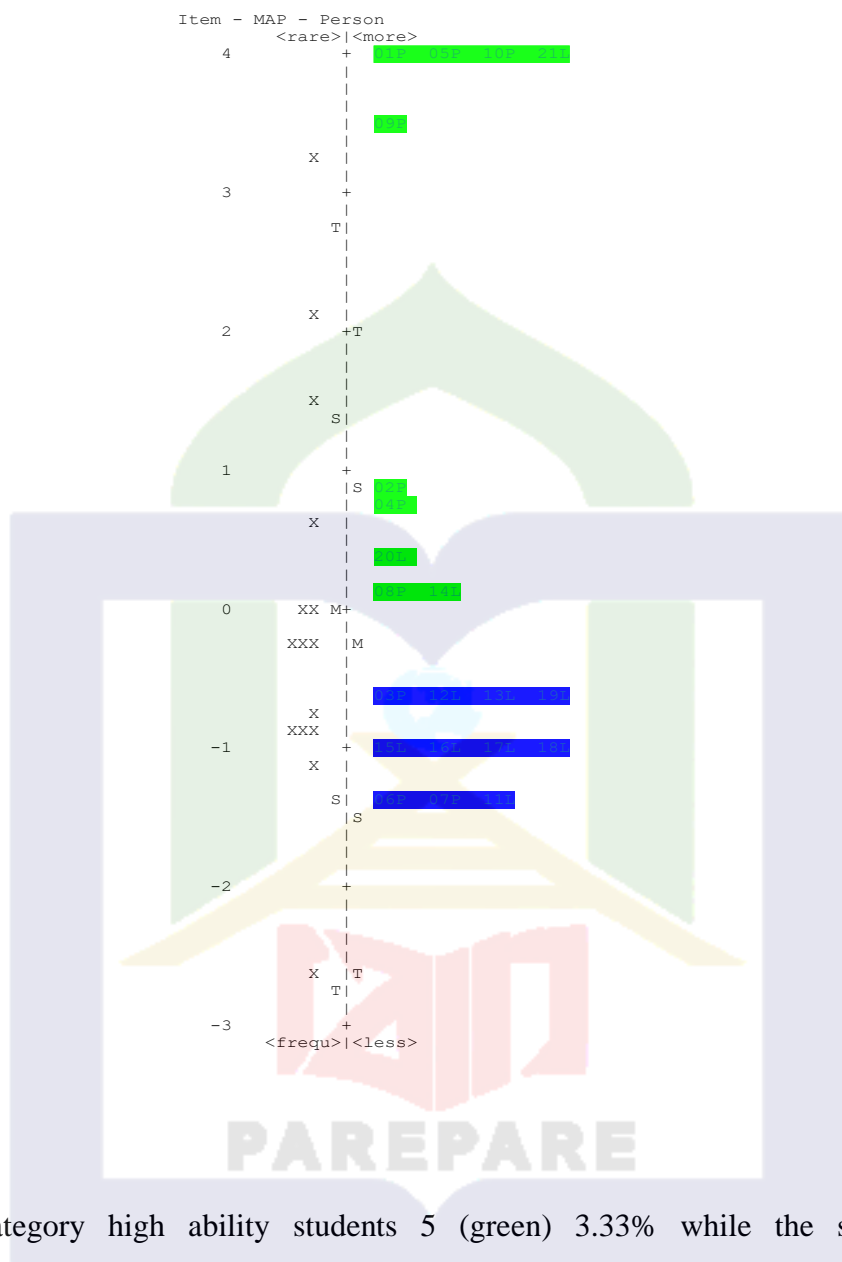
Figure 4.6 Map item of Derivaional





Based on Figure 4.6, it shows that the most difficult items answered by students are items DR15, DR 14 DR 13, DR 12 items that are easiest to answer by DR3 students. There are 8 (Read) 36.36% items in the difficult category, while 4 (green) 18 , 18% easy category items.

Figure 4.7 Person Map of Derivational



Category high ability students 5 (green) 3.33% while the student category meanwhile. category of low student ability 11 (blue) 73.33%. meanwhile. category of low student ability 11 (blue) 73.33%.

