

LAMPIRAN 6

No. Resp	Jawaban Item Pernyataan																				Skor Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
1	1	3	3	3	3	3	3	3	3	3	3	3	4	3	3	3	3	3	3	3	59
2	4	5	5	4	5	3	4	5	4	4	4	4	4	5	2	4	4	4	4	4	82
3	4	5	4	3	4	5	4	5	4	4	4	5	4	4	4	5	4	4	4	4	84
4	5	5	5	3	5	5	4	3	4	5	5	5	5	5	5	5	5	5	5	5	94
5	3	5	5	3	4	5	4	5	4	5	5	5	5	5	1	5	5	5	5	3	87
6	4	3	3	3	3	3	4	3	4	4	4	4	3	4	4	4	4	4	3	4	72
7	4	5	4	4	4	5	5	5	4	5	5	5	1	5	5	5	5	5	5	4	90
8	4	4	4	4	4	4	4	5	4	4	5	5	4	4	4	4	4	4	4	4	83
9	4	5	5	5	5	3	4	5	4	5	4	5	5	5	3	5	4	5	4	4	89
10	5	5	5	5	4	3	5	5	5	5	5	4	2	5	2	5	5	5	5	5	90
11	5	5	4	4	5	4	4	4	5	5	5	5	5	5	4	4	4	4	5	5	91
12	5	5	4	5	5	5	5	4	5	5	5	5	5	4	3	4	3	5	4	5	91
13	3	5	4	4	4	5	4	5	4	4	4	5	4	4	2	5	3	4	3	3	79
14	3	5	5	4	5	4	4	5	4	5	5	5	5	4	3	5	4	5	5	5	90
15	5	3	4	5	3	3	5	3	5	5	5	3	5	5	3	3	5	5	5	5	85
16	4	5	5	4	5	4	4	4	5	5	5	5	4	4	4	4	4	4	4	4	87
17	3	4	3	5	5	5	5	5	1	5	5	5	5	5	2	5	3	5	5	5	86
18	5	4	4	4	5	4	4	4	4	4	5	4	2	4	4	4	5	4	4	4	82
19	3	4	4	4	4	3	4	4	4	5	4	4	4	3	3	4	4	4	4	4	77
20	4	5	5	5	5	4	5	5	5	5	5	5	5	5	4	5	5	5	5	5	97
Jumlah	78	90	85	81	87	80	85	87	82	92	92	91	81	88	65	88	83	89	86	85	1695
r Hitung	0.648	0.714	0.653	0.468	0.665	0.413	0.635	0.411	0.371	0.81	0.8	0.649	0.205	0.703	0.17	0.584	0.465	0.793	0.776	0.653	
r Tabel	0,444	0,444	0,444	0,444	0,444	0,444	0,444	0,444	0,444	0,444	0,444	0,444	0,444	0,444	0,444	0,444	0,444	0,444	0,444	0,444	
Ket.	V	V	V	V	V	TV	V	TV	TV	V	V	V	TV	V	TV	V	V	V	V	V	

Rekap Data X3

$\sum X$	78	90	85	81	87	80	85	87	82	92	92	91	81	88	65	88	83	89	86	85
$\sum Y$	1695																			
$\sum X Y$	6717	7715	7279	6922	7453	6837	7260	7427	7004	7875	7874	7784	6904	7535	5538	7522	7090	7620	7380	7279
$\sum X^2$	324	416	371	339	389	334	367	391	352	430	430	423	355	396	233	396	355	403	380	371
$\sum Y^2$	145015																			
20* XY	134340	154300	145580	138440	149060	136740	145200	148540	140080	157500	157480	155680	138080	150700	110760	150440	141800	152400	147600	145580
20*X2	6480	8320	7420	6780	7780	6680	7340	7820	7040	8600	8600	8460	7100	7920	4660	7920	7100	8060	7600	7420
(x)2	6084	8100	7225	6561	7569	6400	7225	7569	6724	8464	8464	8281	6561	7744	4225	7744	6889	7921	7396	7225
20*X2-(X)2	396	220	195	219	211	280	115	251	316	136	136	179	539	176	435	176	211	139	204	195
20*Y2	2900300																			
($\sum Y$)2	2873025																			
20*Y2-($\sum Y$)2	27275																			
$\sum X^*$ $\sum Y$	132210	152550	144075	137295	147465	135600	144075	147465	138990	155940	155940	154245	137295	149160	110175	149160	140685	150855	145770	144075
r hitung	0.648	0.714	0.652	0.468	0.664	0.412	0.635	0.410	0.371	0.809	0.799	0.649	0.204	0.702	0.169	0.584	0.464	0.793	0.775	0.652

