

Appendix 8

Reliability of Pre test

No	Name	R1	R2	D	d ²
1	ATC	55	50	5	25
2	BN	50	45	5	25
3	DA	55	50	10	25
4	DAM	40	45	5	25
5	DW	55	65	10	100
6	DIP	60	60	0	0
7	DD	55	45	10	100
8	DDM	65	60	5	100
9	ED	50	60	10	100
10	ER	45	55	5	25
11	FDH	55	65	10	100
12	FT	65	60	5	25
13	FAP	50	60	10	100
14	FD	55	55	0	0
15	JAR	45	40	5	25
16	MM	65	70	5	25
17	MP	55	55	0	0
18	MS	50	60	10	100
19	MP	40	45	5	25
20	NAP	50	55	5	25
21	NOK	55	65	10	100
22	N	55	55	0	0
23	NL	65	70	10	100
24	PA	55	45	10	100
25	RR	65	60	5	25
26	STA	65	70	5	0
27	TH	45	55	10	100
28	RS	70	70	0	0
29	TW	65	70	5	25
30	RH	65	60	5	25
Total					1200

To measure of two raters, the researcher used Spearman Rank-Correlation which the formula can described as follows:

$$r = 1 - \frac{6 \cdot \sum d^2}{N(N^2 - 1)}$$

$$r = 1 - \frac{6(1200)}{30(30^2 - 1)}$$

$$r = 1 - \frac{7200}{26970}$$

$$r = 1 - 0.2669633$$

$$r = 0.7330367$$

Note :

r : Coefficient of rank correlation

d^2 : Square of differences of rank correlation

d : Sum differences between each pair of ranks

N : Number of Students