Figure. 4.8 Person Measure Derivational

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S. E.	INFIT		OUTFIT		PT-MEASURE		EXACT MATCH		Person
					MNSQ	ZSTD	MNSQ	ZSTD	CORR.	EXP.	OBS%	EXP%	
1	15	15	4.90	1.87					.00	.00	100.0	100.0	01P
5	15	15	4.90	1.87					.00	.00	100.0	100.0	05P
10	15	15	4.90	1.87					.00	.00	100.0	100.0	10P
21	15	15	4.90	1.87					.00	.00	100.0	100.0	21L
9	14	15	3.49	1.14	.50	-.6	.13	-.6	.62	.39	93.3	93.1	09P
2	10	15	.85	.65	1.05	.2	2.75	2.4	.36	.52	86.7	78.4	02P
4	9	14	.77	.66	2.25	2.9	2.53	2.2	-.19	.53	42.9	77.3	04P
20	8	14	.44	.62	1.32	1.1	1.25	.7	.28	.49	57.1	73.1	20L
8	8	15	.09	.60	1.04	.2	.93	.0	.48	.49	80.0	70.9	08P
14	8	15	.09	.60	1.00	.1	.87	-.1	.50	.49	80.0	70.9	14L
3	6	15	-.60	.59	.96	-.1	.77	-.2	.49	.45	60.0	69.1	03P
12	6	15	-.60	.59	1.19	1.0	1.03	.3	.34	.45	60.0	69.1	12L
13	6	15	-.60	.59	1.00	.1	.82	-.1	.46	.45	60.0	69.1	13L
19	6	15	-.60	.59	.96	-.1	.77	-.2	.49	.45	60.0	69.1	19L
15	5	15	-.96	.61	.68	-1.5	.53	-.6	.62	.42	80.0	71.4	15L
16	5	15	-.96	.61	.68	-1.5	.53	-.6	.62	.42	80.0	71.4	16L
17	5	15	-.96	.61	1.21	.9	1.09	.4	.30	.42	53.3	71.4	17L
18	5	15	-.96	.61	.68	-1.5	.53	-.6	.62	.42	80.0	71.4	18L
6	4	15	-1.36	.64	.72	-1.0	.53	-.4	.57	.39	80.0	76.8	06P
7	4	15	-1.36	.64	.86	-.4	.67	-.2	.49	.39	80.0	76.8	07P
11	4	15	-1.36	.64	.72	-1.0	.53	-.4	.57	.39	80.0	76.8	11L
MEAN	8.2	14.9	.71	.88	.99	-.1	.96	.1			71.4	73.9	
S. D.	4.0	.3	2.29	.49	.38	1.1	.67	.9			13.7	5.8	

There were 4 people who were able to answer all with a score of 4.90 logit, while students with low abilities had a score of -1.36. Mean of morphology students' ability in derivaional section 71.

