

Lampiran 30

Tabel C.1 Analisis Item Hasil Tes Uji Coba Instrumen

No	Nama	Nomor Soal / Skor Maksimal								Skor Total	Kuadrat Skor	Nilai
		1		2	3		4	5				
		a	b		a	b		a	b			
		4	4		8	4		4	8			
1	Arif Darmawan	4	2	8	4	4	8	3	2	35	1225	87,5
2	Ani Pratiwi	4	2	6	2	4	6	4	4	32	1024	80,0
3	Robi Abiyansah	4	4	6	4	2	5	2	4	31	961	77,5
4	Ardi Wahyu S.	4	4	6	4	2	5	4	2	31	961	77,5
5	Atika Sari	4	4	4	4	4	4	2	4	30	900	75,0
6	Arya Mahardika	2	4	6	4	2	6	4	2	30	900	75,0
7	Anton	4	4	4	2	2	4	4	4	28	784	70,0
8	Bejo Rohman	4	0	8	2	4	4	2	4	28	784	70,0
9	Dela Widiانا	2	2	8	0	4	5	3	4	28	784	70,0
10	Priyo Handoko	4	4	4	2	4	4	4	2	28	784	70,0
11	Suradi	4	2	8	0	4	4	4	2	28	784	70,0
12	Ummu Soleha	4	4	6	0	4	4	4	2	28	784	70,0
13	Yeni Erlinda	4	4	8	2	2	1	4	2	27	729	67,5
14	Cici Melansari	4	2	6	4	2	1	4	4	27	729	67,5
15	M. Agung Setiawan	4	2	6	4	4	1	4	2	27	729	67,5
16	Puri Novita	4	4	0	4	4	4	4	2	26	676	65,0

17	Merista Eva .HR.	2	2	2	4	4	5	4	2	25	625	62,5
18	Restu Adi .P.	2	2	0	4	1	6	2	2	19	361	47,5
19	Arif Imanudin	2	2	6	0	2	0	2	2	16	256	40,0
20	Mita Lestari	2	2	8	0	2	0	0	2	16	256	40,0
21	Devi Apriliyani	2	2	4	0	2	1	2	2	15	225	37,5
22	Nur Malik Hakiki	2	2	2	0	2	0	2	4	14	196	35,0
23	Yuli Dwi Putri	2	4	0	0	1	2	2	2	13	169	32,5
24	Mega Tri Novana	4	2	2	1	1	3	0	0	13	169	32,5
25	Andri Suryanto	2	2	0	2	1	2	2	2	13	169	32,5
26	Lara Veronicha	2	0	2	2	1	2	4	0	13	169	32,5
27	Derry Apriadi	0	0	4	1	2	2	2	2	13	169	32,5
28	Andika Febrianto	2	2	0	2	1	2	2	2	13	169	32,5
29	Muhammad Dede .Y.	2	0	4	1	2	1	2	0	12	144	30,0
30	Eva Siti .M.	2	0	4	2	1	1	0	2	12	144	30,0
31	Lisviana	2	0	2	2	2	0	2	0	10	100	25,0
32	Dwi Rahmawati	0	0	2	2	0	2	2	2	10	100	25,0
33	Rianita Firdaus	0	2	1	2	0	3	2	0	10	100	25,0
34	Meliana	1	2	2	1	2	0	2	0	10	100	25,0
Jumlah Skor siswa		91	74	139	68	79	98	90	72	711	17159	1777,5
Jumlah kuadrat		301	228	813	212	239	432	290	208			
Varians		1,69	1,97	7,20	2,24	1,63	4,40	1,52	1,63	20,64		
Varians Total									67,37			
Reliabilitas										0,79		

Perhitungan Reliabilitas Butir Soal :

$$r_{11} = \left[\frac{n}{n-1} \right] \left[1 - \frac{\sum \sigma_i^2}{\sigma_t^2} \right] \text{ dimana } \sigma_i^2 = \frac{\sum X_i^2 - \frac{(\sum X_i)^2}{N}}{N}$$

Dengan $n = 8$ butir soal dan $N = 34$ siswa

$$\sigma_i^2 = \frac{\sum X_i^2 - \frac{(\sum X_i)^2}{N}}{N}$$

Varian setiap butir soal yaitu

$$\sigma_1^2 = 1,69 \quad \sigma_5^2 = 1,63$$

$$\sigma_2^2 = 1,97 \quad \sigma_6^2 = 4,40$$

$$\sigma_3^2 = 7,20 \quad \sigma_7^2 = 1,52$$

$$\sigma_4^2 = 2,24 \quad \sigma_8^2 = 1,63$$

$$\begin{aligned} \sum \sigma_i^2 &= 1,69 + 1,97 + 7,20 + 2,24 + 1,63 + 6,09 + 4,40 + 1,52 + 1,63 \\ &= 20,64 \end{aligned}$$

$$\sigma_t^2 = \frac{\sum X_i^2 - \frac{(\sum X_i)^2}{N}}{N} = \frac{17159 - \frac{(711)^2}{34}}{34} = 67,37$$

Kemudian dimasukkan ke *Rumus Alpha*

$$r_{11} = \left[\frac{n}{n-1} \right] \left[1 - \frac{\sum \sigma_i^2}{\sigma_t^2} \right]$$

$$r_{11} = \left[\frac{8}{8-1} \right] \left[1 - \frac{20,64}{67,37} \right]$$

$$r_{11} = \left[\frac{8}{7} \right] [1 - 0,31]$$

$$r_{11} = [1,14][0,69]$$

$$r_{11} = 0,79$$

Berdasarkan hasil perhitungan, maka instrument *posttest* ini dikatakan reliabel

karena memiliki nilai reliabilitas $\geq 0,70$, yaitu $0,79 > 0,70$.