LAMPIRAN 5

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	3	4	4	3	3	4	3	4	3	3	3	3	4	3	3	3	3	3	3	3	65
2	5	4	5	4	4	5	5	5	5	5	4	3	4	5	5	5	5	5	4	5	92
3	4	5	4	5	4	5	4	4	5	4	4	4	4	5	4	4	4	4	4	5	86
4	4	4	5	4	5	4	5	5	4	5	5	5	5	5	4	5	5	5	5	3	92
5	5	5	5	5	5	4	5	5	5	5	4	5	5	5	4	5	5	5	3	5	95
6	4	4	4	5	5	5	5	4	5	4	4	4	4	4	4	4	4	4	4	4	85
7	5	5	5	5	5	5	5	4	5	4	5	5	5	5	4	5	4	4	4	5	94
8	4	4	4	4	4	4	4	4	4	4	5	5	4	5	4	4	4	4	4	5	84
9	5	5	4	5	5	5	5	4	5	5	5	5	5	5	4	5	5	5	5	5	97
10	5	5	5	5	5	5	5	5	5	5	4	5	5	5	4	5	5	5	5	5	98
11	4	4	4	5	5	5	4	4	5	5	4	5	4	5	5	5	5	5	4	5	92
12	5	4	5	4	5	5	5	4	5	5	5	5	4	5	5	5	5	5	5	5	96
13	5	5	4	4	5	4	5	5	4	5	3	5	4	4	5	5	4	5	4	4	89
14	5	4	5	5	5	5	5	4	5	4	5	5	5	5	4	4	4	5	4	5	93
15	5	5	5	5	4	5	4	4	4	4	5	5	5	5	4	4	5	5	5	3	91
16	5	5	5	5	4	2	4	4	5	5	4	5	4	5	4	5	5	5	4	5	90
17	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	100
18	4	4	4	4	5	4	5	5	5	5	3	4	2	4	4	5	5	4	4	4	84
19	4	4	4	4	3	4	4	4	4	5	3	3	4	4	5	4	4	4	4	4	79
20	5	4	5	5	5	5	5	5	4	5	5	5	5	4	5	5	5	5	5	5	97
Jumlah	91	89	91	91	91	90	92	88	92	92	85	91	87	93	86	92	91	92	85	90	1799
r Hitung	0.84	0.39	0.62	0.69	0.75	0.36	0.74	0.36	0.63	0.62	0.64	0.71	0.52	0.73	0.46	0.79	0.76	0.85	0.63	0.57	
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	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	

Rekap Data X2

∑ X	91	89	91	91	91	90	92	88	92	92	85	91	87	93	86	92	91	92	85	90
∑ Y	1799																			
∑X Y	8263	8036	8234	8249	8264	8137	8343	7943	8333	8332	7723	8268	7885	8431	7776	8347	8255	8353	7707	8162
$\sum X^2$	421	401	419	421	423	416	430	392	430	430	373	425	389	439	376	430	421	430	369	416
$\sum Y^2$	163041																			
20* XY	165260	160720	164680	164980	165280	162740	166860	158860	166660	166640	154460	165360	157700	168620	155520	166940	165100	167060	154140	163240
20*X2	8420	8020	8380	8420	8460	8320	8600	7840	8600	8600	7460	8500	7780	8780	7520	8600	8420	8600	7380	8320
(x)2	8281	7921	8281	8281	8281	8100	8464	7744	8464	8464	7225	8281	7569	8649	7396	8464	8281	8464	7225	8100
20*X2-(X)2	139	99	99	139	179	220	136	96	136	136	235	219	211	131	124	136	139	136	155	220
20*Y2	3260820																			
(∑Y)2	3236401																			
20*Y2-(∑Y)2	24419																			
∑ X* ∑Y	163709	160111	163709	163709	163709	161910	165508	158312	165508	165508	152915	163709	156513	167307	154714	165508	163709	165508	152915	161910
r hitung	0.84186	0.392	0.625	0.69	0.751	0.358	0.742	0.358	0.632	0.621	0.645	0.714	0.523	0.734	0.463	0.786	0.755	0.852	0.63	0.574

LAMPIRAN 5

Uji Validitas Variabel X2

Pengujian validitas dilakukan menggunakan rumus Korelasi Pearson

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

$$r_{xy} = \frac{20(8263)-(91)(1799)}{\sqrt{((20(421)-(91)^2(20(163041)-(1799)^2)}}$$

$$r_{xy} = \frac{165260-163709}{\sqrt{(139)(24419)}} = \frac{1551}{1842,34} = 0,841$$

$$r_{xy} = \frac{20(8036)-(89)(1799)}{\sqrt{((20(401)-(89)^2(20(163041)-(1799)^2)}}$$

$$r_{xy} = \frac{160720-160111}{\sqrt{(99)(24419)}} = \frac{609}{1554,82} = 0,394$$