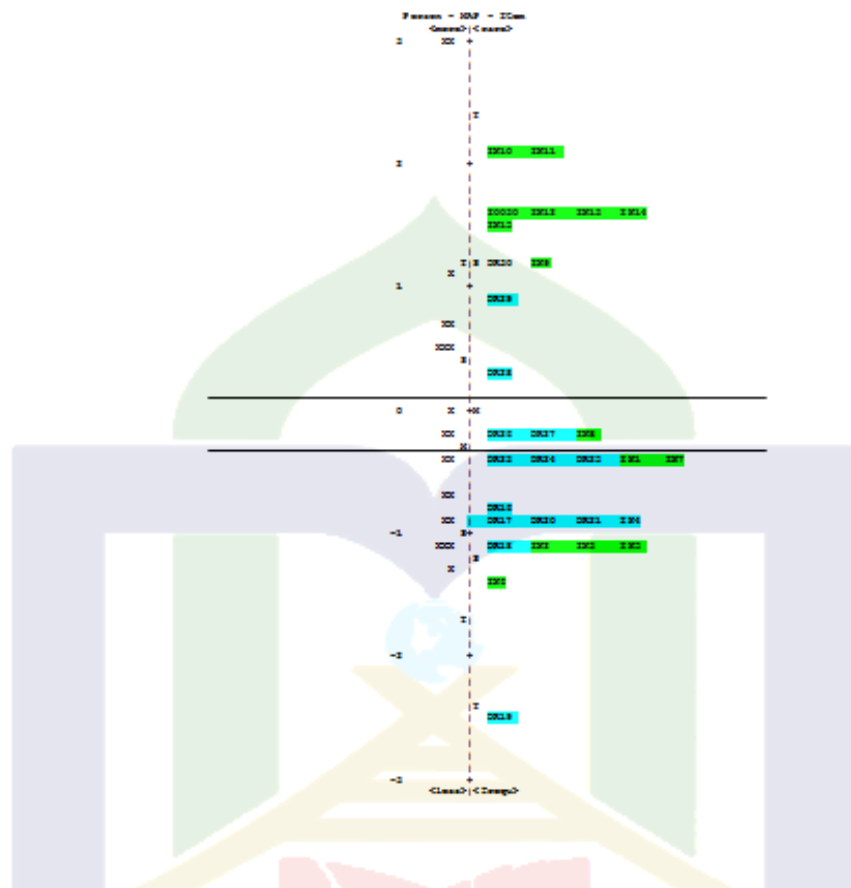
3. The result of the students ability in mastery Bound morphem on Rasch Model

Figure 4.9 Person Measure Bound morphem

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S. E.	INFIT		OUTFIT		PT-MEASURE		EXACT MATCH		Person
					MNSQ	ZSTD	MNSQ	ZSTD	CORR.	EXP.	OBS%	EXP%	
1	30	30	5.25	1.83	MAXIMUM MEASURE				.00	.00	100.0	100.0	01P
5	30	30	5.25	1.83	MAXIMUM MEASURE				.00	.00	100.0	100.0	05P
13	21	30	1.09	.46	1.66	2.4	1.67	1.6	.03	.48	53.3	77.1	13L
10	19	30	.69	.44	.96	-.1	.96	.0	.52	.50	76.7	76.0	10P
21	19	30	.69	.44	.99	.0	1.08	.4	.49	.50	76.7	76.0	21L
7	18	30	.50	.43	1.77	3.0	1.76	2.4	-.03	.50	46.7	75.2	07P
9	18	30	.50	.43	.88	-.5	.93	-.2	.57	.50	80.0	75.2	09P
4	17	29	.46	.44	1.79	3.1	1.74	2.3	-.02	.50	44.8	74.8	04P
2	15	30	-.03	.42	.91	-.4	1.09	.4	.53	.49	80.0	71.9	02P
8	14	30	-.21	.42	1.01	.1	.93	-.2	.49	.48	66.7	70.7	08P
14	14	30	-.21	.42	.73	-1.6	.63	-1.6	.69	.48	80.0	70.7	14L
20	12	28	-.38	.43	1.03	.3	.92	-.2	.44	.44	60.7	68.6	20L
15	13	30	-.38	.42	.65	-2.3	.55	-1.9	.73	.47	83.3	69.9	15L
12	11	30	-.74	.43	.93	-.4	.76	-.7	.53	.45	73.3	70.6	12L
19	11	30	-.74	.43	.83	-1.1	.66	-1.1	.60	.45	73.3	70.6	19L
3	10	30	-.92	.43	.94	-.3	.73	-.7	.51	.44	66.7	71.1	03P
6	10	30	-.92	.43	.93	-.4	.88	-.2	.49	.44	73.3	71.1	06P
11	9	30	-1.11	.44	.77	-1.3	.59	-1.1	.61	.42	83.3	72.7	11L
17	9	30	-1.11	.44	.98	.0	.79	-.5	.46	.42	70.0	72.7	17L
18	9	30	-1.11	.44	.73	-1.6	.55	-1.2	.63	.42	83.3	72.7	18L
16	8	30	-1.31	.45	.83	-.8	.61	-.9	.55	.40	73.3	75.3	16L
MEAN	15.1	29.9	.25	.57	1.02	-.1	.94	-.2			70.8	72.8	
S. D.	6.1	.5	1.76	.41	.33	1.4	.38	1.2			11.5	2.4	

There were 2 people who were able to answer all with a score of 5.25 logit, while students with low abilities had a score of -1.31. The average student's ability in bound morphem 25.

