

## NPar Tests

### Notes

Output Created		18-DEC-2024 14:48:21
Comments		
Input	Data	/Users/theanirudhgj/Downloads/encoded data....
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1470
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each test are based on all cases with valid data for the variable(s) used in that test.
Syntax		NPAR TESTS /K- W=YearsSinceLastPromotion BY ConWorkPerf(20)...
Resources	Processor Time	00:00:00.01
	Elapsed Time	00:00:00.00
	Number of Cases Allowed <sup>a</sup>	449389

a. Based on availability of workspace memory.

## Kruskal-Wallis Test

### Ranks

	ConWorkPerf	N	Mean Rank
YearsSinceLastPromotion	3.00	66	672.39
	4.00	14	640.79
	6.00	296	757.56
	8.00	48	719.75
	9.00	752	734.09
	12.00	271	742.44
	16.00	23	687.65
	Total	1470	

## Test Statistics<sup>a,b</sup>

	YearsSinceLast Promotion
Kruskal-Wallis H	3.680
df	6
Asymp. Sig.	.720

a. Kruskal Wallis Test

b. Grouping Variable:  
ConWorkPerf

## Nonparametric Tests

### Notes

Output Created		19-DEC-2024 14:49:36
Comments		
Input	Data	/Users/amitkumar/Desktop/encoded data.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1470
Syntax		NPTESTS /INDEPENDENT TEST (YearsAtCompany StandardHours) GROUP (YearsSinceLastPromotion) KRUSKAL WALLIS (COMPARE=PAIRWISE) /MISSING SCOPE=ANALYSIS USERMISSING=EXCLUDE /CRITERIA ALPHA=0.05 CILEVEL=95.
Resources	Processor Time	00:00:01.72
	Elapsed Time	00:00:02.00

[DataSet1] /Users/amitkumar/Desktop/encoded data.sav

### Hypothesis Test Summary

	Null Hypothesis	Test	Sig. <sup>a,b</sup>
1	The distribution of YearsAtCompany is the same across categories of YearsSinceLastPromotion.	Independent-Samples Kruskal-Wallis Test	<.001
2	The distribution of StandardHours is the same across categories of YearsSinceLastPromotion.	Independent-Samples Kruskal-Wallis Test	1.000

### Hypothesis Test Summary

	Decision
1	Reject the null hypothesis.
2	Retain the null hypothesis.

a. The significance level is .050.

b. Asymptotic significance is displayed.

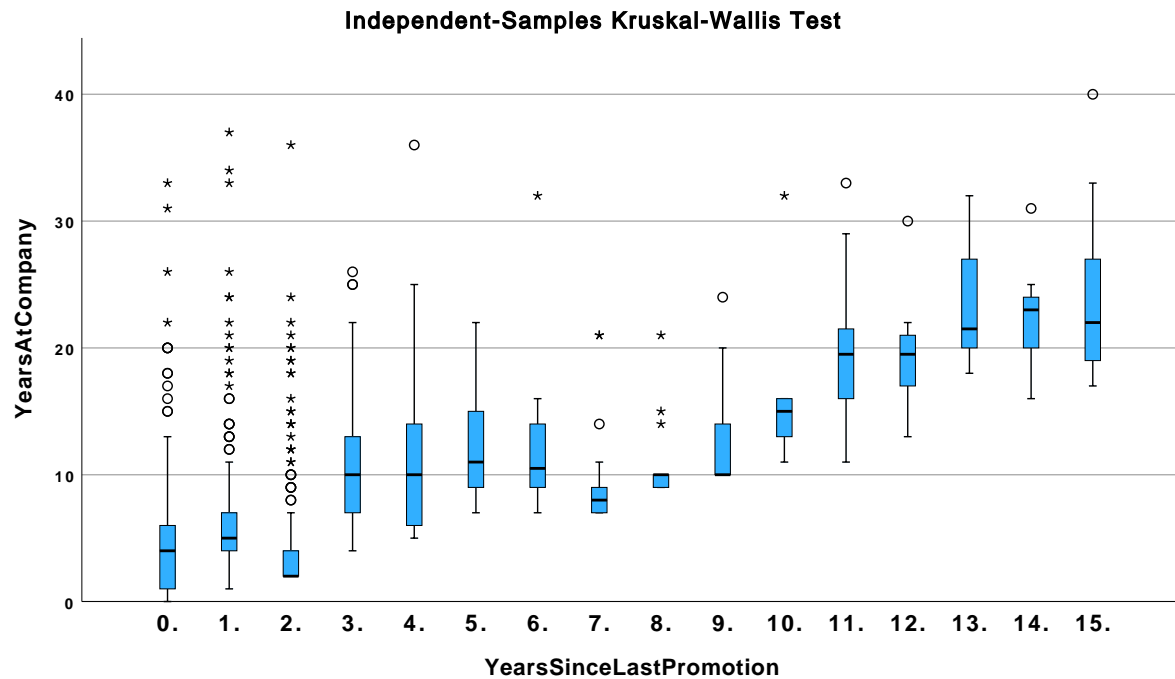
### Independent-Samples Kruskal-Wallis Test

#### YearsAtCompany across YearsSinceLastPromotion

#### Independent-Samples Kruskal-Wallis Test Summary

Total N	1470
Test Statistic	588.002 <sup>a</sup>
Degree Of Freedom	15
Asymptotic Sig.(2-sided test)	<.001

a. The test statistic is adjusted for ties.



