

HBAT - Two-Sample T-Test

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Obs	ID	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11	X12	X13	X14	X15	X16	X17	X18	X19	X20	X21	X22	X23
1	1	2	0	1	1	1	8.5	3.9	2.5	5.9	4.8	4.9	6.0	6.8	4.7	4.3	5.0	5.1	3.7	8.2	8.0	8.4	65.1	1
2	2	3	1	0	0	0	8.2	2.7	5.1	7.2	3.4	7.9	3.1	5.3	5.5	4.0	3.9	4.3	4.9	5.7	6.5	7.5	67.1	0
3	3	3	0	1	1	1	9.2	3.4	5.6	5.6	5.4	7.4	5.8	4.5	6.2	4.6	5.4	4.0	4.5	8.9	8.4	9.0	72.1	1
4	4	1	1	1	1	0	6.4	3.3	7.0	3.7	4.7	4.7	4.5	8.8	7.0	3.6	4.3	4.1	3.0	4.8	6.0	7.2	40.1	0
5	5	2	0	1	0	1	9.0	3.4	5.2	4.6	2.2	6.0	4.5	6.8	6.1	4.5	4.5	3.5	3.5	7.1	6.6	9.0	57.1	0
6	6	1	1	0	1	0	6.5	2.8	3.1	4.1	4.0	4.3	3.7	8.5	5.1	9.5	3.6	4.7	3.3	4.7	6.3	6.1	50.1	0
7	7	1	1	1	1	0	6.9	3.7	5.0	2.6	2.1	2.3	5.4	8.9	4.8	2.5	2.1	4.2	2.0	5.7	7.8	7.2	41.1	0
8	8	2	0	1	1	0	6.2	3.3	3.9	4.8	4.6	3.6	5.1	6.9	5.4	4.8	4.3	6.3	3.7	6.3	5.8	7.7	56.1	0
9	9	2	1	1	1	0	5.8	3.6	5.1	6.7	3.7	5.9	5.8	9.3	5.9	4.4	4.4	6.1	4.6	7.0	7.5	8.2	56.1	1
10	10	1	0	1	1	0	6.4	4.5	5.1	6.1	4.7	5.7	5.7	8.4	5.4	5.3	4.1	5.8	4.4	5.5	5.9	6.7	59.1	0
11	11	3	0	1	0	1	8.7	3.2	4.6	4.8	2.7	6.8	4.6	6.8	5.8	7.5	3.8	3.7	4.0	7.4	7.0	8.4	68.1	0
12	12	1	0	1	1	0	6.1	4.9	6.3	3.9	4.4	3.9	6.4	8.2	5.8	5.9	3.0	4.9	3.2	6.0	6.3	6.6	53.1	0
13	13	1	1	0	0	1	9.5	5.6	4.6	6.9	5.0	6.9	6.6	7.6	6.5	5.3	5.1	4.5	4.4	8.4	8.4	7.9	58.1	1
14	14	3	1	0	0	1	9.2	3.9	5.7	5.5	2.4	8.4	4.8	7.1	6.7	3.0	4.5	2.6	4.2	7.6	6.9	8.2	72.1	1
15	15	2	0	1	1	1	6.3	4.5	4.7	6.9	4.5	6.8	5.9	8.8	6.0	5.4	4.8	6.2	5.2	8.0	7.0	7.6	62.1	1
16	16	3	0	0	0	0	8.7	3.2	4.0	6.8	3.2	7.8	3.8	4.9	6.1	5.0	4.3	3.9	4.5	6.6	6.4	7.1	71.1	0
17	17	2	1	0	1	1	5.7	4.0	6.7	6.0	3.3	5.5	5.1	6.2	6.7	5.4	4.2	6.2	4.5	6.4	7.5	7.2	50.1	1
18	18	2	0	1	1	0	5.9	4.1	5.5	7.2	3.5	6.4	5.5	8.4	6.2	6.3	5.7	5.8	4.8	7.4	6.9	8.2	58.1	1
19	19	2	1	1	1	0	5.6	3.4	5.1	6.4	3.7	5.7	5.6	9.1	5.4	6.1	5.0	6.0	4.5	6.8	7.5	7.9	55.1	0
20	20	3	0	1	1	0	9.1	4.5	3.6	6.4	5.3	5.3	7.1	8.4	5.8	6.7	4.5	6.1	4.4	7.6	8.5	8.8	67.1	1
21	21	1	0	0	1	0	5.2	3.8	7.1	5.2	3.9	4.3	5.0	8.4	7.1	4.6	3.3	4.9	3.3	5.4	5.5	7.0	50.1	0
22	22	3	1	1	1	1	9.6	5.7	6.8	5.9	5.4	8.3	7.8	4.5	6.4	6.5	4.3	3.0	4.3	9.9	9.6	9.9	70.1	1
23	23	2	0	0	0	1	8.6	3.6	7.4	5.1	3.5	7.3	4.7	3.7	6.7	6.0	4.8	3.4	4.0	7.0	7.1	8.1	60.1	0
24	24	3	0	1	1	1	9.3	2.4	2.6	7.2	2.2	7.2	4.5	6.2	6.4	4.2	6.7	4.4	4.5	8.6	8.1	8.0	65.1	1
25	25	1	0	0	1	0	6.0	4.1	5.3	4.7	3.5	5.3	5.3	8.0	6.5	3.9	4.7	5.3	4.0	4.8	4.9	5.5	55.1	0
26	26	2	0	1	1	0	6.4	3.6	6.6	6.1	4.0	3.9	5.3	7.1	6.1	3.7	5.6	6.6	3.9	6.6	6.8	7.0	58.1	0
27	27	3	0	0	0	0	8.5	3.0	7.2	5.8	4.1	7.6	3.7	4.8	6.9	6.7	5.3	3.8	4.4	6.3	7.1	7.0	70.1	0
28	28	1	1	0	1	0	7.0	3.3	5.4	5.5	2.6	4.8	4.2	9.0	6.5	5.9	4.3	5.2	3.7	5.4	5.5	5.6	55.1	0
29	29	3	0	0	0	0	8.5	3.0	5.7	6.0	2.3	7.6	3.7	4.8	5.8	6.0	5.7	3.8	4.4	6.3	6.9	7.2	70.1	0
30	30	1	1	1	1	0	7.6	3.6	3.0	4.0	5.1	4.2	4.6	7.7	4.9	7.2	4.7	5.5	3.5	5.4	5.5	6.2	52.1	0
31	31	1	1	0	0	1	6.9	3.4	8.5	4.3	4.5	6.4	4.7	5.2	7.7	3.3	3.7	2.7	3.3	6.1	6.8	7.1	44.1	0
32	32	1	0	1	1	0	8.1	2.5	7.2	4.5	2.3	5.1	3.8	6.6	6.8	6.1	3.0	3.5	3.0	6.4	5.8	6.2	51.1	0
33	33	1	1	1	1	0	6.7	3.7	6.5	5.3	5.3	5.1	4.9	9.2	5.7	4.2	3.5	4.5	3.4	5.4	6.5	7.6	44.1	0
34	34	2	1	1	1	0	8.0	3.3	6.1	5.7	5.5	4.6	4.7	8.7	5.9	3.8	4.7	6.6	4.2	7.3	7.5	9.0	62.1	1
35	35	1	0	1	1	0	6.7	4.0	5.2	3.9	3.0	5.4	6.8	8.4	6.2	6.0	2.5	4.3	3.5	6.3	6.6	6.7	54.1	0
36	36	1	0	0	0	0	8.7	3.2	6.1	4.3	3.5	6.1	2.9	5.6	6.1	6.5	3.1	2.9	2.5	5.4	4.6	7.1	51.1	0
37	37	2	0	0	0	1	9.0	3.4	5.9	4.6	3.9	6.0	4.5	6.8	6.4	4.3	3.9	3.5	3.5	7.1	8.0	7.2	57.1	0
38	38	3	0	1	1	1	9.6	4.1	6.2	7.3	2.9	7.7	5.5	7.7	6.1	4.4	5.2	4.6	4.9	8.7	9.9	9.9	77.1	1

HBAT - Two-Sample T-Test

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Obs	ID	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11	X12	X13	X14	X15	X16	X17	X18	X19	X20	X21	X22	X23
39	39	2	1	1	1	0	8.2	3.6	3.9	6.2	5.8	4.9	5.0	9.0	5.2	7.1	4.7	6.9	4.5	7.6	6.9	7.6	65.1	1
40	40	1	0	0	1	0	6.1	4.9	3.0	4.8	5.1	3.9	6.4	8.2	5.1	6.8	4.5	4.9	3.2	6.0	5.5	5.8	53.1	0
41	41	2	1	1	1	0	8.3	3.4	3.3	5.5	3.1	4.6	5.2	9.1	4.1	1.7	4.6	5.8	3.9	7.0	7.5	8.4	61.1	1
42	42	2	1	0	0	1	9.4	3.8	4.7	5.4	3.8	6.5	4.9	8.5	4.9	6.2	4.1	4.5	4.1	7.6	8.0	7.9	61.1	1
43	43	3	0	1	0	1	9.3	5.1	4.6	6.8	5.8	6.6	6.3	7.4	5.1	4.1	4.6	4.6	4.3	8.9	7.8	7.6	72.1	1
44	44	2	1	1	1	1	5.1	5.1	6.6	6.9	4.4	5.4	7.8	5.9	7.2	5.2	4.9	6.3	4.5	7.6	7.9	8.4	55.1	1
45	45	3	1	0	0	0	8.0	2.5	4.7	7.1	3.6	7.7	3.0	5.2	5.1	3.9	4.3	4.2	4.7	5.5	5.6	6.5	65.1	0
46	46	2	0	1	1	0	5.9	4.1	5.7	5.9	5.8	6.4	5.5	8.4	6.4	5.1	5.2	5.8	4.8	7.4	8.6	7.7	58.1	1
47	47	3	1	0	0	1	10.0	4.3	7.1	6.3	2.9	5.4	4.5	3.8	6.7	3.7	5.0	4.0	3.5	7.1	8.8	8.0	67.1	1
48	48	2	1	1	1	0	5.7	3.8	6.8	7.5	5.7	5.7	6.0	8.2	6.6	4.8	6.5	7.3	5.2	7.6	7.6	7.1	60.1	0
49	49	3	0	0	1	1	9.9	3.7	3.7	6.1	4.2	7.0	6.7	6.8	5.9	7.2	4.5	3.4	3.9	8.7	8.1	8.5	67.1	1
50	50	3	1	1	0	1	7.9	3.9	4.3	5.8	4.4	6.9	5.8	4.7	5.2	3.6	4.1	4.2	4.3	8.6	7.8	7.6	61.1	1
51	51	1	0	1	1	0	6.7	3.6	5.9	4.2	3.4	4.7	4.8	7.2	5.7	5.3	4.0	3.6	2.8	5.4	7.5	7.2	48.1	0
52	52	3	1	0	0	0	8.2	2.7	3.7	7.4	2.7	7.9	3.1	5.3	5.3	5.0	4.5	4.3	4.9	5.7	7.1	8.2	67.1	1
53	53	3	0	1	1	1	9.4	2.5	4.8	6.1	3.2	7.3	4.6	6.3	6.3	9.2	4.7	4.6	4.6	8.7	9.0	9.0	66.1	1
54	54	1	1	0	0	1	6.9	3.4	5.7	4.4	3.3	6.4	4.7	5.2	6.4	4.4	3.2	2.7	3.3	6.1	7.0	7.2	44.1	0
55	55	2	1	1	1	0	8.0	3.3	3.8	5.8	3.2	4.6	4.7	8.7	5.3	4.2	4.9	6.6	4.2	7.3	8.1	8.1	62.1	1
56	56	3	1	0	0	0	9.3	3.8	7.3	5.7	3.7	6.4	5.5	7.4	6.6	5.9	4.1	3.2	3.4	7.7	7.6	8.9	59.1	1
57	57	2	0	1	1	1	7.4	5.1	4.8	7.7	4.5	7.2	6.9	9.6	6.4	7.4	5.7	6.5	5.5	9.0	7.9	8.8	74.1	1
58	58	3	1	0	0	0	7.6	3.6	5.2	5.8	5.6	6.6	5.4	4.4	6.7	6.4	4.6	3.9	4.0	8.2	7.5	7.5	58.1	1
59	59	3	1	0	0	0	10.0	4.3	5.3	3.7	4.2	5.4	4.5	3.8	6.7	4.5	3.7	4.0	3.5	7.1	6.5	7.0	67.1	0
60	60	3	1	1	1	0	9.9	2.8	7.2	6.9	2.6	5.8	3.5	5.4	6.2	7.0	5.6	4.9	4.0	7.9	8.5	8.5	61.1	1
61	61	3	0	0	0	0	8.7	3.2	8.4	6.1	2.8	7.8	3.8	4.9	7.2	4.5	5.4	3.9	4.5	6.6	6.9	7.2	71.1	1
62	62	2	0	1	1	1	8.4	3.8	6.7	5.0	4.5	4.7	5.9	6.7	5.1	4.2	2.7	5.0	3.6	8.0	7.6	8.8	63.1	1
63	63	1	0	0	0	1	8.8	3.9	3.8	5.1	4.3	4.7	4.8	5.8	5.0	7.2	4.4	3.7	2.9	6.3	5.5	8.0	44.1	0
64	64	1	0	1	1	0	7.7	2.2	6.3	4.5	2.4	4.7	3.4	6.2	6.0	4.7	3.3	3.1	2.6	6.0	6.0	8.1	47.1	0
65	65	1	0	1	1	0	6.6	3.6	5.8	4.1	4.9	4.7	4.8	7.2	6.5	3.9	3.5	3.6	2.8	5.4	6.9	7.1	48.1	0
66	66	2	1	1	1	0	5.7	3.8	3.5	6.7	5.4	5.7	6.0	8.2	5.4	5.0	4.7	7.3	5.2	7.6	6.9	9.0	60.1	1
67	67	2	1	0	1	0	5.7	4.0	7.9	6.4	2.7	5.5	5.1	6.2	7.5	6.4	5.0	6.2	4.5	6.4	5.6	6.2	50.1	0
68	68	2	1	0	1	1	5.5	3.7	4.7	5.4	4.3	5.3	4.9	6.0	5.6	2.5	4.5	5.9	4.3	6.1	6.3	8.2	48.1	0
69	69	1	1	1	1	0	7.5	3.5	3.8	3.5	2.9	4.1	4.5	7.6	5.1	5.2	4.0	5.4	3.4	5.2	5.8	5.8	51.1	0
70	70	2	0	1	1	0	6.4	3.6	2.7	5.3	3.9	3.9	5.3	7.1	5.2	5.5	4.7	6.6	3.9	6.6	6.6	8.0	58.1	1
71	71	3	0	0	1	0	9.1	4.5	6.1	5.9	6.3	5.3	7.1	8.4	7.1	5.7	5.4	6.1	4.4	7.6	7.5	7.7	67.1	0
72	72	1	1	0	0	1	6.7	3.2	3.0	3.7	4.8	6.3	4.5	5.0	5.2	2.5	2.9	2.6	3.1	5.8	6.0	7.0	43.1	0
73	73	2	0	1	1	0	6.5	4.3	2.7	6.6	6.5	6.3	6.0	8.7	4.7	6.3	4.6	5.6	4.6	7.9	6.6	7.9	66.1	0
74	74	3	0	1	1	1	9.9	3.7	7.5	4.7	5.6	7.0	6.7	6.8	7.2	4.6	4.1	3.4	3.9	8.6	8.8	9.8	66.1	1
75	75	2	0	1	1	1	8.5	3.9	5.3	5.5	5.0	4.9	6.0	6.8	5.7	3.6	4.4	5.1	3.7	8.2	7.0	8.4	65.1	1
76	76	3	0	0	0	0	9.9	3.0	6.8	5.0	5.4	5.9	4.8	4.9	7.3	7.6	3.1	4.3	3.8	7.1	6.6	8.9	63.1	1