Figure 4.9 Map item of Bound morphem



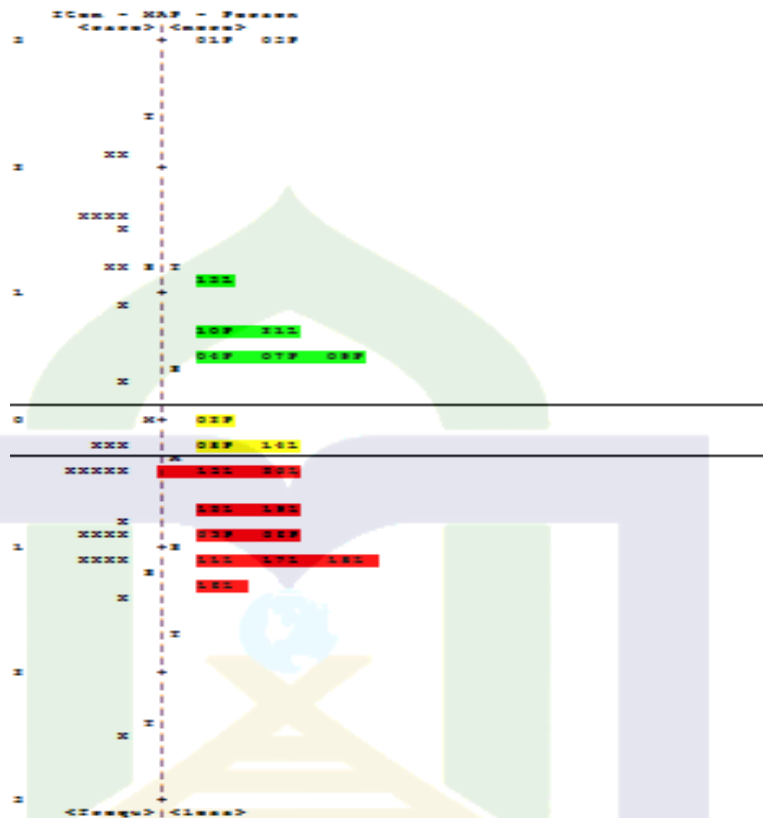
Based on Figure 4.2, the most difficult items answered by students are items IN10, IN11, IN12, IN13, IN14, IN15, IN16, IN17 (green) and DR19, DR19 (blue) 10 33.33% while items that are currently DR16, DR17 (blue) and IN9 (green) 3 (10%) which are the items most easily answered by students DR6, DR16, DR17, DR18, DR19, DR10 (blue) IN8, IN3, IN8, IN30 (green) There are 10 (33.33%).