Uji Validitas Variabel X3

Pengujian validitas dilakukan menggunakan rumus Korelasi Pearson

$$r_{xy} = \frac{N \cdot \sum XY - (\sum X)(\sum Y)}{\sqrt{[N \cdot \sum X^2 - (\sum X)^2][N \cdot \sum Y^2 - (\sum Y)^2]}}$$

$$r_{xy} = \frac{20(6717) - (78)(1695)}{\sqrt{((20(324) - (78)^2)(20(145015) - (1695)^2))}}$$

$$r_{xy} = \frac{134340 - 132210}{\sqrt{(396)(27275)}} = \frac{2130}{3286,472} = 0,648$$

$$r_{xy} = \frac{20(7715) - (90)(1695)}{\sqrt{((20(416) - (90)^2)(20(145015) - (1695)^2))}}$$

$$r_{xy} = \frac{154300 - 152550}{\sqrt{(220)(27275)}} = \frac{1750}{2449,5} = 0,714$$

$$r_{xy} = \frac{20(7279) - (85)(1695)}{\sqrt{((20(371) - (85)^2)(20(145015) - (1695)^2))}}$$

$$r_{xy} = \frac{145580 - 144075}{\sqrt{(195)(27275)}} = \frac{1505}{2306,2} = 0,652$$

$$r_{xy} = \frac{20(6922) - (81)(1695)}{\sqrt{((20(339) - (81)^2)(20(145015) - (1695)^2))}}$$

$$r_{xy} = \frac{138440 - 137295}{\sqrt{(219)(27275)}} = \frac{1145}{2444,01} = 0,468$$

$$r_{xy} = \frac{20(7453) - (87)(1695)}{\sqrt{((20(389) - (87)^2)(20(145015) - (1695)^2))}}$$

$$r_{xy} = \frac{149960 - 147465}{\sqrt{(211)(27275)}} = \frac{2495}{2398,9} = 0,664$$

$$r_{xy} = \frac{20(6837) - (80)(1779)}{\sqrt{((20(334) - (80)^2)(20(145015) - (1779)^2))}}$$

$$r_{xy} = \frac{136740 - 135600}{\sqrt{(280)(27275)}} = \frac{1140}{2763,5} = 0,412$$

$$r_{xy} = \frac{20(7260) - (85)(1695)}{\sqrt{((20(367) - (85)^2)(20(145015) - (1695)^2))}}$$

$$r_{xy} = \frac{145200 - 144075}{\sqrt{(115)(27275)}} = \frac{1125}{1771,05} = 0,635$$

$$r_{xy} = \frac{20(7427) - (87)(1695)}{\sqrt{((20(391) - (87)^2)(20(145015) - (1695)^2))}}$$

$$r_{xy} = \frac{148540 - 147465}{\sqrt{(251)(27275)}} = \frac{1075}{2616,49} = 0,410$$

$$r_{xy} = \frac{20(7004) - (82)(1695)}{\sqrt{((20(352) - (82)^2)(20(145015) - (1695)^2))}}$$

$$r_{xy} = \frac{140080 - 138990}{\sqrt{(316)(27275)}} = \frac{1090}{2935,79} = 0,371$$

$$r_{xy} = \frac{20(7875) - (92)(1695)}{\sqrt{((20(430) - (92)^2)(20(145015) - (1695)^2))}}$$