$$r_{xy} = \frac{20(8234)-(91)(1799)}{\sqrt{((20(419)-(91)^2(20(163041)-(1799)^2)}}$$

$$r_{xy} = \frac{164680-163709}{\sqrt{(99)(24419)}} = \frac{971}{1554,825} = 0,624$$

$$r_{xy} = \frac{20(8249)-(91)(1799)}{\sqrt{((20(421)-(91)^2(20(163041)-(1799)^2)}}$$

$$r_{xy} = \frac{164980-163709}{\sqrt{(139)(24419)}} = \frac{1271}{1842,34} = 0,6899$$

$$r_{xy} = \frac{20(8264)-(91)(1799)}{\sqrt{((20(423)-(91)^2(20(163041)-(1799)^2)}}$$

$$r_{xy} = \frac{165280-163709}{\sqrt{(179)(24419)}} = \frac{1571}{2090,69} = 0,7514$$

$$r_{xy} = \frac{20(8137)-(90)(1779)}{\sqrt{((20(416)-(90)^2(20(163041)-(1779)^2)}}$$

$$r_{xy} = \frac{162740-161910}{\sqrt{(220)(24419)}} = \frac{830}{2317,796} = 0,358$$

$$r_{xy} = \frac{20(8343)-(92)(1799)}{\sqrt{((20(430)-(92)^2(20(163041)-(1799)^2)}}$$

$$r_{xy} = \frac{166860-165508}{\sqrt{(136)(24419)}} = \frac{1352}{1822,35} = 0,741$$

$$r_{xy} = \frac{20(7943)-(88)(1799)}{\sqrt{((20(392)-(88)^2(20(163041)-(1799)^2)}}$$

$$r_{xy} = \frac{158860-158312}{\sqrt{(96)(24419)}} = \frac{548}{1531,085} = 0,357$$

$$r_{xy} = \frac{20(8333)-(92)(1799)}{\sqrt{((20(430)-(92)^2(20(163041)-(1799)^2)}}$$

$$r_{xy} = \frac{166660-165508}{\sqrt{(136)(24419)}} = \frac{1152}{1822,35} = 0,6321$$

$$r_{xy} = \frac{20(8332)-(92)(1799)}{\sqrt{((20(430)-(92)^2(20(163041)-(1799)^2)}}$$

$$r_{xy} = \frac{166640-165508}{\sqrt{(136)(24419)}} = \frac{1132}{1822,35} = 0,6212$$

$$r_{xy} = \frac{20(7723)-(85)(1799)}{\sqrt{((20(373)-(85)^2(20(163041)-(1799)^2)}}$$

$$r_{xy} = \frac{154460-152915}{\sqrt{(235)(24419)}} = \frac{1545}{2395{,}509} = 0{,}645$$

$$r_{xy} = \frac{20(8268)-(91)(1799)}{\sqrt{((20(425)-(91)^2(20(163041)-(1799)^2)}}$$

$$r_{xy} = \frac{165360-163709}{\sqrt{(219)(24419)}} = \frac{1651}{2312{,}52} = 0{,}7139$$

$$r_{xy} = \frac{20(7885)-(87)(1799)}{\sqrt{((20(389)-(87)^2(20(163041)-(1799)^2)}}$$

$$r_{xy} = \frac{157700-156513}{\sqrt{(211)(24419)}} = \frac{1187}{2269{,}89} = 0{,}5229$$

$$r_{xy} = \frac{20(8431)-(93)(1799)}{\sqrt{((20(439)-(93)^2(20(163041)-(1799)^2)}}$$

$$r_{xy} = \frac{168620-167307}{\sqrt{(131)(24419)}} = \frac{1313}{1788{,}54} = 0{,}7341$$

$$r_{xy} = \frac{20(7776)-(86)(1799)}{\sqrt{((20(376)-(86)^2(20(163041)-(1799)^2)}}$$

$$r_{xy} = \frac{155520-154714}{\sqrt{(124)(24419)}} = \frac{806}{1740{,}10} = 0{,}4632$$

$$r_{xy} = \frac{20(8347)-(92)(1799)}{\sqrt{((20(430)-(92)^2(20(163041)-(1799)^2)}}$$

$$r_{xy} = \frac{166940-165508}{\sqrt{(136)(24419)}} = \frac{1432}{1822{,}356} = 0{,}7858$$

$$r_{xy} = \frac{20(8255)-(91)(1799)}{\sqrt{((20(421)-(91)^2(20(163041)-(1799)^2)}}$$

$$r_{xy} = \frac{165100-163709}{\sqrt{(139)(24419)}} = \frac{1391}{1842{,}346} = 0{,}755$$

$$r_{xy} = \frac{20(8353)-(92)(1799)}{\sqrt{((20(430)-(92)^2(20(163041)-(1799)^2)}}$$

$$r_{xy} = \frac{167060-165508}{\sqrt{(136)(24419)}} = \frac{1552}{1822{,}35} = 0{,}8516$$

$$r_{xy} = \frac{20(7707)-(85)(1799)}{\sqrt{((20(369)-(85)^2(20(163041)-(1799)^2)}}$$

$$r_{xy} = \frac{154140-152915}{\sqrt{(155)(24419)}} = \frac{1225}{1945{,}49} = 0{,}6297$$

$$r_{xy} = \frac{20(8162)-(90)(1799)}{\sqrt{\left((20(416)-(90)^2((20(163041)-(1799)^2\right)}}$$

$$r_{xy} = \frac{163240-161910}{\sqrt{(220)(24419)}} = \frac{1330}{2317{,}79} = 0{,}5738$$

