

Appendix 4

The Reliability of Motivation Questionnaire

No	Students	Odd (X)	Even (Y)	X ²	Y ²	XY
1	Student 1	17	21	289	441	357
2	Student 2	31	31	961	961	961
3	Student 3	24	25	576	625	600
4	Student 4	20	23	400	529	460
5	Student 5	20	20	400	400	400
6	Student 6	34	27	1156	729	918
7	Student 7	26	26	676	676	676
8	Student 8	21	22	441	484	462
9	Student 9	42	39	1764	1521	1638
10	Student 10	27	31	729	961	837
11	Student 11	31	29	961	841	899
12	Student 12	43	45	1849	2025	1935
13	Student 13	37	39	1369	1521	1443
14	Student 14	33	29	1089	841	957
15	Student 15	42	41	1764	1681	1722
16	Student 16	25	21	625	441	525
17	Student 17	21	21	441	441	441
18	Student 18	33	29	1089	841	957
19	Student 19	24	18	576	324	432
20	Student 20	29	28	841	784	812
21	Student 21	29	33	841	1089	957
22	Student 22	38	40	1444	1600	1520
23	Student 23	28	31	784	961	868

24	Student 24	30	30	900	900	900
25	Student 25	21	19	441	361	399
26	Student 26	41	40	1681	1600	1640
27	Student 27	30	27	900	729	810
28	Student 28	19	24	361	576	456
29	Student 29	31	30	961	900	930
30	Student 30	44	41	1936	1681	1804
31	Student 31	32	29	1024	841	928
32	Student 32	24	18	576	324	432
33	Student 33	19	18	361	324	342
34	Student 34	32	36	1024	1296	1152
35	Student 35	34	31	1156	961	1054
36	Student 36	32	30	1024	900	960
	Total	1064	1042	33410	32110	32584

The Coefficient of Reliability the first and second group

$$\begin{aligned}
 r &= \frac{\sum xy}{\sqrt{\sum x^2 \sum y^2}} = \frac{32584}{\sqrt{33410 \times 32110}} \\
 &= \frac{32584}{\sqrt{1072795100}} \\
 &= \frac{32584}{32753,55095253} \\
 &= 0,994823432
 \end{aligned}$$

The Coefficient Correlation of whole item

$$rk = \frac{2rl}{1+rl} = \frac{2 \times 0,994823432}{1+0,994823432}$$

$$= \frac{1,989646864}{1,994823432}$$
$$= 0,997404999$$