$$r_{xy} = \frac{157500 - 155940}{\sqrt{(136)(27275)}} = \frac{1560}{1925,98} = 0,81$$

$$r_{xy} = \frac{20(7874)-(92)(1695)}{\sqrt{((20(430)-(92)^2(20(145015)-(1695)^2))}}$$

$$r_{xy} = \frac{157480-155940}{\sqrt{(136)(27275)}} = \frac{1540}{1925,98} = 0,799$$

$$r_{xy} = \frac{20(7784)-(91)(1695)}{\sqrt{((20(423)-(91)^2(20(145015)-(1695)^2))}}$$

$$r_{xy} = \frac{155680-154245}{\sqrt{(179)(27275)}} = \frac{1435}{2209,5} = 0,649$$

$$r_{xy} = \frac{20(6904)-(81)(1695)}{\sqrt{((20(355)-(81)^2(20(145015)-(1695)^2))}}$$

$$r_{xy} = \frac{138080-137295}{\sqrt{(539)(27275)}} = \frac{785}{3834,21} = 0,204$$

$$r_{xy} = \frac{20(7535)-(88)(1695)}{\sqrt{((20(396)-(88)^2(20(145015)-(1695)^2))}}$$

$$r_{xy} = \frac{150700-149160}{\sqrt{(176)(27275)}} = \frac{1540}{2190,98} = 0,702$$

$$r_{xy} = \frac{20(5538)-(65)(1695)}{\sqrt{((20(233)-(65)^2(20(145015)-(1695)^2))}}$$

$$r_{xy} = \frac{110760-110175}{\sqrt{(435)(27275)}} = \frac{585}{3444,50} = 0,169$$

$$r_{xy} = \frac{20(7522)-(88)(1695)}{\sqrt{((20(396)-(88)^2(20(145015)-(1695)^2))}}$$

$$r_{xy} = \frac{150440-149160}{\sqrt{(176)(27275)}} = \frac{1280}{2190,98} = 0,584$$

$$r_{xy} = \frac{20(7090)-(83)(1695)}{\sqrt{((20(355)-(83)^2(20(145015)-(1695)^2))}}$$

$$r_{xy} = \frac{141800-140685}{\sqrt{(211)(27275)}} = \frac{1115}{2398,96} = 0,464$$

$$r_{xy} = \frac{20(7620)-(89)(1695)}{\sqrt{((20(403)-(89)^2(20(145015)-(1695)^2))}}$$

$$r_{xy} = \frac{152400-150855}{\sqrt{(139)(27275)}} = \frac{1545}{1947,10} = 0,793$$

$$r_{xy} = \frac{20(7380)-(86)(1695)}{\sqrt{((20(380)-(86)^2(20(145015)-(1695)^2))}}$$

$$r_{xy} = \frac{147600-145770}{\sqrt{(204)(27275)}} = \frac{1830}{2358,83} = 0,775$$

$$r_{xy} = \frac{20(7279)-(85)(1695)}{\sqrt{((20(371)-(85)^2(20(145015)-(1695)^2))}}$$

$$r_{xy} = \frac{145580-144075}{\sqrt{(195)(27275)}} = \frac{1505}{2306,21} = 0,652$$

Dari hasil perhitungan seluruh item ditampilkan pada tabel berikut

No Item	r hitung	r tabel	Ket
1	0,648	0,444	Valid
2	0,714	0,444	Valid
3	0,652	0,444	Valid
4	0,468	0,444	Valid
5	0,664	0,444	Valid
6	0,412	0,444	Tidak Valid
7	0, 635	0,444	Valid
8	0,410	0,444	Tidak Valid
9	0,371	0,444	Tidak Valid
10	0,81	0,444	Valid
11	0,799	0,444	Valid
12	0,649	0,444	Valid
13	0,204	0,444	Tidak Valid
14	0,702	0,444	Valid
15	0,169	0,444	Tidak Valid
16	0,584	0,444	Valid
17	0,464	0,444	Valid
18	0,793	0,444	Valid
19	0,775	0,444	Valid
20	0,652	0,444	Valid

Dari hasil perhitungan seperti tercantum pada tabel diatas maka terdapat 5 item pernyataan pada variabel X3 yang dinyatakan tidak valid dan harus diperbaiki atau dikeluarkan dari instrument.