Figure 5.1 item measure of Bound morphem

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S. E.	INFIT		OUTFIT		PT-MEASURE		EXACT OBS%	MATCH EXP%	Item
					MNSQ	ZSTD	MNSQ	ZSTD	CORR.	EXP.			
10	4	21	2.06	.76	.82	-.1	.48	-.6	.76	.68	89.5	89.4	IN10
11	4	21	2.06	.76	.82	-.1	.48	-.6	.76	.68	89.5	89.4	IN11
12	5	21	1.57	.65	.80	-.4	.53	-.8	.72	.62	84.2	84.1	IN12
13	5	21	1.57	.65	.80	-.4	.53	-.8	.72	.62	84.2	84.1	IN13
14	5	21	1.57	.65	.80	-.4	.53	-.8	.72	.62	84.2	84.1	IN14
30	5	21	1.57	.65	.84	-.3	.56	-.7	.70	.62	84.2	84.1	I0030
15	5	20	1.51	.66	.80	-.4	.54	-.8	.71	.62	83.3	83.2	IN15
9	6	21	1.19	.59	.99	.1	1.02	.2	.57	.57	78.9	78.8	IN9
29	6	21	1.19	.59	.79	-.6	.57	-1.0	.68	.57	78.9	78.8	DR30
28	7	21	.87	.55	.84	-.6	.70	-.8	.61	.53	68.4	74.1	DR29
27	9	21	.32	.50	.90	-.4	.86	-.6	.52	.47	73.7	68.2	DR28
8	11	21	-.17	.49	1.16	1.0	1.14	.8	.34	.41	47.4	65.1	IN8
25	11	21	-.17	.49	.83	-1.1	.80	-1.2	.49	.41	68.4	65.1	DR26
26	11	21	-.17	.49	.73	-1.8	.71	-1.8	.54	.41	78.9	65.1	DR27
1	12	21	-.40	.49	1.24	1.5	1.26	1.4	.27	.38	52.6	64.6	IN1
7	12	21	-.40	.49	1.22	1.4	1.22	1.3	.28	.38	52.6	64.6	IN7
22	12	21	-.40	.49	1.03	.3	1.08	.5	.36	.38	63.2	64.6	DR23
23	12	21	-.40	.49	1.13	.8	1.18	1.0	.32	.38	63.2	64.6	DR24
24	12	21	-.40	.49	.90	-.6	.88	-.6	.44	.38	73.7	64.6	DR25
16	13	20	-.83	.51	1.34	1.9	1.48	1.9	.17	.34	38.9	65.1	DR16
4	14	21	-.89	.50	1.02	.2	1.03	.2	.32	.33	73.7	66.2	IN4
17	14	21	-.89	.50	1.37	1.9	1.55	2.1	.13	.33	42.1	66.2	DR17
20	14	21	-.89	.50	.90	-.6	.82	-.7	.39	.33	73.7	66.2	DR20
21	14	21	-.89	.50	1.10	.6	1.19	.9	.27	.33	63.2	66.2	DR21
2	15	21	-1.15	.52	1.12	.6	1.22	.8	.23	.30	73.7	68.8	IN2
3	15	21	-1.15	.52	1.12	.6	1.22	.8	.23	.30	73.7	68.8	IN3
5	15	21	-1.15	.52	1.00	.1	.99	.1	.31	.30	63.2	68.8	IN5
18	15	21	-1.15	.52	1.05	.3	1.02	.2	.28	.30	63.2	68.8	DR18
6	16	21	-1.43	.54	1.21	.9	1.44	1.2	.15	.28	73.7	73.7	IN6
19	18	20	-2.55	.77	1.03	.2	1.03	.3	.16	.18	88.9	88.9	DR19
MEAN	10.6	20.9	.00	.56	.99	.1	.94	.1			70.9	72.8	
S.D.	4.2	.3	1.19	.09	.18	.8	.31	1.0			13.6	8.8	

Based on table 5.1 , the IN10 item has a value of 2.06 logit which means that this item is the most difficult item while the DR19 item has a value of -2.55 logit which means the easiest.

Figure 5.2 Person Map of Bound morphem



Category high ability students 6 (green) 27.27%, while the middle student category 3 (yellow) 13.63%). and low student ability category 10 (red) 33.33%.

B. Discussion

The purpose of this study was to determine the students' ability in quantitative morphology material using multiple choice tests and previously distributed essays. In essence, this study seeks to answer these questions; How do students know about morphology. This chapter begins with a summary of the main findings and how they fit into the basic knowledge of strengths of character. This chapter concludes with a discussion of the limitations associated with this study. Students' ability in identifying English inflectional in multiple choice. The initial objective of this study was to determine the students' ability to master the morphological bound morpheme the second grade of MA DDI Tellu Limpoe. This is to find out how the students' ability to master morphology at MA DDI Tellu Limpoe. The researcher distributes questions so that students can answer the questions that have been given, which has been distributed to 22 students. In this section the researcher describes the results.