**Pairwise Comparisons of YearsSinceLastPromotion**

Sample 1-Sample 2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig. <sup>a</sup>
2-0	26.234	37.860	.693	.488	1.000
2-1	211.054	40.332	5.233	<.001	.000
2-7	-509.365	58.991	-8.635	<.001	.000
2-3	-566.683	67.577	-8.386	<.001	.000
2-4	-577.362	63.709	-9.062	<.001	.000
2-8	-658.176	105.198	-6.257	<.001	.000
2-6	-669.181	81.959	-8.165	<.001	.000
2-5	-683.332	71.428	-9.567	<.001	.000
2-9	-726.098	107.942	-6.727	<.001	.000
2-10	-819.093	175.923	-4.656	<.001	.000
2-11	-862.093	92.635	-9.306	<.001	.000
2-12	-872.159	137.911	-6.324	<.001	.000
2-14	-905.121	144.941	-6.245	<.001	.000
2-15	-907.125	122.025	-7.434	<.001	.000
2-13	-909.759	137.911	-6.597	<.001	.000
0-1	-184.820	28.447	-6.497	<.001	.000
0-7	-483.131	51.599	-9.363	<.001	.000
0-3	-540.448	61.230	-8.826	<.001	.000
0-4	-551.128	56.934	-9.680	<.001	.000
0-8	-631.942	101.238	-6.242	<.001	.000
0-6	-642.947	76.811	-8.371	<.001	.000
0-5	-657.098	65.456	-10.039	<.001	.000
0-9	-699.864	104.086	-6.724	<.001	.000
0-10	-792.859	173.584	-4.568	<.001	.001

### Pairwise Comparisons of YearsSinceLastPromotion

Sample 1-Sample 2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig. <sup>a</sup>
0-11	-835.859	88.113	-9.486	<.001	.000
0-12	-845.925	134.915	-6.270	<.001	.000
0-14	-878.886	142.093	-6.185	<.001	.000
0-15	-880.891	118.628	-7.426	<.001	.000
0-13	-883.525	134.915	-6.549	<.001	.000
1-7	-298.310	53.439	-5.582	<.001	.000
1-3	-355.628	62.789	-5.664	<.001	.000
1-4	-366.308	58.606	-6.250	<.001	.000
1-8	-447.122	102.188	-4.375	<.001	.001
1-6	-458.127	78.059	-5.869	<.001	.000
1-5	-472.277	66.916	-7.058	<.001	.000
1-9	-515.043	105.010	-4.905	<.001	.000
1-10	-608.039	174.140	-3.492	<.001	.058
1-11	-651.039	89.203	-7.298	<.001	.000
1-12	-661.105	135.630	-4.874	<.001	.000
1-14	-694.066	142.771	-4.861	<.001	.000
1-15	-696.071	119.440	-5.828	<.001	.000
1-13	-698.705	135.630	-5.152	<.001	.000
7-3	57.318	76.129	.753	.452	1.000
7-4	67.997	72.718	.935	.350	1.000
7-8	-148.811	110.886	-1.342	.180	1.000
7-6	159.817	89.143	1.793	.073	1.000
7-5	173.967	79.567	2.186	.029	1.000
7-9	-216.733	113.492	-1.910	.056	1.000
7-10	-309.728	179.382	-1.727	.084	1.000
7-11	-352.728	99.047	-3.561	<.001	.044
7-12	-362.795	142.298	-2.550	.011	1.000
7-14	-395.756	149.120	-2.654	.008	.955
7-15	-397.760	126.961	-3.133	.002	.208
7-13	-400.395	142.298	-2.814	.005	.588
3-4	-10.679	79.841	-.134	.894	1.000
3-8	-91.494	115.682	-.791	.429	1.000
3-6	-102.499	95.043	-1.078	.281	1.000
3-5	-116.649	86.126	-1.354	.176	1.000
3-9	-159.415	118.183	-1.349	.177	1.000
3-10	-252.410	182.386	-1.384	.166	1.000
3-11	-295.410	104.389	-2.830	.005	.559
3-12	-305.477	146.066	-2.091	.036	1.000
3-14	-338.438	152.720	-2.216	.027	1.000
3-15	-340.442	131.171	-2.595	.009	1.000
3-13	-343.077	146.066	-2.349	.019	1.000
4-8	-80.814	113.466	-.712	.476	1.000
4-6	-91.819	92.333	-.994	.320	1.000