HBAT - Two-Sample T-Test

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Obs	ID	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11	X12	X13	X14	X15	X16	X17	X18	X19	X20	X21	X22	X23
77	77	1	0	0	1	1	7.6	3.6	7.6	4.6	4.7	4.6	5.0	7.4	8.1	6.6	4.5	5.8	3.9	6.4	6.9	7.5	49.1	0
78	78	2	1	0	0	1	9.4	3.8	7.0	6.2	4.7	6.5	4.9	8.5	7.3	2.4	4.3	4.5	4.1	7.6	7.3	8.0	61.1	1
79	79	3	0	0	0	1	9.3	3.5	6.3	7.6	5.5	7.5	5.9	4.6	6.6	3.1	5.2	4.1	4.6	8.9	7.3	8.1	72.1	1
80	80	1	1	1	1	0	7.1	3.4	4.9	4.1	4.0	5.0	5.9	7.8	6.1	3.5	2.6	3.1	2.7	5.7	5.8	7.6	44.1	0
81	81	3	0	1	0	0	9.9	3.0	7.4	4.8	4.0	5.9	4.8	4.9	5.9	6.9	3.2	4.3	3.8	7.1	7.9	8.8	63.1	0
82	82	3	0	0	0	0	8.7	3.2	6.4	4.9	2.4	6.8	4.6	6.8	6.3	5.1	4.3	3.7	4.0	7.4	7.3	8.0	68.1	1
83	83	2	0	0	0	1	8.6	2.9	5.8	3.9	2.9	5.6	4.0	6.3	6.1	4.0	2.7	3.0	3.0	6.6	6.1	8.5	53.1	0
84	84	1	1	0	1	0	6.4	3.2	6.7	3.6	2.2	2.9	5.0	8.4	7.3	6.5	2.0	3.7	1.6	5.0	5.1	6.5	37.1	0
85	85	2	0	0	0	1	7.7	2.6	6.7	6.6	1.9	7.2	4.3	5.9	6.5	4.1	4.7	3.9	4.3	8.2	7.5	7.7	52.1	1
86	86	1	1	1	1	0	7.5	3.5	4.1	4.5	3.5	4.1	4.5	7.6	4.9	2.8	3.4	5.4	3.4	5.2	6.0	7.2	51.1	0
87	87	1	0	0	1	0	5.0	3.6	1.3	3.0	3.5	4.2	4.9	8.2	4.3	7.6	2.4	4.8	3.1	5.2	5.5	6.0	48.1	0
88	88	2	0	0	0	1	7.7	2.6	8.0	6.7	3.5	7.2	4.3	5.9	6.9	7.7	5.1	3.9	4.3	8.2	7.6	8.2	52.1	0
89	89	2	1	0	0	1	9.1	3.6	5.5	5.4	4.2	6.2	4.6	8.3	6.5	4.1	4.6	4.3	3.9	7.3	6.5	7.4	59.1	0
90	90	2	1	0	1	1	5.5	5.5	7.7	7.0	5.6	5.7	8.2	6.3	7.4	4.9	5.5	6.7	4.9	8.2	7.6	9.3	59.1	1
91	91	3	1	0	0	0	9.1	3.7	7.0	4.1	4.4	6.3	5.4	7.3	7.5	4.6	4.4	3.0	3.3	7.4	7.9	7.9	58.1	1
92	92	1	1	0	1	0	7.1	4.2	4.1	2.6	2.1	3.3	4.5	9.9	5.5	3.5	2.0	4.0	2.4	4.8	5.0	6.5	51.1	0
93	93	3	1	1	0	1	9.2	3.9	4.6	5.3	4.2	8.4	4.8	7.1	6.2	6.6	4.4	2.6	4.2	7.6	7.5	8.6	72.1	0
94	94	3	0	1	1	1	9.3	3.5	5.4	7.8	4.6	7.5	5.9	4.6	6.4	4.9	4.8	4.1	4.6	8.9	7.6	8.9	72.1	1
95	95	3	1	1	0	0	9.3	3.8	4.0	4.6	4.7	6.4	5.5	7.4	5.3	4.8	3.6	3.2	3.4	7.7	7.3	8.4	59.1	1
96	96	1	1	0	0	1	8.6	4.8	5.6	5.3	2.3	6.0	5.7	6.7	5.8	3.6	4.9	3.6	3.6	7.3	8.1	8.1	50.1	1
97	97	1	0	0	1	1	7.4	3.4	2.6	5.0	4.1	4.4	4.8	7.2	4.5	6.4	4.2	5.6	3.7	6.3	5.5	7.2	48.1	0
98	98	1	0	0	0	1	8.7	3.2	3.3	3.2	3.1	6.1	2.9	5.6	5.0	4.3	3.1	2.9	2.5	5.4	7.0	7.7	51.1	0
99	99	2	1	0	1	1	7.8	4.9	5.8	5.3	5.2	5.3	7.1	7.9	6.0	5.7	4.3	4.9	3.9	6.4	7.1	7.4	61.1	0
100	100	2	1	1	1	0	7.9	3.0	4.4	5.1	5.9	4.2	4.8	9.7	5.7	5.8	3.4	5.4	3.5	6.4	7.3	7.0	57.1	0

The UNIVARIATE Procedure
Variable: X19 (X19 - Satisfaction)

Moments			
N	100	Sum Weights	100
Mean	6.918	Sum Observations	691.8
Std Deviation	1.19183925	Variance	1.42048081
Skewness	0.0781812	Kurtosis	-0.7913045
Uncorrected SS	4926.5	Corrected SS	140.6276
Coeff Variation	17.2280898	Std Error Mean	0.11918393

Basic Statistical Measures			
Location		Variability	
Mean	6.918000	Std Deviation	1.19184
Median	7.050000	Variance	1.42048
Mode	7.600000	Range	5.20000
		Interquartile Range	1.65000

Tests for Location: Mu0=0				
Test	Statistic		p Value	
Student's t	t	58.04474	Pr > t 	<.0001
Sign	M	50	Pr >= M 	<.0001
Signed Rank	S	2525	Pr >= S 	<.0001

Tests for Normality				
Test	Statistic		p Value	
Shapiro-Wilk	W	0.975162	Pr < W	0.0556
Kolmogorov-Smirnov	D	0.078082	Pr > D	0.1367
Cramer-von Mises	W-Sq	0.109171	Pr > W-Sq	0.0870
Anderson-Darling	A-Sq	0.714966	Pr > A-Sq	0.0630

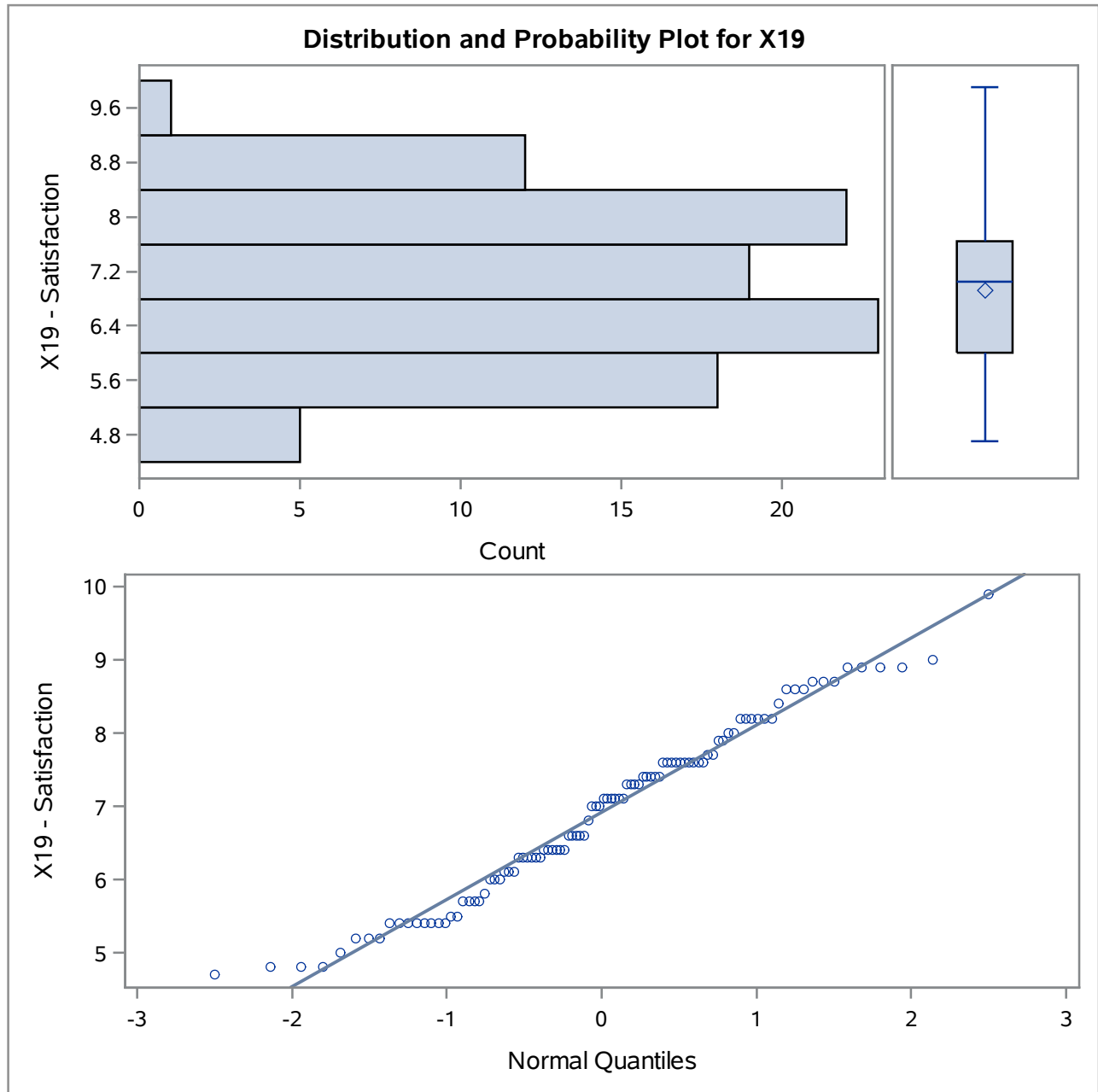
Quantiles (Definition 5)	
Level	Quantile
100% Max	9.90
99%	9.45
95%	8.90
90%	8.60
75% Q3	7.65
50% Median	7.05
25% Q1	6.00

The UNIVARIATE Procedure
Variable: X19 (X19 - Satisfaction)

Quantiles (Definition 5)	
Level	Quantile
10%	5.40
5%	5.10
1%	4.75
0% Min	4.70

Extreme Observations			
Lowest		Highest	
Value	Obs	Value	Obs
4.7	6	8.9	43
4.8	92	8.9	79
4.8	25	8.9	94
4.8	4	9.0	57
5.0	84	9.9	22

The UNIVARIATE Procedure



The UNIVARIATE Procedure
Variable: X20 (X20 - Likelihood of Recommendation)

Moments			
N	100	Sum Weights	100
Mean	7.02	Sum Observations	702
Std Deviation	1.04330477	Variance	1.08848485
Skewness	0.04392529	Kurtosis	-0.0883467
Uncorrected SS	5035.8	Corrected SS	107.76
Coeff Variation	14.8618913	Std Error Mean	0.10433048

Basic Statistical Measures			
Location		Variability	
Mean	7.020000	Std Deviation	1.04330
Median	7.000000	Variance	1.08848
Mode	7.500000	Range	5.30000
		Interquartile Range	1.30000

Tests for Location: Mu0=0				
Test	Statistic		p Value	
Student's t	t	67.28619	Pr > t 	<.0001
Sign	M	50	Pr >= M 	<.0001
Signed Rank	S	2525	Pr >= S 	<.0001

Tests for Normality				
Test	Statistic		p Value	
Shapiro-Wilk	W	0.988054	Pr < W	0.5122
Kolmogorov-Smirnov	D	0.077269	Pr > D	0.1460
Cramer-von Mises	W-Sq	0.073672	Pr > W-Sq	0.2498
Anderson-Darling	A-Sq	0.452245	Pr > A-Sq	>0.2500

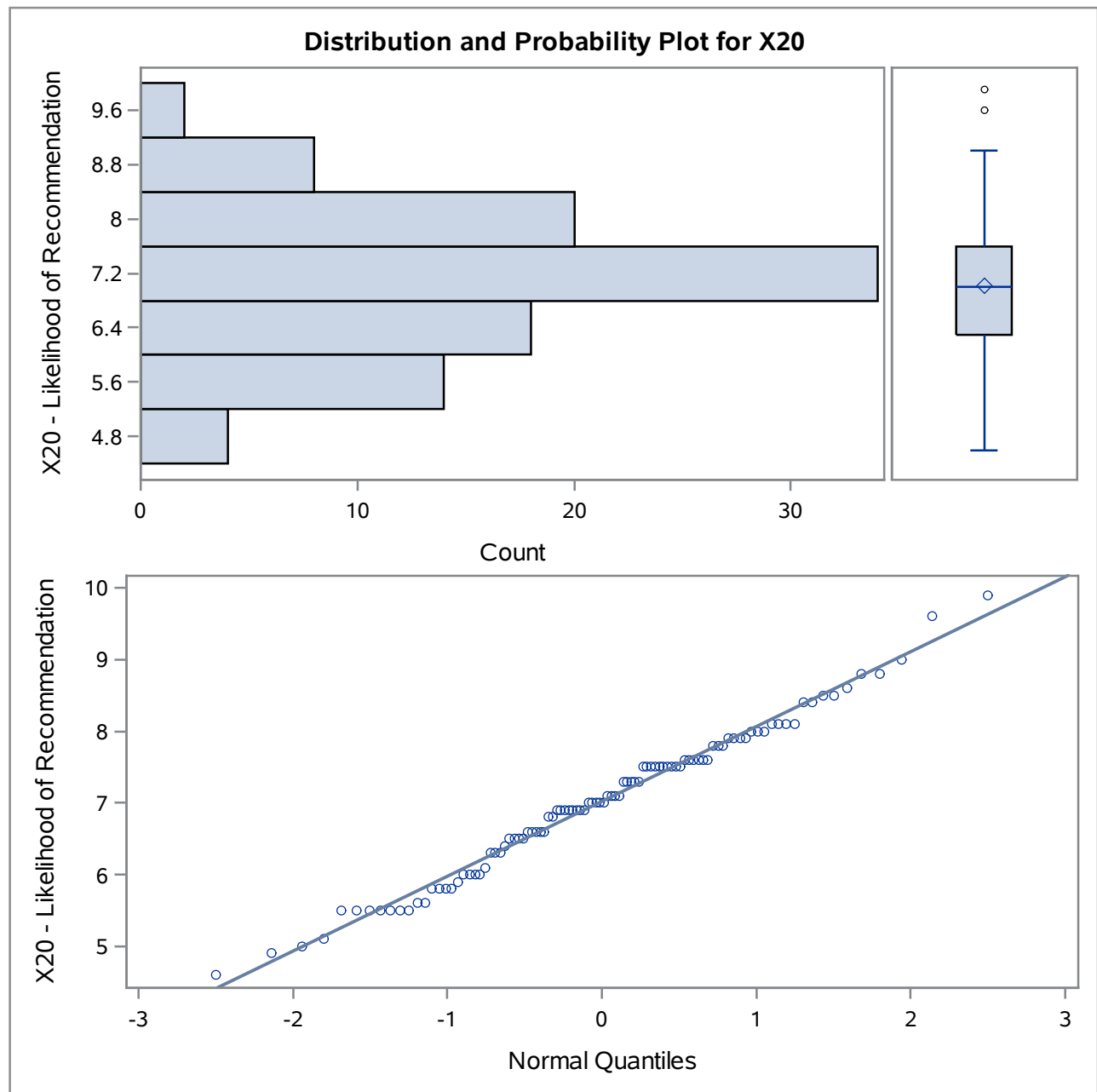
Quantiles (Definition 5)	
Level	Quantile
100% Max	9.90
99%	9.75
95%	8.70
90%	8.25
75% Q3	7.60
50% Median	7.00
25% Q1	6.30