Uji Reliabilitas Variabel X3

Uji reliabilitas instrument dengan alpha cronbach, terlebih dahulu menghitung varians masing masing butir dengan rumus berikut,

$$\sigma_1^2 = \frac{\sum X^2 - \frac{(\sum X)^2}{n}}{n-1}$$

$$\sigma_1^2 = \frac{324 - \frac{(78)^2}{20}}{19} = 0,104$$

$$\sigma_1^2 = \frac{416 - \frac{(90)^2}{20}}{19} = 0,578$$

$$\sigma_1^2 = \frac{371 - \frac{(85)^2}{20}}{19} = 0,513$$

$$\sigma_1^2 = \frac{339 - \frac{(81)^2}{20}}{19} = 0,576$$

$$\sigma_1^2 = \frac{389 - \frac{(87)^2}{20}}{19} = 0,555$$

$$\sigma_1^2 = \frac{334 - \frac{(80)^2}{20}}{19} = 0,736$$

$$\sigma_1^2 = \frac{367 - \frac{(85)^2}{20}}{19} = 0,302$$

$$\sigma_1^2 = \frac{391 - \frac{(87)^2}{20}}{19} = 0,660$$

$$\sigma_1^2 = \frac{352 - \frac{(82)^2}{20}}{19} = 0,831$$

$$\sigma_1^2 = \frac{430 - \frac{(92)^2}{20}}{19} = 0,357$$

$$\sigma_1^2 = \frac{430 - \frac{(92)^2}{20}}{19} = 0,357$$

$$\sigma_1^2 = \frac{423 - \frac{(91)^2}{20}}{19} = 0,471$$

$$\sigma_1^2 = \frac{355 - \frac{(81)^2}{20}}{19} = 1,418$$

$$\sigma_1^2 = \frac{396 - \frac{(88)^2}{20}}{19} = 0,463$$

$$\sigma_1^2 = \frac{233 - \frac{(65)^2}{20}}{19} = 1,144$$

$$\sigma_1^2 = \frac{396 - \frac{(88)^2}{20}}{19} = 0,463$$

$$\sigma_1^2 = \frac{355 - \frac{(83)^2}{20}}{19} = 0,555$$

$$\sigma_1^2 = \frac{403 - \frac{(89)^2}{20}}{19} = 0,365$$

$$\sigma_1^2 = \frac{380 - \frac{(86)^2}{20}}{19} = 0,536$$

$$\sigma_1^2 = \frac{371 - \frac{(85)^2}{20}}{19} = 0,513$$

Dari hasil perhitungan varians seluruh item ditampilkan pada tabel berikut

No item	σ_1^2
1	0,104
2	0,578
3	0,513
4	0,576
5	0,555
6	0,736
7	0,302
8	0, 660
9	0,831
10	0,357
11	0,357
12	0,471
13	1,418
14	0,463
15	1,144
16	0,463
17	0,555
18	0,365
19	0,536
20	0,513
$\sum s_i^2$	11,497

Menghitung varians total item sebagai berikut

$$\sigma_1^2 = \frac{145015 - \frac{(1695)^2}{20}}{19} = 71,77$$

Menghitung nilai Alpha Cronbach dengan rumus

$$r_{11} = \left(\frac{k}{k-1} \right) \left(1 - \frac{\sum s_i^2}{s_i^2} \right)$$

$$r_{11} = \left(\frac{20}{19} \right) \left(1 - \frac{11,497}{71,77} \right)$$

$$r_{11} = (1,053)(0,839808)$$

$$r_{11} = 0,884317824 \text{ (reliabilitasnya tinggi)}$$