1. The result of the students ability in mastery inflection on Rasch model .

Inflection is a process that deals with the inflected forms of words, that is the kind of variation that words show on the base of their grammatical context.¹ Inflectional morphemes refer to morphemes that do not change category and do not create new lexemes, but rather change the form of lexemes so that they fit into different grammatical contexts or meanings. Grammatical contexts can include information about number (singular and plural), person (first, second, third), tense (past and present)². Means, inflectional are used to show if a word is plural or singular, it is

¹ Carstairs- McCarthy, An Introduction to English Morphology: Words and Their Structure (Edinburgh University Press. 2002), p.30.

² Rochelle Lieber, Introducing Morphology, (New York: Cambridge University Press, 2009 ,p.88

past or not, it is comparative or possessive form, for Example the suffix “ed” is used to change a verb in past tense form, and “ing” indicate the verb is progressive. There are two kinds of inflection; regular inflection, and irregular inflection. The plural form of any countable noun will be formed by adding to the singular form the suffix –s, in other words, suffixing -s is the regular method of forming plurals. The item map of inflection shows the most difficult items answered by the students. the items most easily answered by students.

There are 6 (40%) items in the difficult category, while 9 (60%). Measurement of items in 10 has a value of 2.94 logit, which means that this item is the item most difficult to answer by students while item in 6 has a value of -2.24 logit which means that it is easiest to answer by students. person map inflectional High-ability student category 6 (blue) 27.27%, while the middle student category 3 (yellow) 13.63%. and the category of low student ability is 15 (low) 54.54%. person measure of inflectional There are 3 people who are able to answer all with nilai 5.21 logit. While students with low abilities have a score of -2.23. Average ability of morphology students in the inflection section - 10.

2. The result of the students ability in mastery derivational on Rasch model

Derivational morphemes are used to make new words in the language and are often used to make words of a different grammatical category from the stem.³ There are many kinds of derivational morphemes, for example: Noun affix is an affix that forms noun. For example age forms noun breakage from verb break and dom forms noun freedom from adjective free. Adjective affix is an affix that forms adjective. For example ful forms adjective careful from verb care and less forms adjective fruitless from noun

³ Dr. Harrison Adeniyi, English Morphology, p.11

fruit. Verb affix is an affix that forms .Map items of derivational. shows that the most difficult items answered by students are items items that are easiest to answer by students There are 8 (Read) 36.36%) items in the difficult category, while 4 (green) 18.18% easy category items. Person measure derivational There are 4 people who are able to answer all with a value of 4.90 logit, while students with low abilities have a value of -1.36. The average ability of morphology students in the derivational section is 71. person map of derivational The high-ability student category is 5 (green) 3.33% while the student category meanwhile. category of low student ability 11 (blue) 73.33%.

3. Result of the all the Test on Rasch model

Type of bound morphemes which generate or create new words by either changing the class of word or forming new words.⁴ Affixation is a morphological process whereby a bound morpheme, an affix, is attached to a morphological base. Diachronically, the English word affix was first used as a verb and has its origin in Latin: affix s, past participle of the verb affigere, ad- "to" figere "to fix". Affixation falls in the scope of Morphology where bound morphemes are either roots or affixes. Prefixes (affixes that precede the root) and suffixes (affixes that follow the root) are the most common types of affixes cross-linguistically. The bound morphem item map shows the most difficult items that are answered by the students item (green) and (blue) 10 33.33% while the items that are (blue) and (green) 3 (10%) are the items most easily answered by students (blue) (green) There are 10 (33.33%).⁵ items measure bound morphem item has a value of 2.06 logit which means this item is the most difficult item while item has a value of -2.55 logit which means the easiest. Person map of bound morphem The high ability student category is 6 (green) 27.27%, while the middle student category 3

⁴ George Yule, The Study of Language, p.61

(yellow) is 13.63%). and low student ability category 10 (read) 33.33%. Person measure bound morphem There are 2 people who are able to answer everything with a value of 5.25 logit. Meanwhile,students with low abilities have a value of -1.31 The average student's ability in bound morphem 25.