The UNIVARIATE Procedure
Variable: X20 (X20 - Likelihood of Recommendation)

Quantiles (Definition 5)	
Level	Quantile
10%	5.50
5%	5.50
1%	4.75
0% Min	4.60

Extreme Observations			
Lowest		Highest	
Value	Obs	Value	Obs
4.6	36	8.8	47
4.9	25	8.8	74
5.0	92	9.0	53
5.1	84	9.6	22
5.5	97	9.9	38

The UNIVARIATE Procedure



The UNIVARIATE Procedure
Variable: X19 (X19 - Satisfaction)

X5 - Distribution System=0

Moments			
N	57	Sum Weights	57
Mean	6.38245614	Sum Observations	363.8
Std Deviation	0.98545182	Variance	0.97111529
Skewness	0.00654683	Kurtosis	-1.2628095
Uncorrected SS	2376.32	Corrected SS	54.3824561
Coeff Variation	15.4400093	Std Error Mean	0.13052628

Basic Statistical Measures			
Location		Variability	
Mean	6.382456	Std Deviation	0.98545
Median	6.400000	Variance	0.97112
Mode	5.400000	Range	3.50000
		Interquartile Range	1.90000

Tests for Location: Mu0=0				
Test	Statistic		p Value	
Student's t	t	48.89786	Pr > t 	<.0001
Sign	M	28.5	Pr >= M 	<.0001
Signed Rank	S	826.5	Pr >= S 	<.0001

Tests for Normality				
Test	Statistic		p Value	
Shapiro-Wilk	W	0.944705	Pr < W	0.0114
Kolmogorov-Smirnov	D	0.124119	Pr > D	0.0272
Cramer-von Mises	W-Sq	0.16214	Pr > W-Sq	0.0172
Anderson-Darling	A-Sq	1.054157	Pr > A-Sq	0.0086

Quantiles (Definition 5)	
Level	Quantile
100% Max	8.2
99%	8.2
95%	7.9
90%	7.6
75% Q3	7.3
50% Median	6.4

The UNIVARIATE Procedure
Variable: X19 (X19 - Satisfaction)

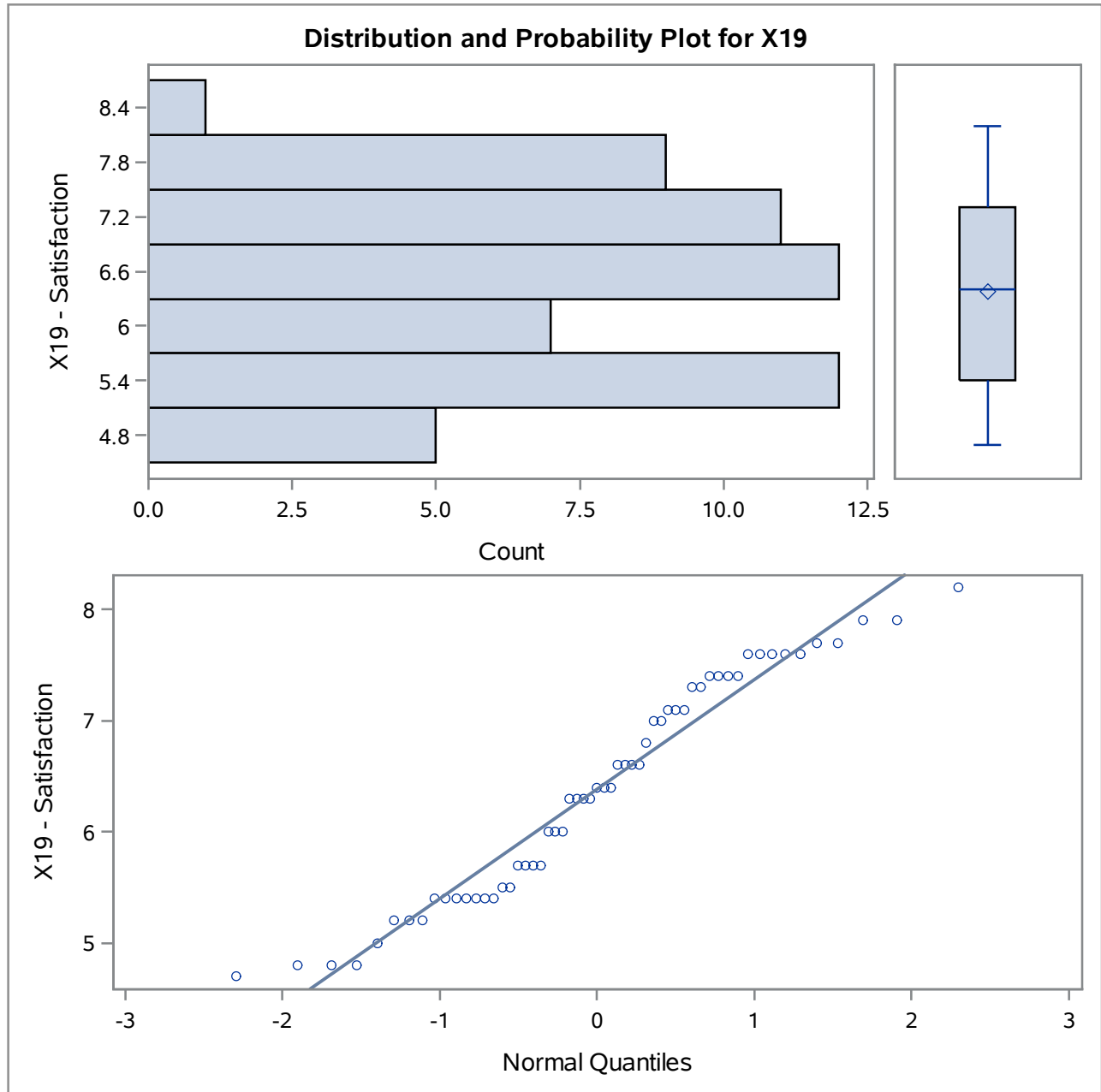
X5 - Distribution System=0

Quantiles (Definition 5)	
Level	Quantile
25% Q1	5.4
10%	5.2
5%	4.8
1%	4.7
0% Min	4.7

Extreme Observations					
Lowest			Highest		
Value	X5	Obs	Value	X5	Obs
4.7	0	3	7.7	0	34
4.8	0	55	7.7	0	56
4.8	0	14	7.9	0	37
4.8	0	2	7.9	0	46
5.0	0	51	8.2	0	35

The UNIVARIATE Procedure

X5 - Distribution System=0



The UNIVARIATE Procedure
Variable: X19 (X19 - Satisfaction)

X5 - Distribution System=1

Moments			
N	43	Sum Weights	43
Mean	7.62790698	Sum Observations	328
Std Deviation	1.07156441	Variance	1.14825028
Skewness	-0.1920377	Kurtosis	-0.8318361
Uncorrected SS	2550.18	Corrected SS	48.2265116
Coeff Variation	14.047948	Std Error Mean	0.16341204

Basic Statistical Measures			
Location		Variability	
Mean	7.627907	Std Deviation	1.07156
Median	7.600000	Variance	1.14825
Mode	7.600000	Range	4.50000
		Interquartile Range	2.00000

Note: The mode displayed is the smallest of 2 modes with a count of 5.

Tests for Location: Mu0=0				
Test	Statistic		p Value	
Student's t	t	46.67898	Pr > t 	<.0001
Sign	M	21.5	Pr >= M 	<.0001
Signed Rank	S	473	Pr >= S 	<.0001

Tests for Normality				
Test	Statistic		p Value	
Shapiro-Wilk	W	0.961101	Pr < W	0.1521
Kolmogorov-Smirnov	D	0.121894	Pr > D	0.1058
Cramer-von Mises	W-Sq	0.100658	Pr > W-Sq	0.1084
Anderson-Darling	A-Sq	0.662014	Pr > A-Sq	0.0821

Quantiles (Definition 5)	
Level	Quantile
100% Max	9.9
99%	9.9
95%	8.9
90%	8.9
75% Q3	8.6

The UNIVARIATE Procedure
Variable: X19 (X19 - Satisfaction)

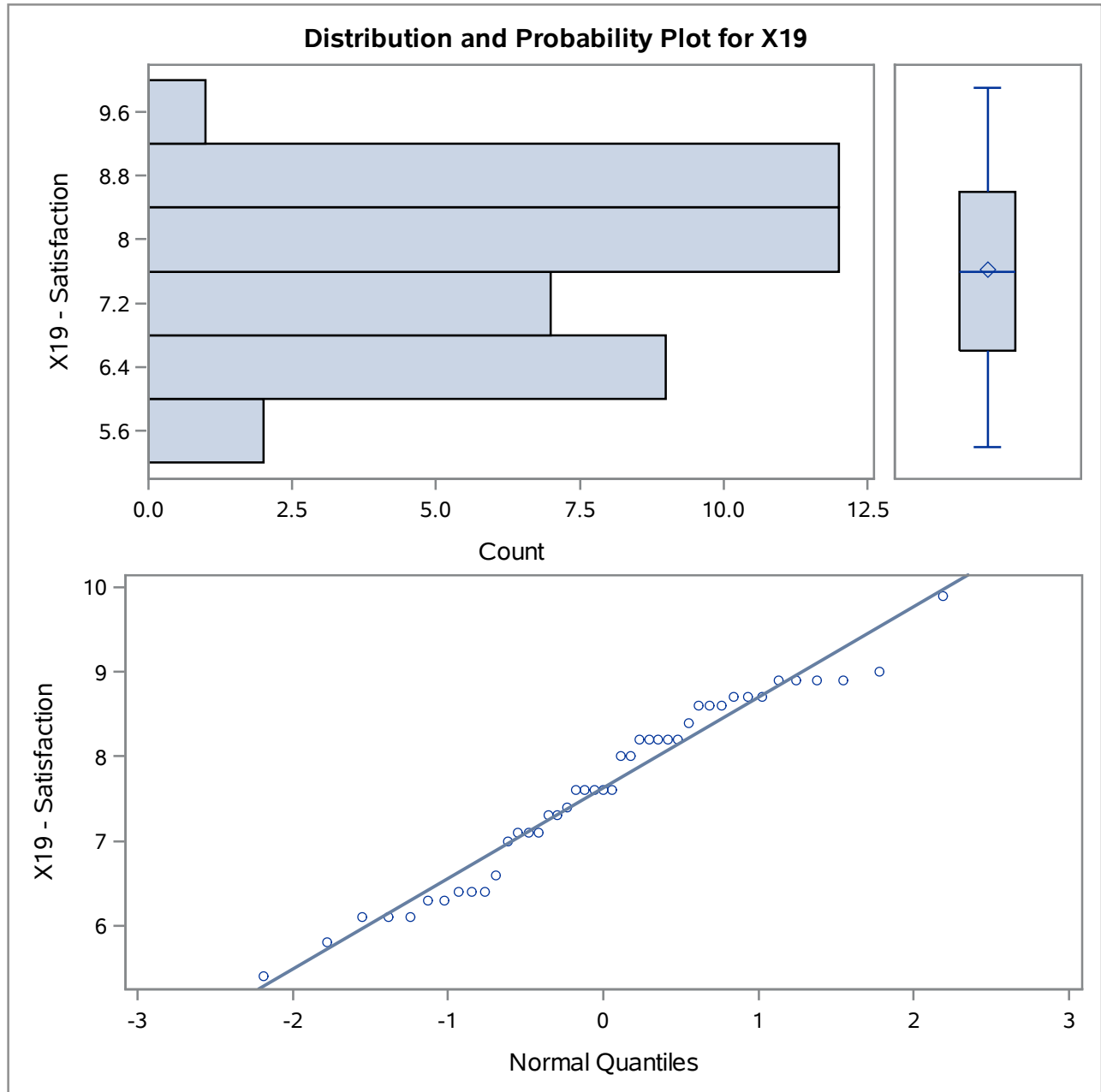
X5 - Distribution System=1

Quantiles (Definition 5)	
Level	Quantile
50% Median	7.6
25% Q1	6.6
10%	6.1
5%	6.1
1%	5.4
0% Min	5.4

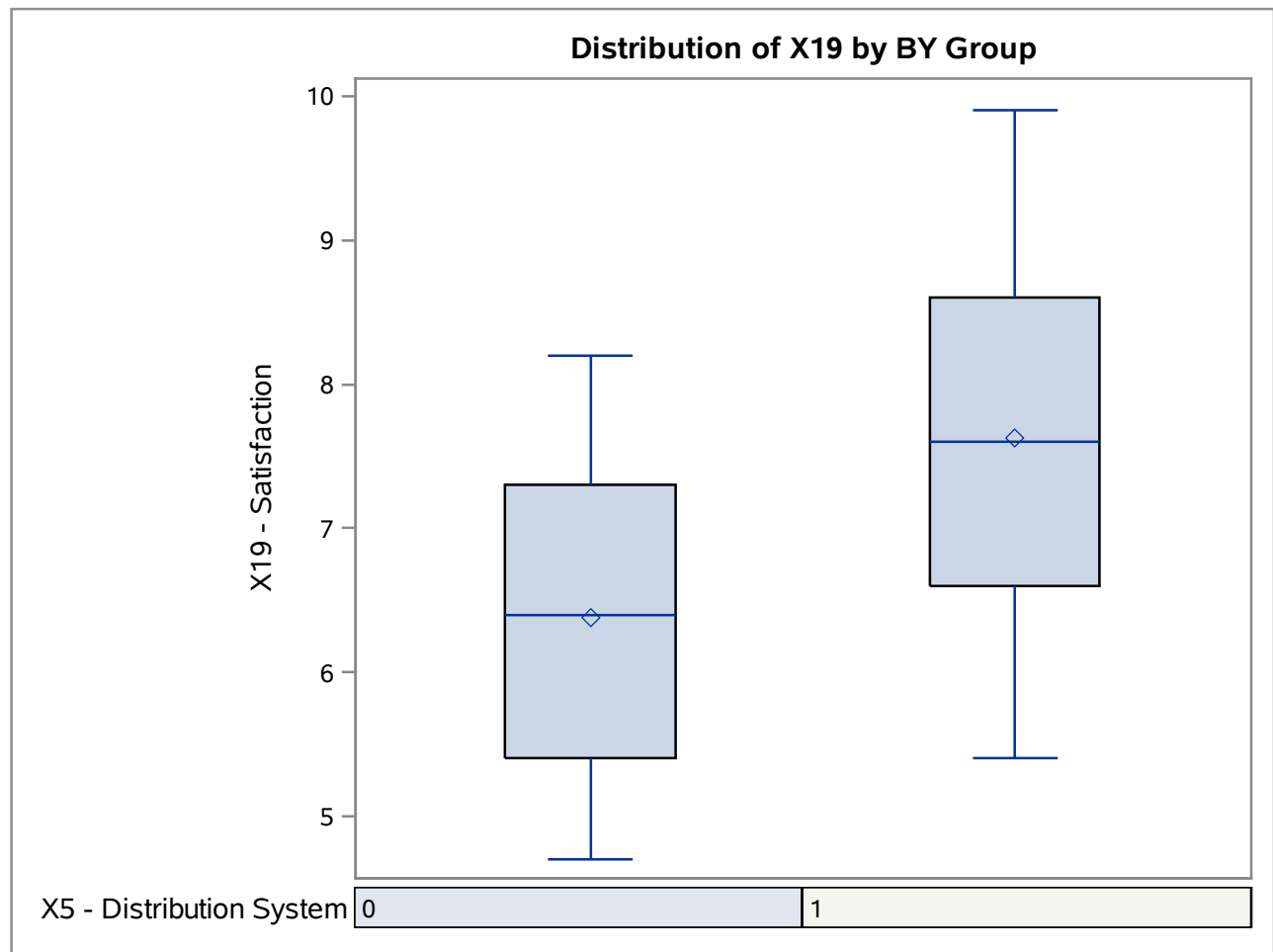
Extreme Observations					
Lowest			Highest		
Value	X5	Obs	Value	X5	Obs
5.4	1	99	8.9	1	73
5.8	1	84	8.9	1	89
6.1	1	83	8.9	1	96
6.1	1	79	9.0	1	80
6.1	1	69	9.9	1	66