### Pairwise Comparisons of YearsSinceLastPromotion

Sample 1-Sample 2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig. <sup>a</sup>
4-5	-105.970	83.126	-1.275	.202	1.000
4-9	-148.736	116.015	-1.282	.200	1.000
4-10	-241.731	180.989	-1.336	.182	1.000
4-11	-284.731	101.928	-2.793	.005	.626
4-12	-294.798	144.318	-2.043	.041	1.000
4-14	-327.759	151.049	-2.170	.030	1.000
4-15	-329.763	129.221	-2.552	.011	1.000
4-13	-332.398	144.318	-2.303	.021	1.000
8-6	11.005	124.632	.088	.930	1.000
8-5	25.156	117.973	.213	.831	1.000
8-9	-67.922	143.063	-.475	.635	1.000
8-10	-160.917	199.411	-.807	.420	1.000
8-11	-203.917	131.898	-1.546	.122	1.000
8-12	-213.983	166.839	-1.283	.200	1.000
8-14	-246.944	172.695	-1.430	.153	1.000
8-15	-248.949	153.967	-1.617	.106	1.000
8-13	-251.583	166.839	-1.508	.132	1.000
6-5	14.150	97.818	.145	.885	1.000
6-9	-56.916	126.956	-.448	.654	1.000
6-10	-149.911	188.190	-.797	.426	1.000
6-11	-192.911	114.227	-1.689	.091	1.000
6-12	-202.978	153.252	-1.324	.185	1.000
6-14	-235.939	159.607	-1.478	.139	1.000
6-15	-237.944	139.128	-1.710	.087	1.000
6-13	-240.578	153.252	-1.570	.116	1.000
5-9	-42.766	120.426	-.355	.722	1.000
5-10	-135.761	183.848	-.738	.460	1.000
5-11	-178.761	106.922	-1.672	.095	1.000
5-12	-188.828	147.887	-1.277	.202	1.000
5-14	-221.789	154.463	-1.436	.151	1.000
5-15	-223.793	133.196	-1.680	.093	1.000
5-13	-226.428	147.887	-1.531	.126	1.000
9-10	-92.995	200.872	-.463	.643	1.000
9-11	-135.995	134.096	-1.014	.311	1.000
9-12	-146.062	168.583	-.866	.386	1.000
9-14	-179.023	174.380	-1.027	.305	1.000
9-15	-181.027	155.855	-1.162	.245	1.000
9-13	-183.662	168.583	-1.089	.276	1.000
10-11	-43.000	193.079	-.223	.824	1.000
10-12	-53.067	218.444	-.243	.808	1.000
10-14	-86.028	222.948	-.386	.700	1.000
10-15	-88.032	208.778	-.422	.673	1.000
10-13	-90.667	218.444	-.415	.678	1.000

### Pairwise Comparisons of YearsSinceLastPromotion

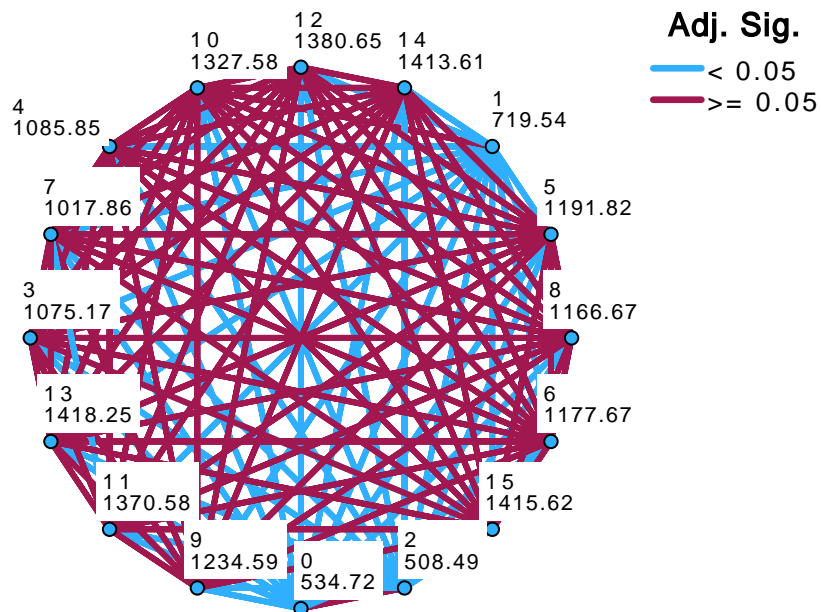
Sample 1-Sample 2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig. <sup>a</sup>
11-12	-10.067	159.217	-.063	.950	1.000
11-14	-43.028	165.343	-.260	.795	1.000
11-15	-45.032	145.673	-.309	.757	1.000
11-13	-47.667	159.217	-.299	.765	1.000
12-14	-32.961	194.362	-.170	.865	1.000
12-15	-34.965	177.929	-.197	.844	1.000
12-13	-37.600	189.178	-.199	.842	1.000
14-15	-2.004	183.431	-.011	.991	1.000
14-13	4.639	194.362	.024	.981	1.000
15-13	2.635	177.929	.015	.988	1.000

Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same.