Dari hasil perhitungan seluruh item ditampilkan pada tabel berikut

No Item	r hitung	r tabel	Ket
1	0,841	0,444	Valid
2	0,394	0,444	Tidak Valid
3	0,624	0,444	Valid
4	0,6899	0,444	Valid
5	0,7514	0,444	Valid
6	0,358	0,444	Tidak Valid
7	0, 741	0,444	Valid
8	0,357	0,444	Tidak Valid
9	0,6321	0,444	Valid
10	0,6212	0,444	Valid
11	0,645	0,444	Valid
12	0,7139	0,444	Valid
13	0,5229	0,444	Valid
14	0,7341	0,444	Valid
15	0,4632	0,444	Valid
16	0,7858	0,444	Valid
17	0,755	0,444	Valid
18	0,8516	0,444	Valid
19	0,6297	0,444	Valid
20	0,5738	0,444	Valid

Dari hasil perhitungan seperti tercantum pada tabel diatas maka terdapat 3 item pernyataan pada variabel X2 yang dinyatakan tidak valid dan harus diperbaiki atau dikeluarkan dari instrument.

Uji Reliabilitas Variabel X2

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

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

$\sigma_1^2 = \frac{421-\frac{(91)^2}{20}}{19} = 0{,}365$ $\sigma_1^2 = \frac{401-\frac{(89)^2}{20}}{19} = 0{,}260$ $\sigma_1^2 = \frac{419-\frac{(91)^2}{20}}{19} = 0{,}260$

$\sigma_1^2 = \frac{421-\frac{(91)^2}{20}}{19} = 0{,}365$ $\sigma_1^2 = \frac{423-\frac{(91)^2}{20}}{19} = 0{,}471$ $\sigma_1^2 = \frac{416-\frac{(90)^2}{20}}{19} = 0{,}578$

$\sigma_1^2 = \frac{430-\frac{(92)^2}{20}}{19} = 0{,}357$ $\sigma_1^2 = \frac{392-\frac{(88)^2}{20}}{19} = 0{,}252$ $\sigma_1^2 = \frac{430-\frac{(92)^2}{20}}{19} = 0{,}357$

$\sigma_1^2 = \frac{430-\frac{(92)^2}{20}}{19} = 0{,}357$ $\sigma_1^2 = \frac{373-\frac{(85)^2}{20}}{19} = 0{,}618$ $\sigma_1^2 = \frac{425-\frac{(91)^2}{20}}{19} = 0{,}576$

$\sigma_1^2 = \frac{389-\frac{(87)^2}{20}}{19} = 0{,}555$ $\sigma_1^2 = \frac{439-\frac{(93)^2}{20}}{19} = 0{,}344$ $\sigma_1^2 = \frac{376-\frac{(86)^2}{20}}{19} = 0{,}326$

$\sigma_1^2 = \frac{430-\frac{(92)^2}{20}}{19} = 0{,}357$ $\sigma_1^2 = \frac{421-\frac{(91)^2}{20}}{19} = 0{,}365$ $\sigma_1^2 = \frac{430-\frac{(92)^2}{20}}{19} = 0{,}357$

$\sigma_1^2 = \frac{369-\frac{(85)^2}{20}}{19} = 0{,}407$ $\sigma_1^2 = \frac{416-\frac{(90)^2}{20}}{19} = 0{,}578$

Dari hasil perhitungan varians seluruh item ditampilkan pada tabel berikut

No item	σ_1^2
1	0,365
2	0,260
3	0,260
4	0,365
5	0,471
6	0,578
7	0,357
8	0,252
9	0,357
10	0,357
11	0,618
12	0,576
13	0,555
14	0,344
15	0,326
16	0,357
17	0,365
18	0,357
19	0,407
20	0,578
$\sum s_i^2$	8,105

Menghitung varians total item sebagai berikut

$$\sigma_1^2 = \frac{163041 - \frac{(1799)^2}{20}}{19} = 64{,}260$$

Menghitung nilai Alpha Cronbach dengan rumus

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

$r_{11} = \left(\frac{20}{19}\right)\left(1 - \frac{8{,}105}{64{,}260}\right)$

$r_{11} = (1{,}053)(0{,}8739)$

$r_{11} = 0{,}9202167$ *(reliabilitasnya tinggi)*