The UNIVARIATE Procedure

X5 - Distribution System=1



The UNIVARIATE Procedure



The UNIVARIATE Procedure
Variable: X20 (X20 - Likelihood of Recommendation)

X5 - Distribution System=0

Moments			
N	57	Sum Weights	57
Mean	6.65964912	Sum Observations	379.6
Std Deviation	0.9676665	Variance	0.93637845
Skewness	-0.0361836	Kurtosis	-0.6903364
Uncorrected SS	2580.44	Corrected SS	52.437193
Coeff Variation	14.5302925	Std Error Mean	0.12817056

Basic Statistical Measures			
Location		Variability	
Mean	6.659649	Std Deviation	0.96767
Median	6.600000	Variance	0.93638
Mode	7.500000	Range	4.00000
		Interquartile Range	1.70000

Tests for Location: Mu0=0				
Test	Statistic		p Value	
Student's t	t	51.95927	Pr > t 	<.0001
Sign	M	28.5	Pr >= M 	<.0001
Signed Rank	S	826.5	Pr >= S 	<.0001

Tests for Normality				
Test	Statistic		p Value	
Shapiro-Wilk	W	0.97818	Pr < W	0.3903
Kolmogorov-Smirnov	D	0.088122	Pr > D	>0.1500
Cramer-von Mises	W-Sq	0.070271	Pr > W-Sq	>0.2500
Anderson-Darling	A-Sq	0.431285	Pr > A-Sq	>0.2500

Quantiles (Definition 5)	
Level	Quantile
100% Max	8.6
99%	8.6
95%	8.5
90%	7.9
75% Q3	7.5
50% Median	6.6

The UNIVARIATE Procedure
Variable: X20 (X20 - Likelihood of Recommendation)

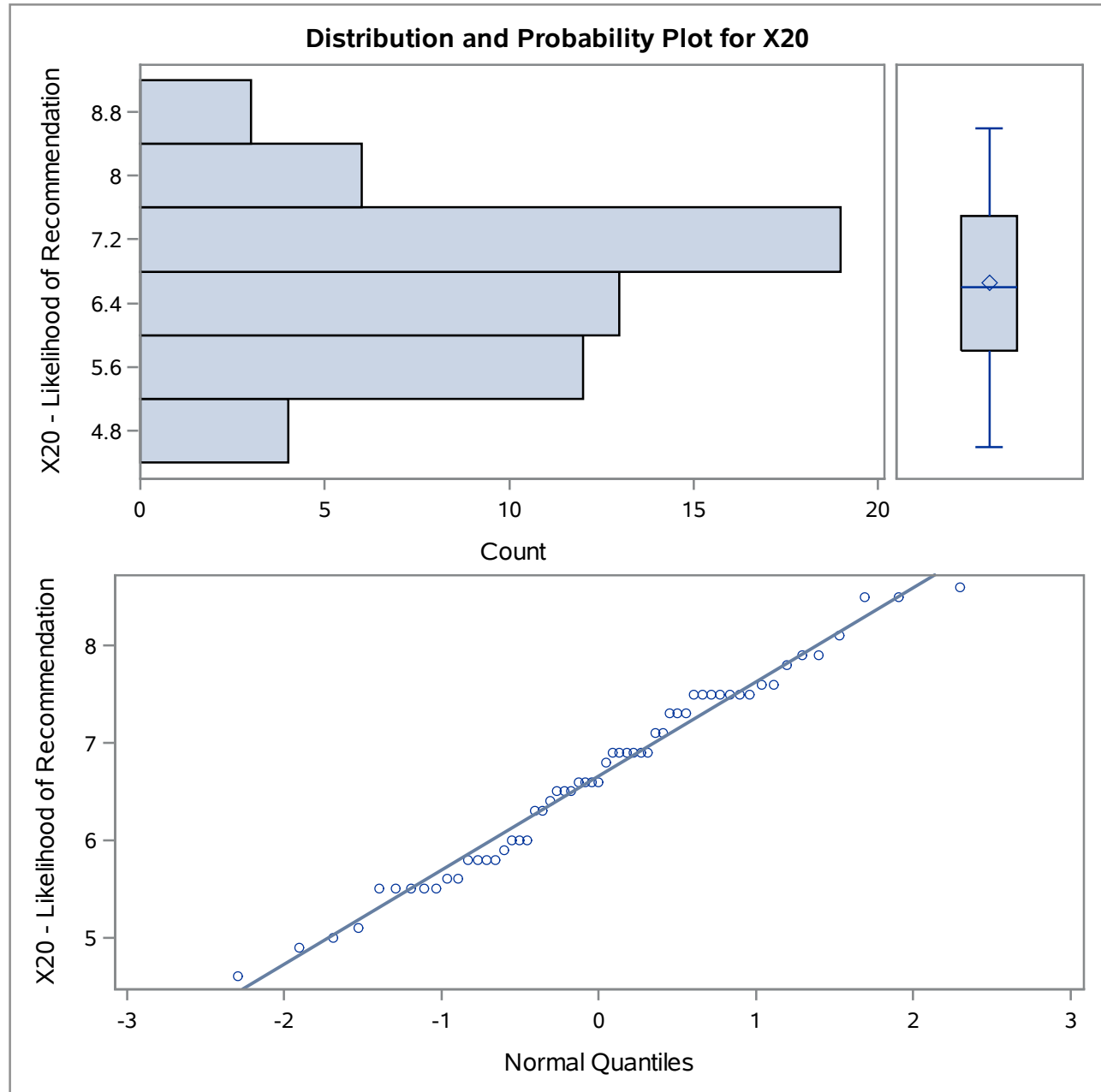
X5 - Distribution System=0

Quantiles (Definition 5)	
Level	Quantile
25% Q1	5.8
10%	5.5
5%	5.0
1%	4.6
0% Min	4.6

Extreme Observations					
Lowest			Highest		
Value	X5	Obs	Value	X5	Obs
4.6	0	24	7.9	0	54
4.9	0	14	8.1	0	33
5.0	0	55	8.5	0	12
5.1	0	51	8.5	0	37
5.5	0	53	8.6	0	29

The UNIVARIATE Procedure

X5 - Distribution System=0



The UNIVARIATE Procedure
Variable: X20 (X20 - Likelihood of Recommendation)

X5 - Distribution System=1

Moments			
N	43	Sum Weights	43
Mean	7.49767442	Sum Observations	322.4
Std Deviation	0.95256255	Variance	0.90737542
Skewness	0.19260946	Kurtosis	0.47361591
Uncorrected SS	2455.36	Corrected SS	38.1097674
Coeff Variation	12.7047735	Std Error Mean	0.14526443

Basic Statistical Measures			
Location		Variability	
Mean	7.497674	Std Deviation	0.95256
Median	7.500000	Variance	0.90738
Mode	7.000000	Range	4.40000
		Interquartile Range	1.00000

Tests for Location: Mu0=0				
Test	Statistic		p Value	
Student's t	t	51.61397	Pr > t 	<.0001
Sign	M	21.5	Pr >= M 	<.0001
Signed Rank	S	473	Pr >= S 	<.0001

Tests for Normality				
Test	Statistic		p Value	
Shapiro-Wilk	W	0.980277	Pr < W	0.6584
Kolmogorov-Smirnov	D	0.100798	Pr > D	>0.1500
Cramer-von Mises	W-Sq	0.050482	Pr > W-Sq	>0.2500
Anderson-Darling	A-Sq	0.321261	Pr > A-Sq	>0.2500

Quantiles (Definition 5)	
Level	Quantile
100% Max	9.9
99%	9.9
95%	9.0
90%	8.8
75% Q3	8.0
50% Median	7.5

The UNIVARIATE Procedure
Variable: X20 (X20 - Likelihood of Recommendation)

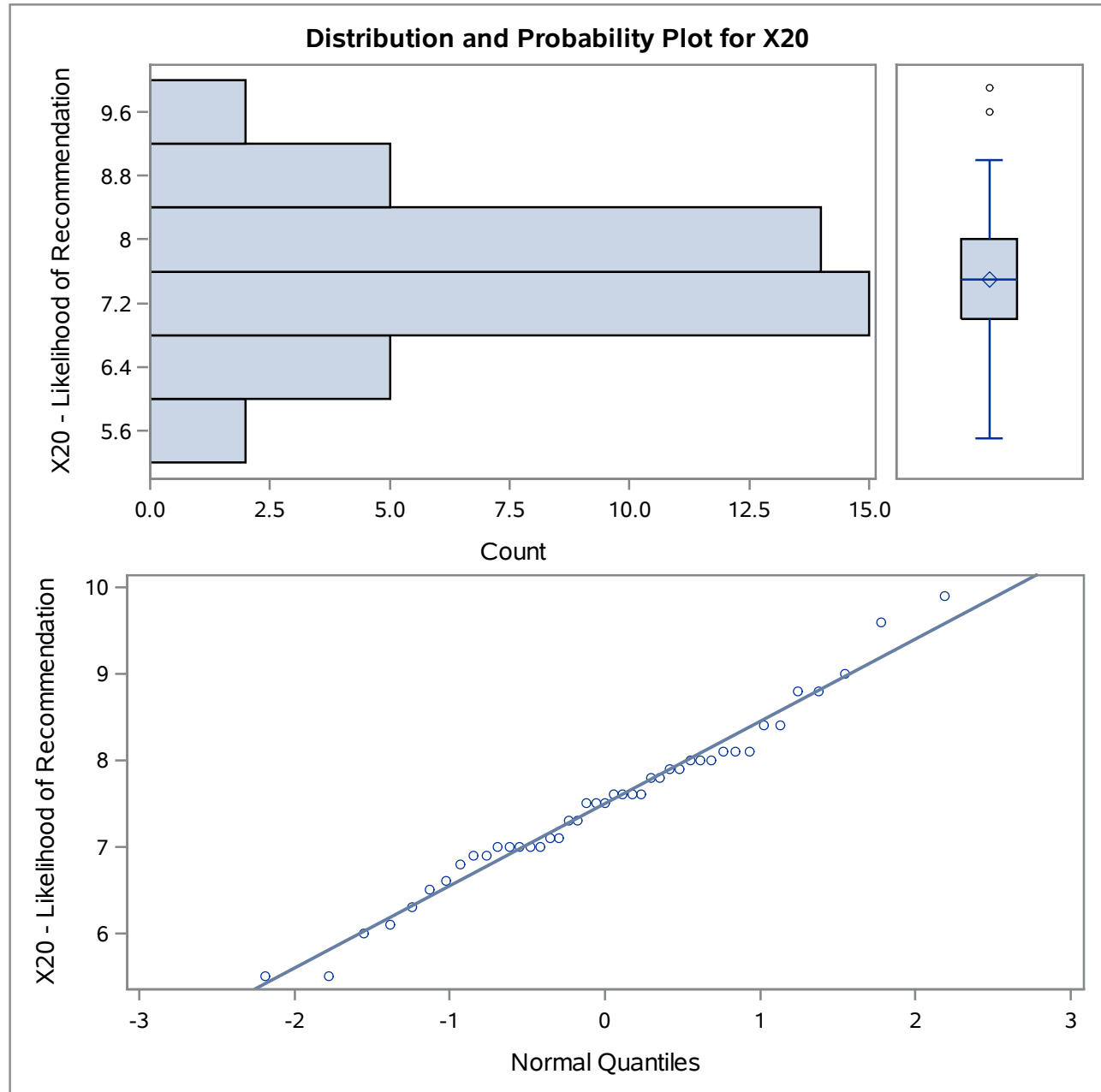
X5 - Distribution System=1

Quantiles (Definition 5)	
Level	Quantile
25% Q1	7.0
10%	6.3
5%	6.0
1%	5.5
0% Min	5.5

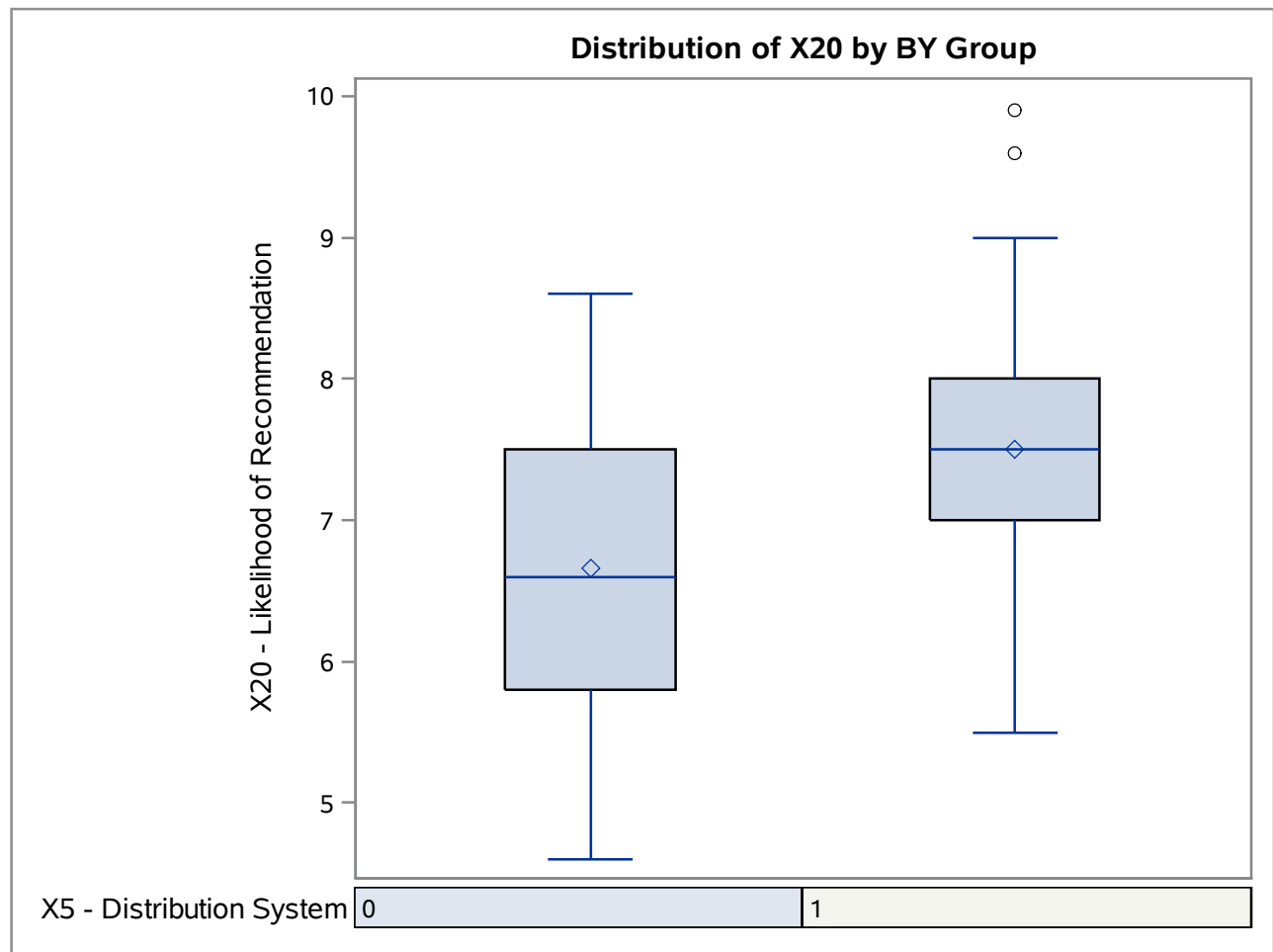
Extreme Observations					
Lowest			Highest		
Value	X5	Obs	Value	X5	Obs
5.5	1	98	8.8	1	75
5.5	1	82	8.8	1	85
6.0	1	84	9.0	1	78
6.1	1	90	9.6	1	66
6.3	1	83	9.9	1	71

The UNIVARIATE Procedure

X5 - Distribution System=1



The UNIVARIATE Procedure



The TTEST Procedure

Variable: X19 (X19 - Satisfaction)

X5	N	Mean	Std Dev	Std Err	Minimum	Maximum
0	57	6.3825	0.9855	0.1305	4.7000	8.2000
1	43	7.6279	1.0716	0.1634	5.4000	9.9000
Diff (1-2)		-1.2455	1.0232	0.2067		

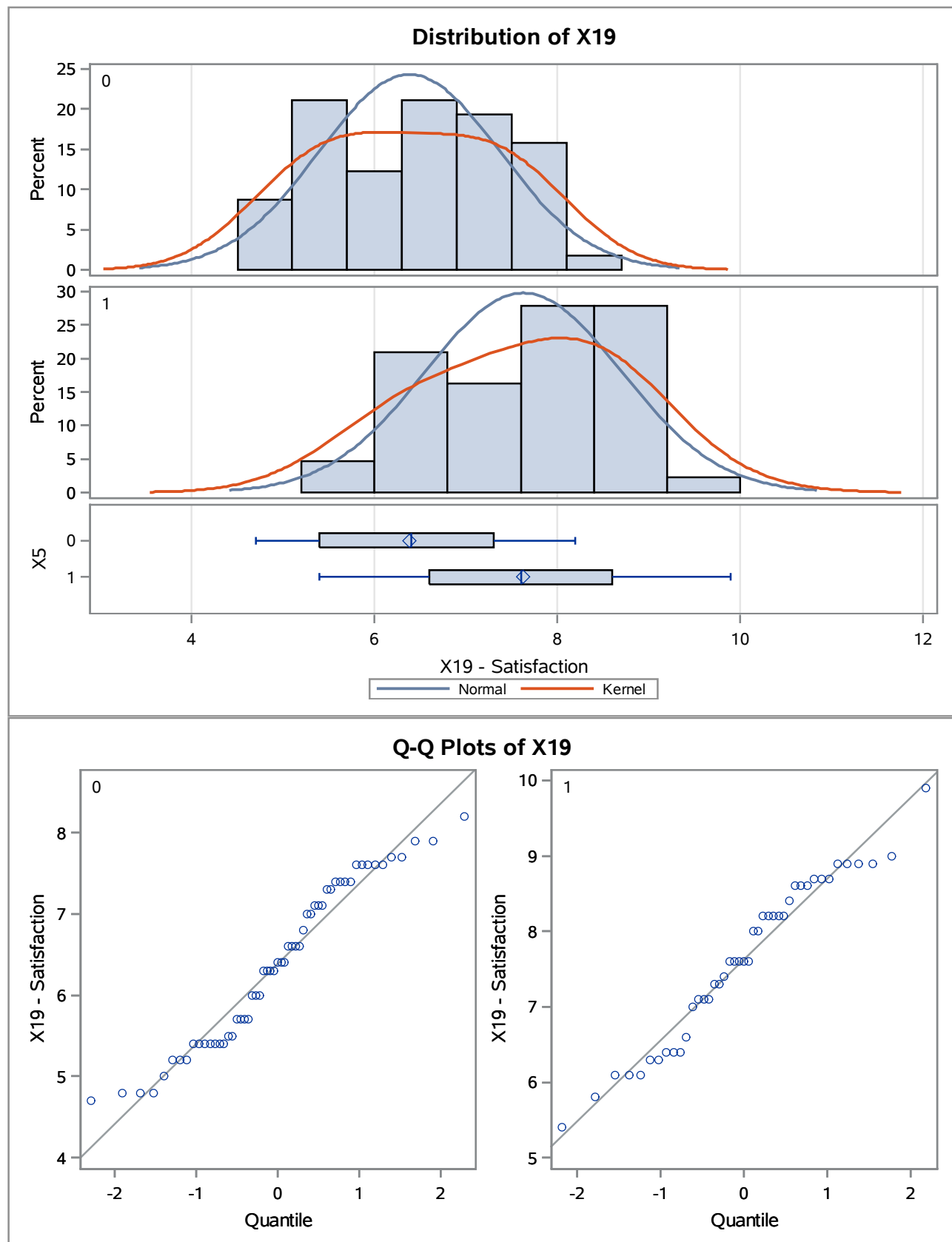
X5	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
0		6.3825	6.1210	6.6439	0.9855	0.8320	1.2089
1		7.6279	7.2981	7.9577	1.0716	0.8835	1.3620
Diff (1-2)	Pooled	-1.2455	-1.6556	-0.8353	1.0232	0.8979	1.1897
Diff (1-2)	Satterthwaite	-1.2455	-1.6612	-0.8297			

Method	Variances	DF	t Value	Pr > t
Pooled	Equal	98	-6.03	<.0001
Satterthwaite	Unequal	86.333	-5.96	<.0001

Equality of Variances				
Method	Num DF	Den DF	F Value	Pr > F
Folded F	42	56	1.18	0.5531

The TTEST Procedure

Variable: X19 (X19 - Satisfaction)



The TTEST Procedure

Variable: X20 (X20 - Likelihood of Recommendation)

Variable: X20 (X20 - Likelihood of Recommendation)

X5	N	Mean	Std Dev	Std Err	Minimum	Maximum
0	57	6.6596	0.9677	0.1282	4.6000	8.6000
1	43	7.4977	0.9526	0.1453	5.5000	9.9000
Diff (1-2)		-0.8380	0.9612	0.1942		

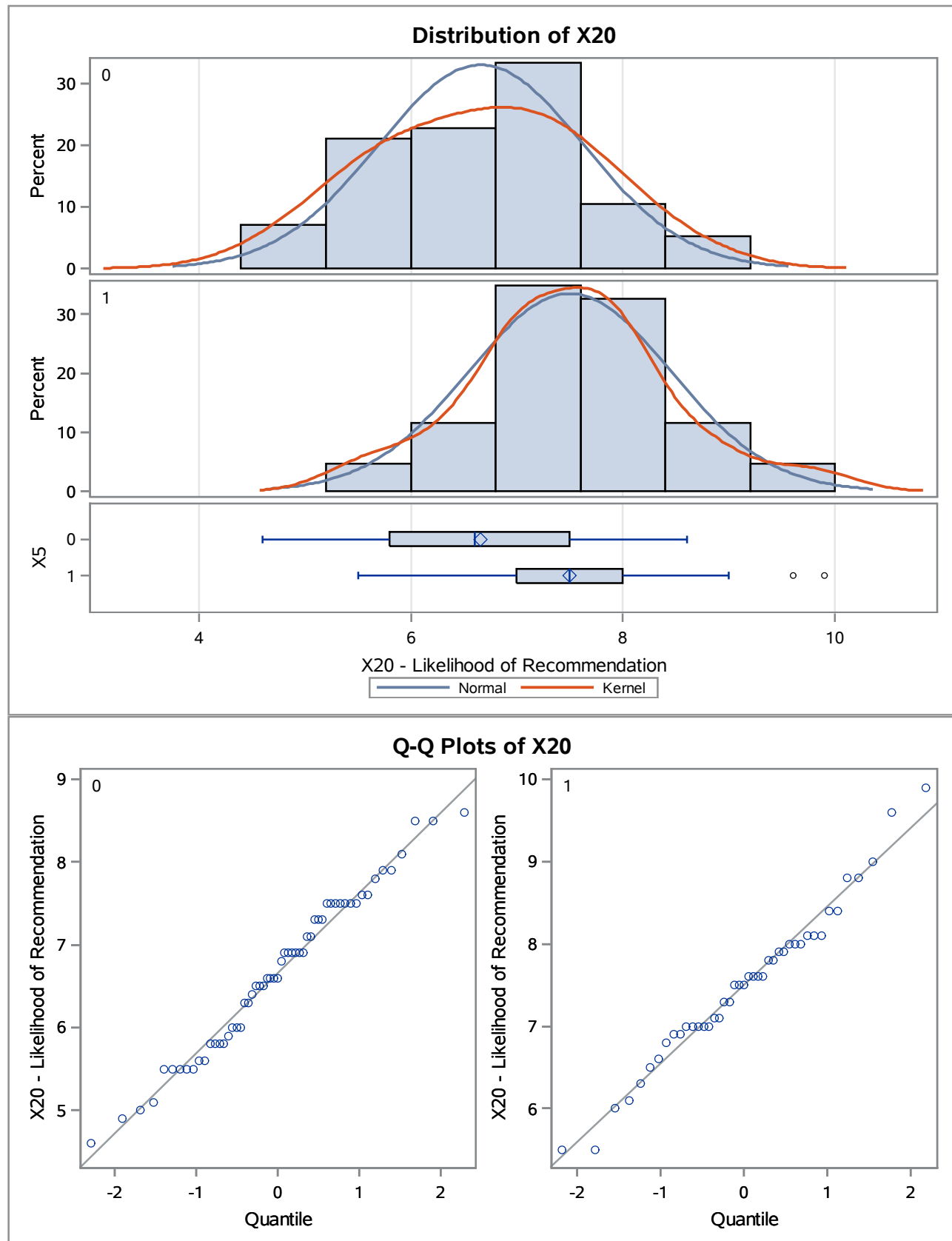
X5	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
0		6.6596	6.4029	6.9164	0.9677	0.8170	1.1871
1		7.4977	7.2045	7.7908	0.9526	0.7854	1.2107
Diff (1-2)	Pooled	-0.8380	-1.2233	-0.4527	0.9612	0.8434	1.1175
Diff (1-2)	Satterthwaite	-0.8380	-1.2228	-0.4532			

Method	Variances	DF	t Value	Pr > t
Pooled	Equal	98	-4.32	<.0001
Satterthwaite	Unequal	91.333	-4.33	<.0001

Equality of Variances				
Method	Num DF	Den DF	F Value	Pr > F
Folded F	56	42	1.03	0.9247

The TTEST Procedure

Variable: X20 (X20 - Likelihood of Recommendation)



The ANOVA Procedure

Class Level Information		
Class	Levels	Values
X5	2	0 1

Number of Observations Read	100
Number of Observations Used	100

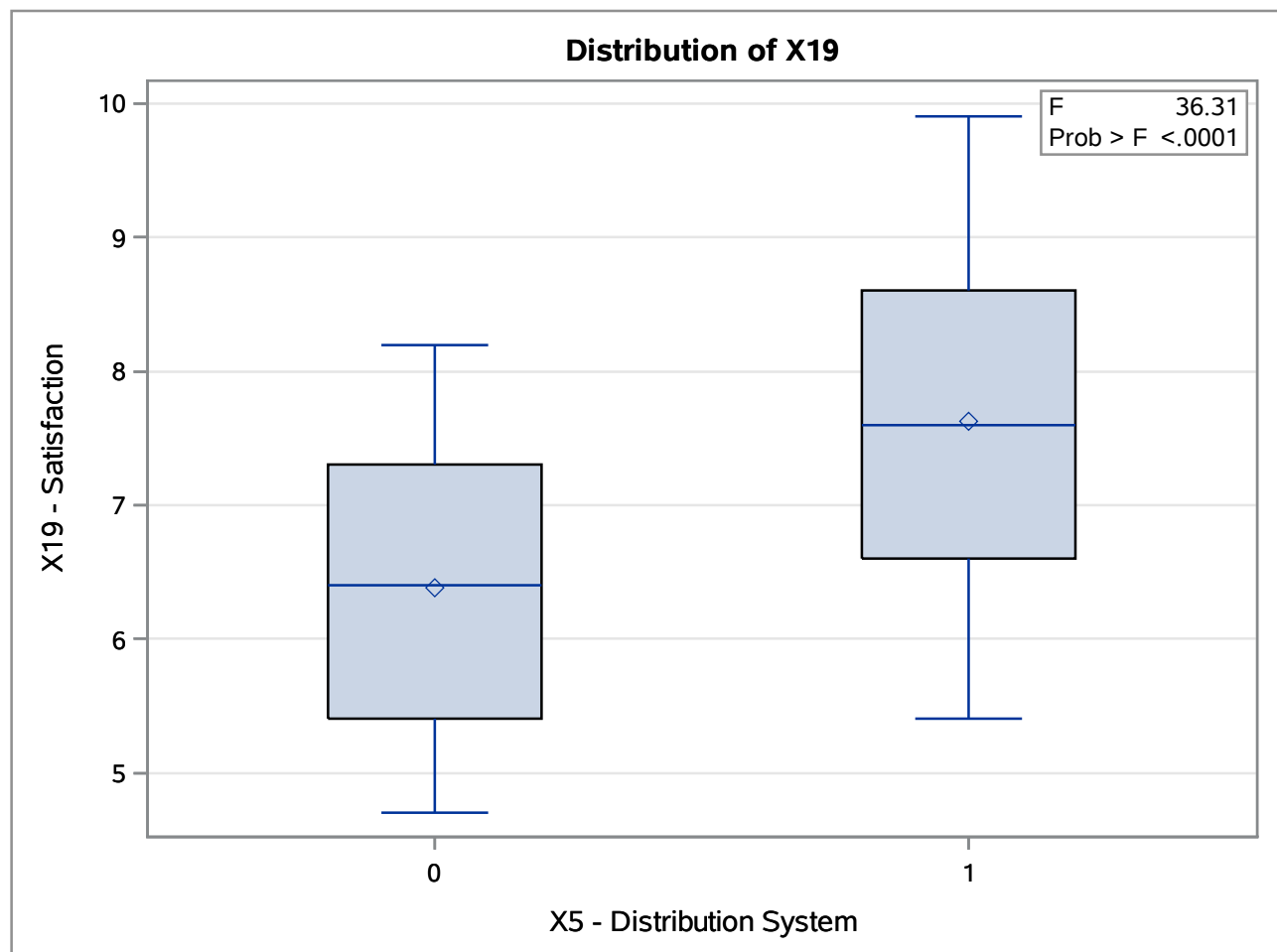
The ANOVA Procedure

Dependent Variable: X19 X19 - Satisfaction

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	38.0186322	38.0186322	36.31	<.0001
Error	98	102.6089678	1.0470303		
Corrected Total	99	140.6276000			

R-Square	Coeff Var	Root MSE	X19 Mean
0.270350	14.79105	1.023245	6.918000

Source	DF	Anova SS	Mean Square	F Value	Pr > F
X5	1	38.01863223	38.01863223	36.31	<.0001



The ANOVA Procedure

Class Level Information		
Class	Levels	Values
X5	2	0 1

Number of Observations Read	100
Number of Observations Used	100

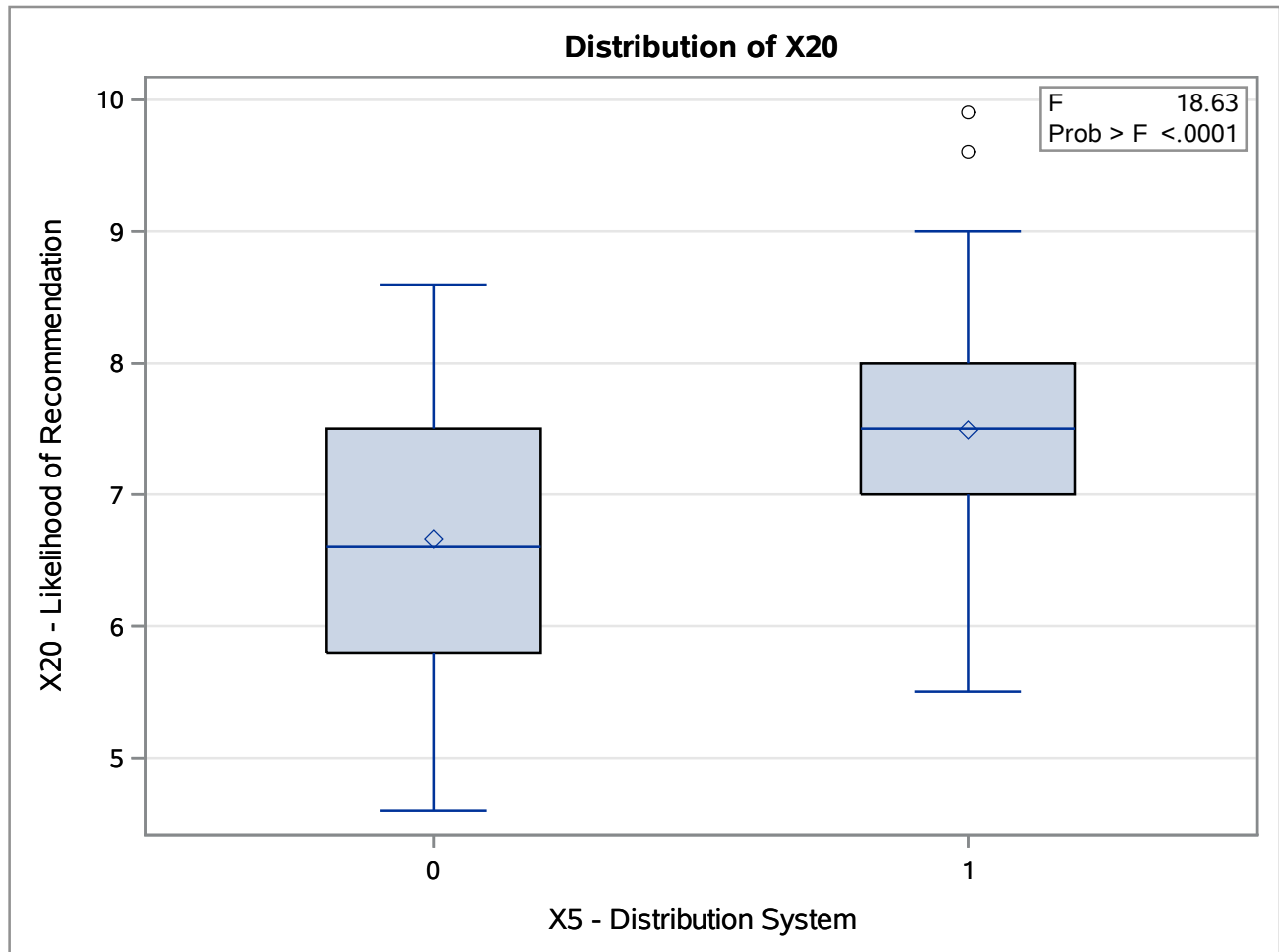
The ANOVA Procedure

Dependent Variable: X20 X20 - Likelihood of Recommendation

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	17.2130396	17.2130396	18.63	<.0001
Error	98	90.5469604	0.9239486		
Corrected Total	99	107.7600000			

R-Square	Coeff Var	Root MSE	X20 Mean
0.159735	13.69263	0.961222	7.020000

Source	DF	Anova SS	Mean Square	F Value	Pr > F
X5	1	17.21303958	17.21303958	18.63	<.0001



The REG Procedure
Model: MODEL1
Dependent Variable: X19 X19 - Satisfaction

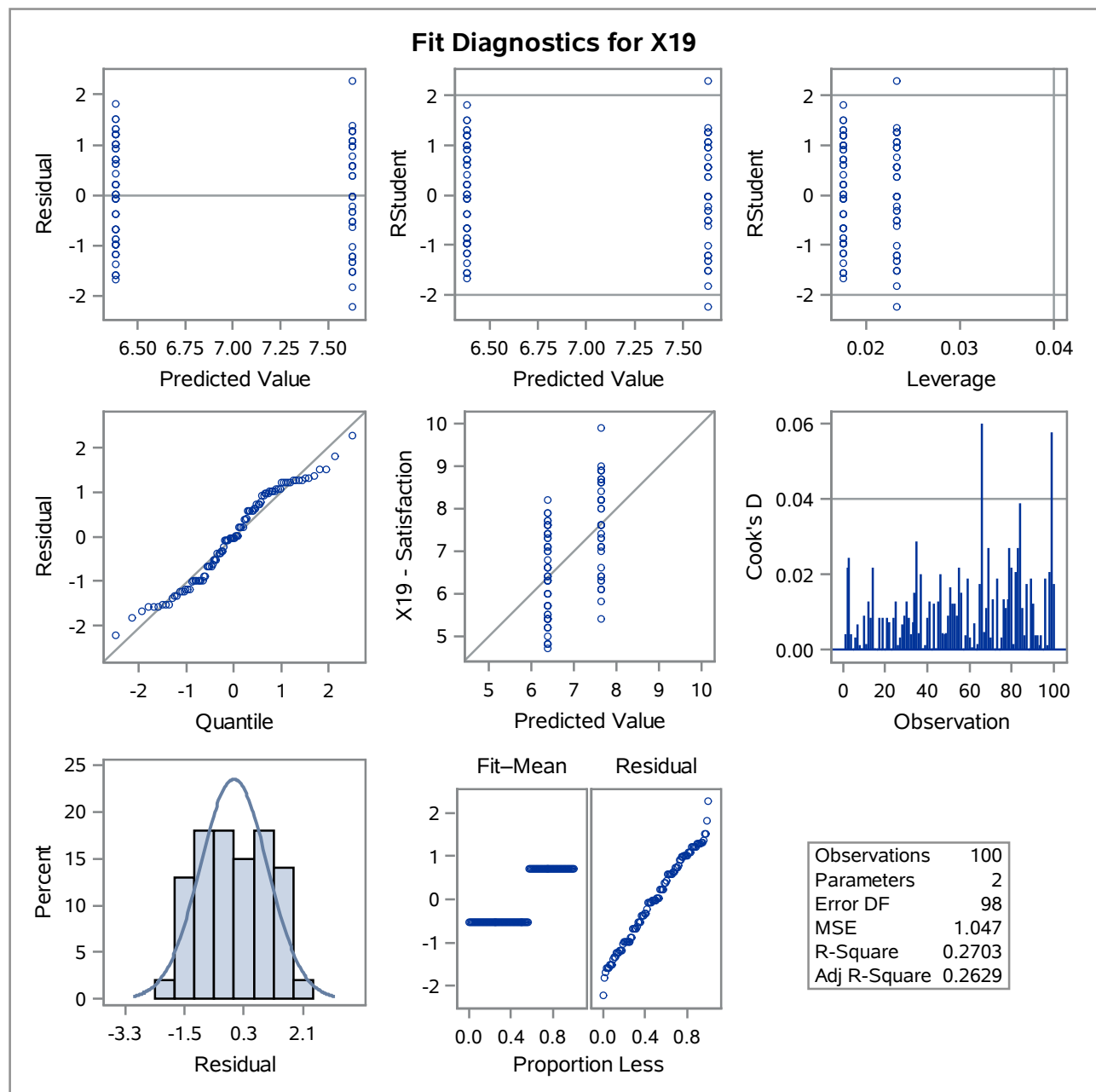
Number of Observations Read	100
Number of Observations Used	100

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	38.01863	38.01863	36.31	<.0001
Error	98	102.60897	1.04703		
Corrected Total	99	140.62760			

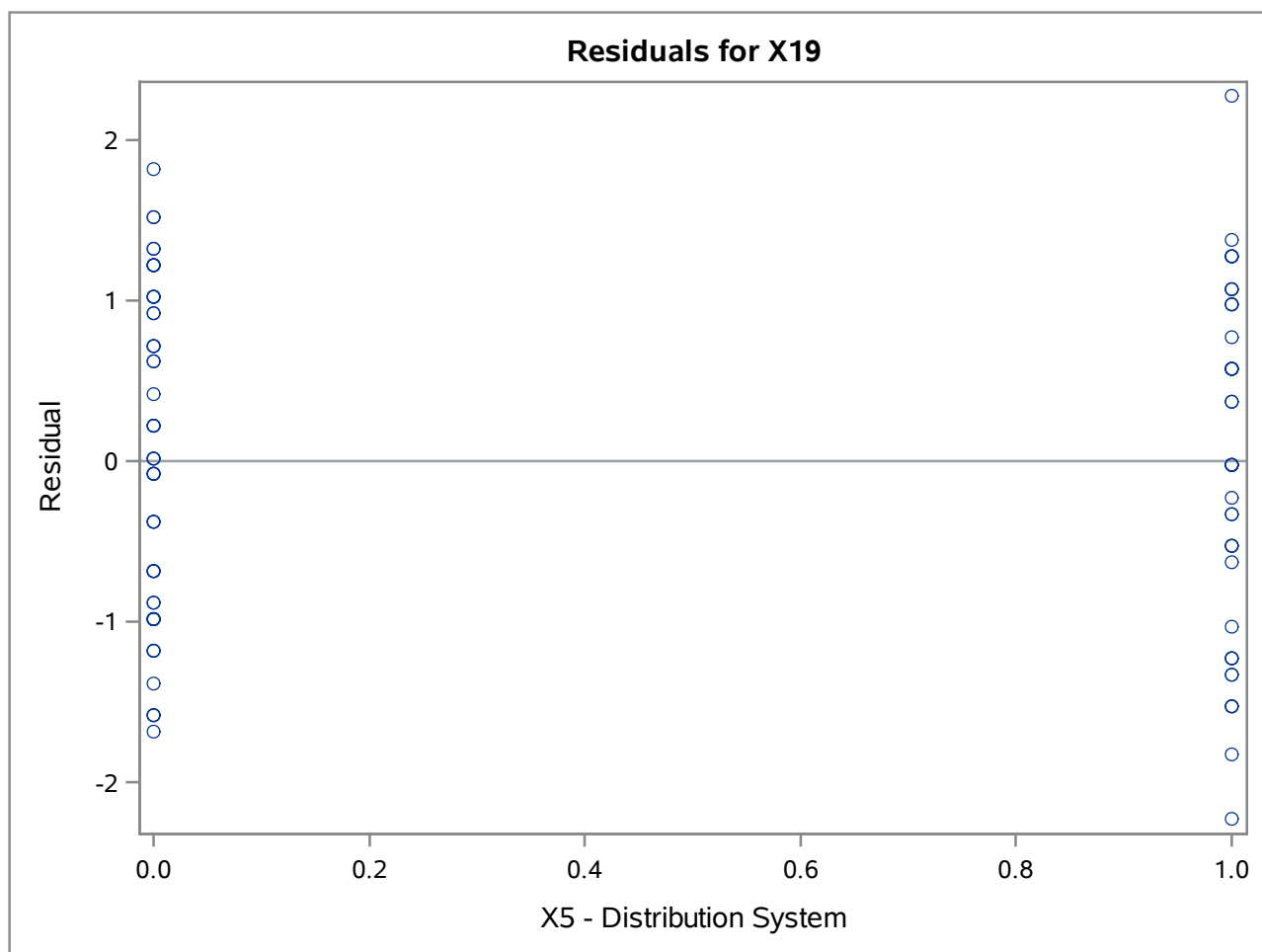
Root MSE	1.02324	R-Square	0.2703
Dependent Mean	6.91800	Adj R-Sq	0.2629
Coeff Var	14.79105		

Parameter Estimates						
Variable	Label	DF	Parameter Estimate	Standard Error	t Value	Pr > t
Intercept	Intercept	1	6.38246	0.13553	47.09	<.0001
X5	X5 - Distribution System	1	1.24545	0.20668	6.03	<.0001

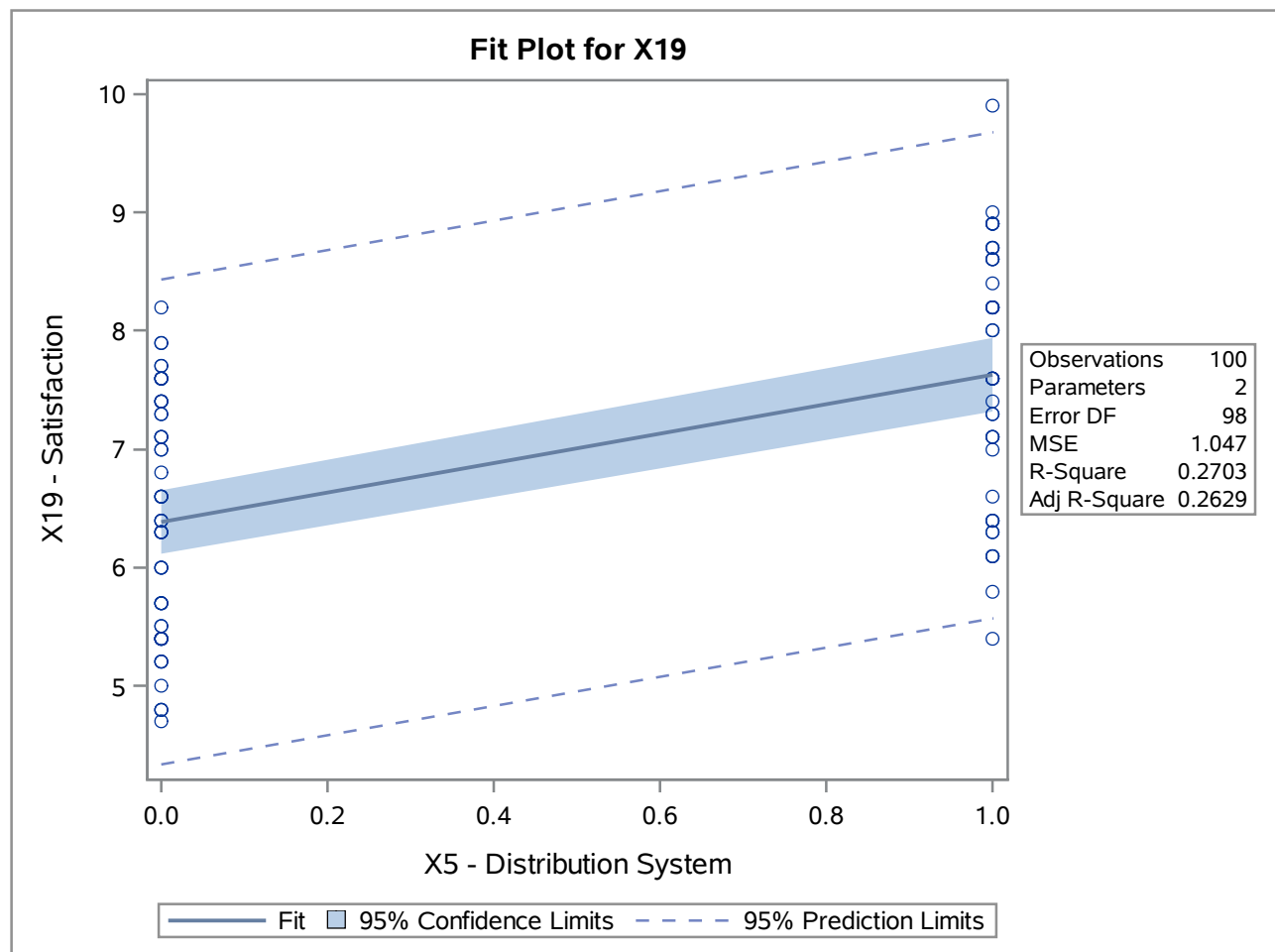
The REG Procedure
Model: MODEL1
Dependent Variable: X19 X19 - Satisfaction



The REG Procedure
Model: MODEL1
Dependent Variable: X19 X19 - Satisfaction



The REG Procedure
Model: MODEL1
Dependent Variable: X19 X19 - Satisfaction



The REG Procedure

Model: MODEL1

Dependent Variable: X20 X20 - Likelihood of Recommendation

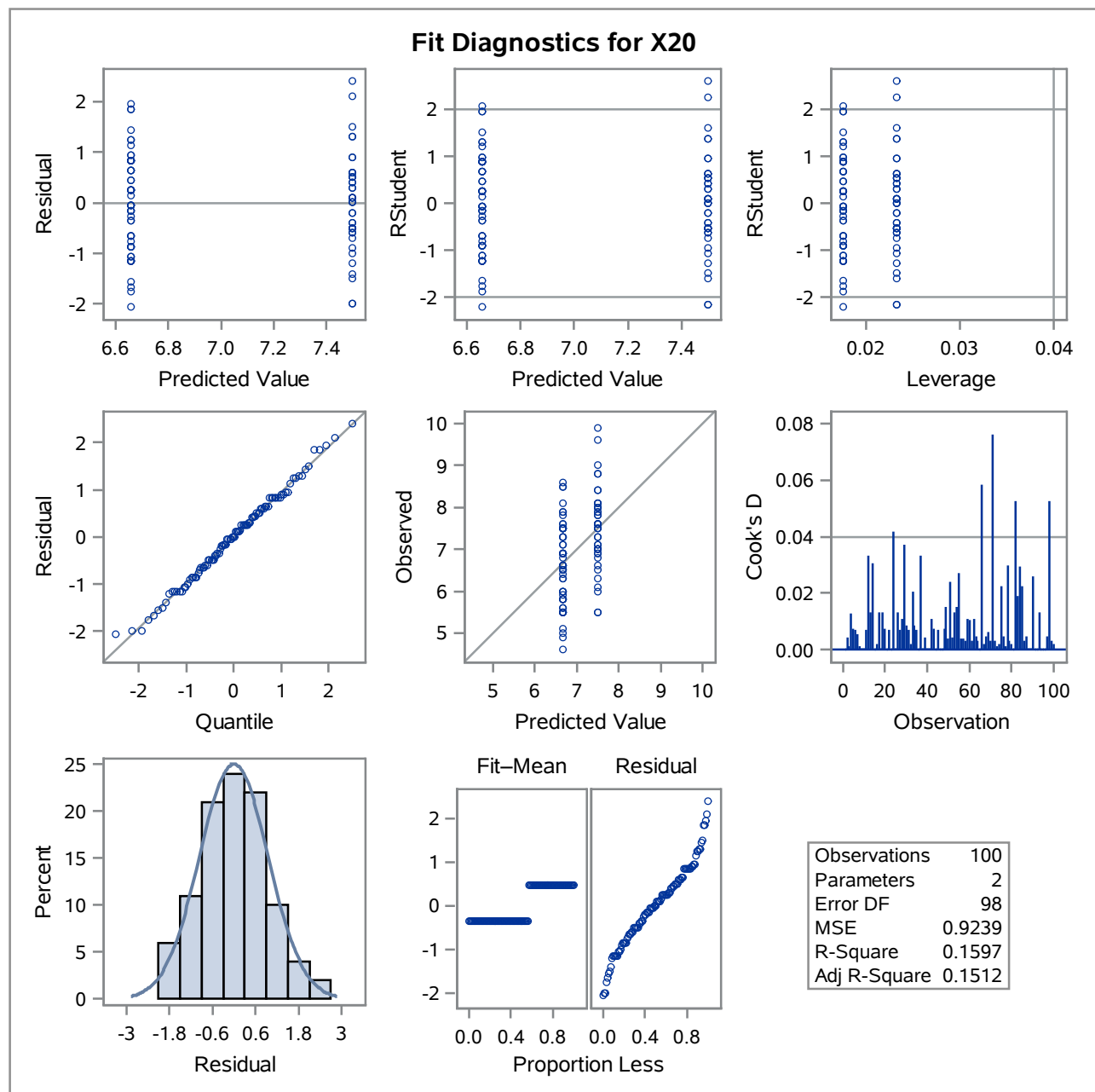
Number of Observations Read	100
Number of Observations Used	100

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	17.21304	17.21304	18.63	<.0001
Error	98	90.54696	0.92395		
Corrected Total	99	107.76000			

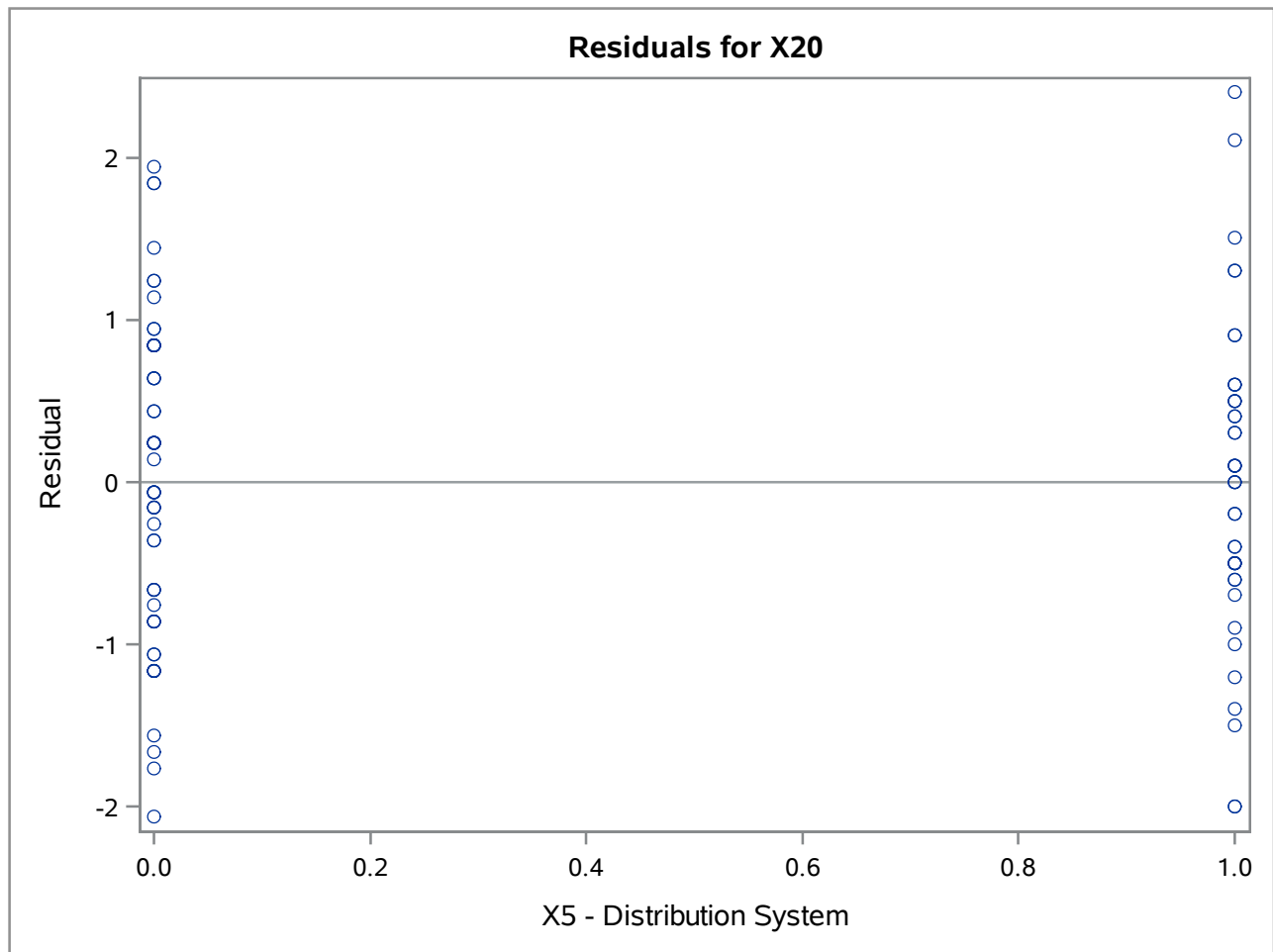
Root MSE	0.96122	R-Square	0.1597
Dependent Mean	7.02000	Adj R-Sq	0.1512
Coeff Var	13.69263		

Parameter Estimates						
Variable	Label	DF	Parameter Estimate	Standard Error	t Value	Pr > t
Intercept	Intercept	1	6.65965	0.12732	52.31	<.0001
X5	X5 - Distribution System	1	0.83803	0.19416	4.32	<.0001

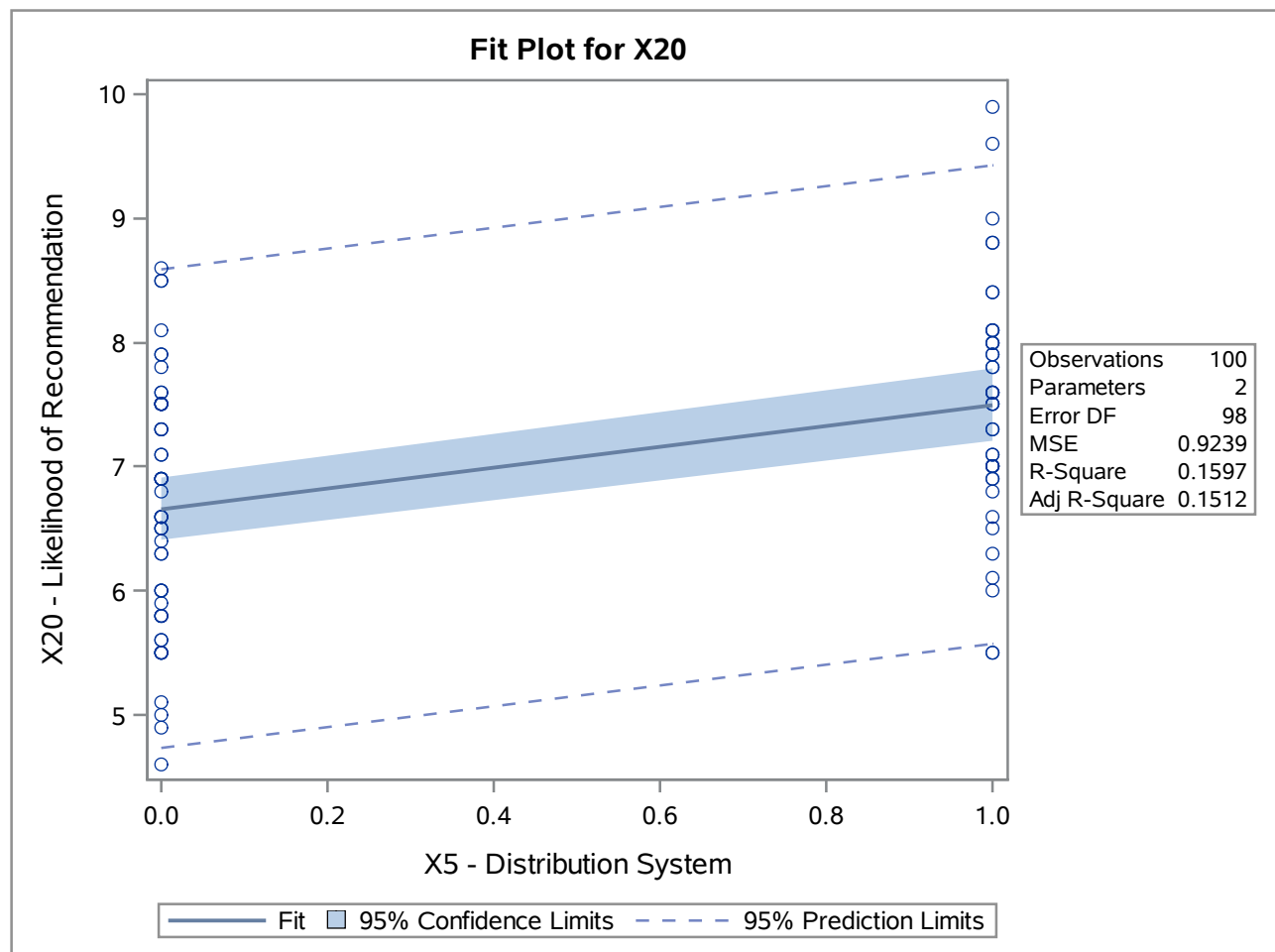
The REG Procedure
Model: MODEL1
Dependent Variable: X20 X20 - Likelihood of Recommendation



The REG Procedure
Model: MODEL1
Dependent Variable: X20 X20 - Likelihood of Recommendation



The REG Procedure
Model: MODEL1
Dependent Variable: X20 X20 - Likelihood of Recommendation



The GLM Procedure

Class Level Information		
Class	Levels	Values
X5	2	0 1

Number of Observations Read	100
Number of Observations Used	100

The GLM Procedure

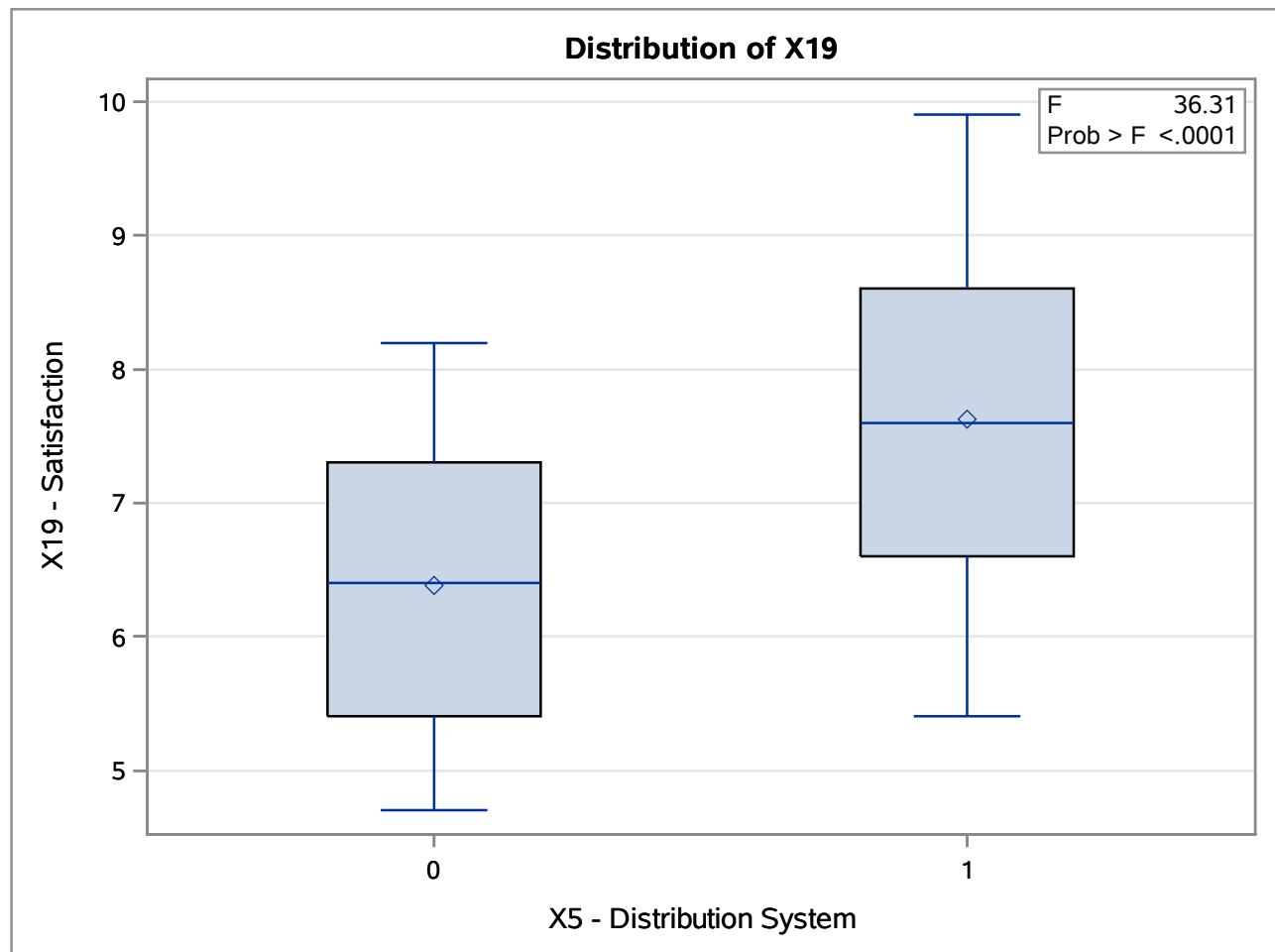
Dependent Variable: X19 X19 - Satisfaction

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	38.0186322	38.0186322	36.31	<.0001
Error	98	102.6089678	1.0470303		
Corrected Total	99	140.6276000			

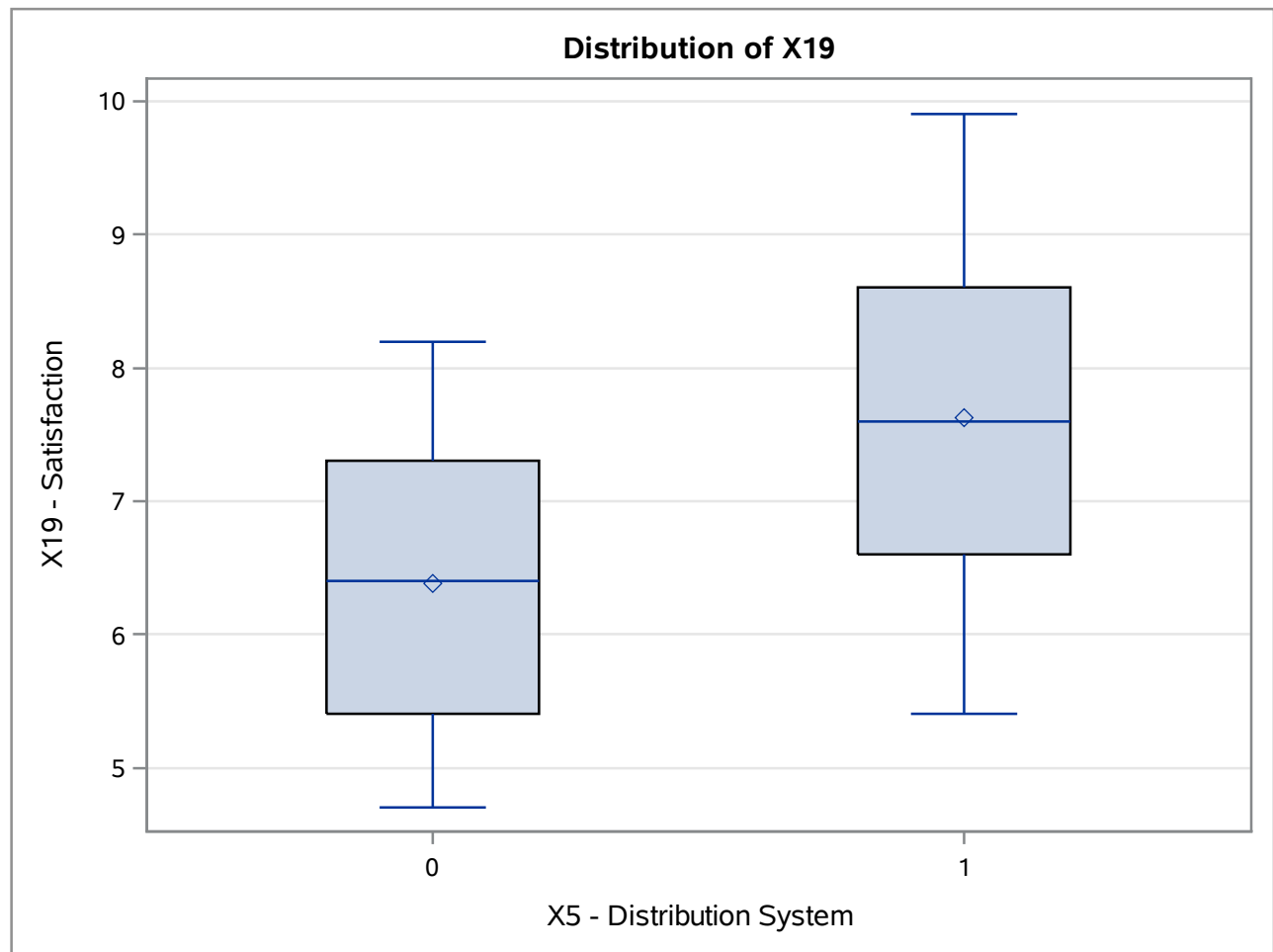
R-Square	Coeff Var	Root MSE	X19 Mean
0.270350	14.79105	1.023245	6.918000

Source	DF	Type I SS	Mean Square	F Value	Pr > F
X5	1	38.01863223	38.01863223	36.31	<.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
X5	1	38.01863223	38.01863223	36.31	<.0001



The GLM Procedure



Level of X5	N	X19	
		Mean	Std Dev
0	57	6.38245614	0.98545182
1	43	7.62790698	1.07156441

The GLM Procedure

Class Level Information		
Class	Levels	Values
X5	2	0 1

Number of Observations Read	100
Number of Observations Used	100

The GLM Procedure

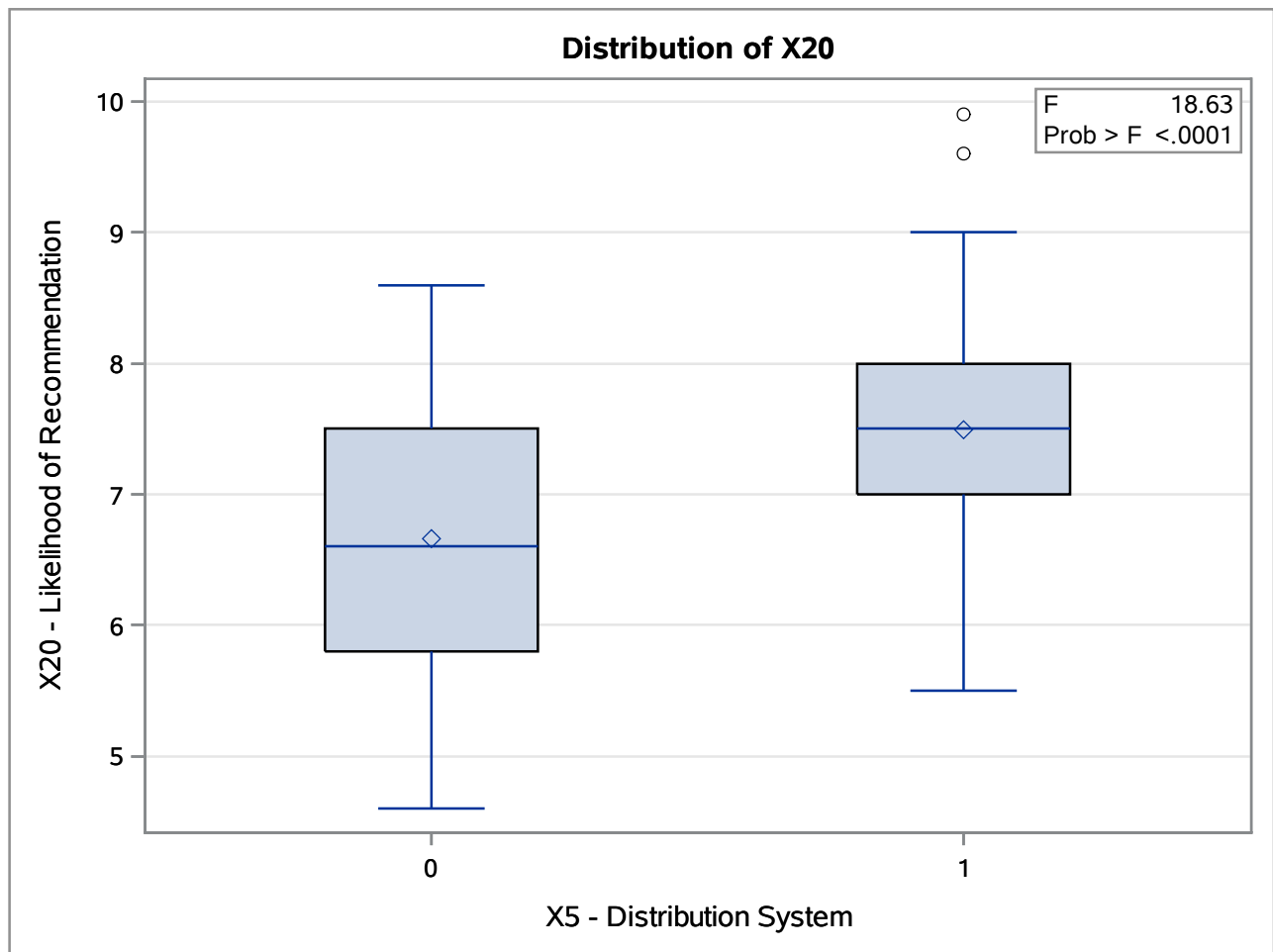
Dependent Variable: X20 X20 - Likelihood of Recommendation

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	17.2130396	17.2130396	18.63	<.0001
Error	98	90.5469604	0.9239486		
Corrected Total	99	107.7600000			

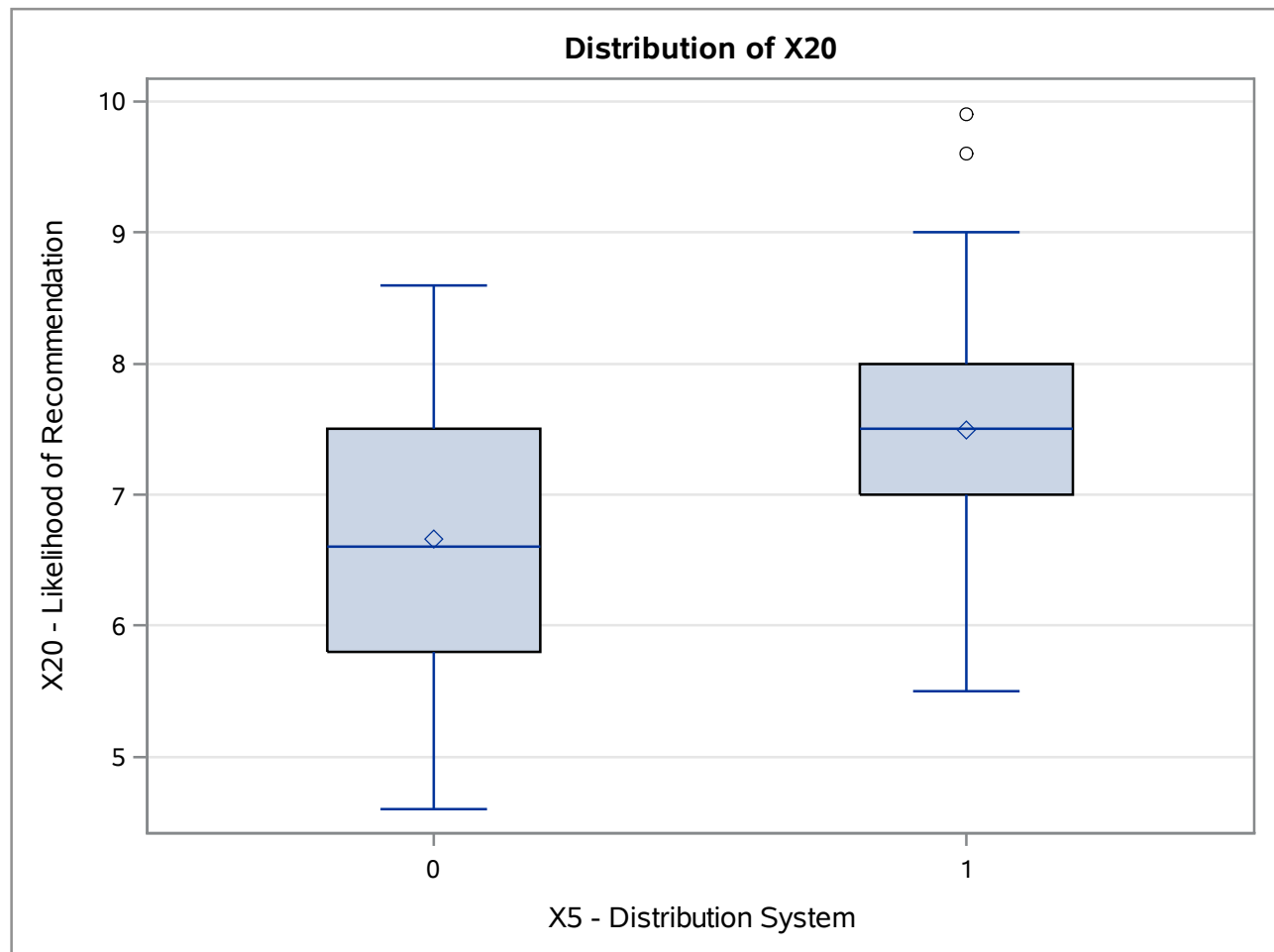
R-Square	Coeff Var	Root MSE	X20 Mean
0.159735	13.69263	0.961222	7.020000

Source	DF	Type I SS	Mean Square	F Value	Pr > F
X5	1	17.21303958	17.21303958	18.63	<.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
X5	1	17.21303958	17.21303958	18.63	<.0001



The GLM Procedure



Level of X5	N	X20	
		Mean	Std Dev
0	57	6.65964912	0.96766650
1	43	7.49767442	0.95256255