Asymptotic significances (2-sided tests) are displayed. The significance level is .050.

a. Significance values have been adjusted by the Bonferroni correction for multiple tests

### Pairwise Comparisons of YearsSinceLastPromotion



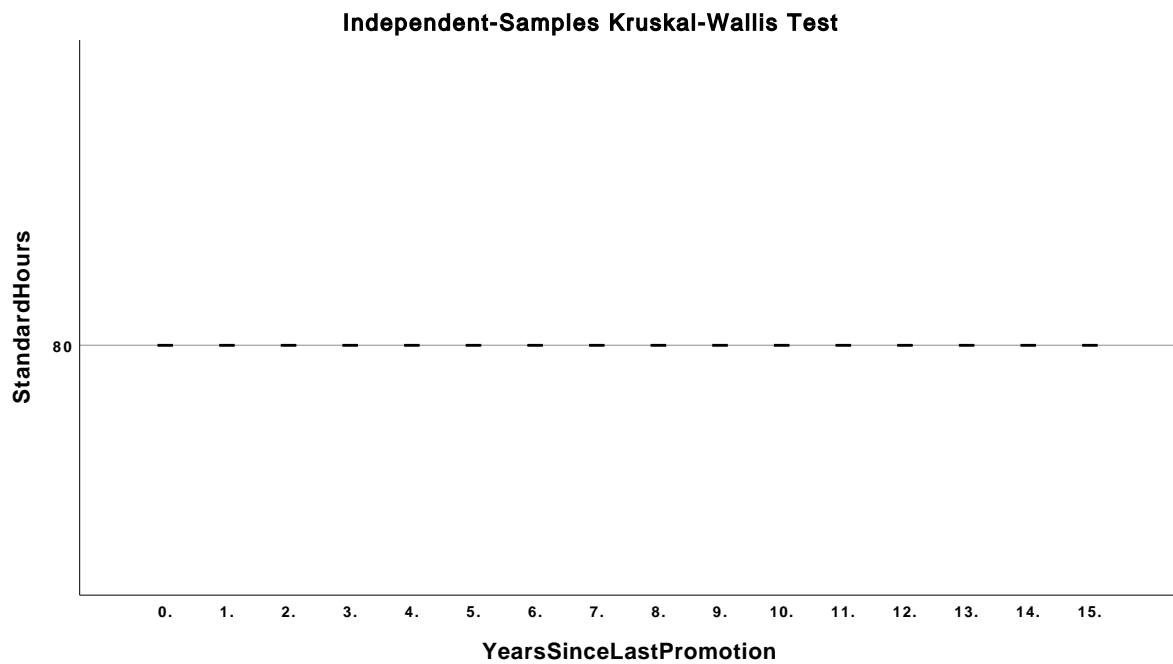
Each node shows the sample average rank of YearsSinceLastPromotion.

### StandardHours across YearsSinceLastPromotion

### Independent-Samples Kruskal-Wallis Test Summary

Total N	1470
Test Statistic	.000 <sup>a</sup>
Degree Of Freedom	15
Asymptotic Sig.(2-sided test)	1.000

a. The test statistic is adjusted for ties.





### Pairwise Comparisons of YearsSinceLastPromotion

Sample 1-Sample 2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig. <sup>a</sup>
0-1	.000	.000	.	1.000	1.000
0-2	.000	.000	.	1.000	1.000
0-3	.000	.000	.	1.000	1.000
0-4	.000	.000	.	1.000	1.000
0-5	.000	.000	.	1.000	1.000
0-6	.000	.000	.	1.000	1.000
0-7	.000	.000	.	1.000	1.000
0-8	.000	.000	.	1.000	1.000
0-9	.000	.000	.	1.000	1.000
0-10	.000	.000	.	1.000	1.000
0-11	.000	.000	.	1.000	1.000
0-12	.000	.000	.	1.000	1.000
0-13	.000	.000	.	1.000	1.000
0-14	.000	.000	.	1.000	1.000
0-15	.000	.000	.	1.000	1.000
1-2	.000	.000	.	1.000	1.000
1-3	.000	.000	.	1.000	1.000
1-4	.000	.000	.	1.000	1.000
1-5	.000	.000	.	1.000	1.000
1-6	.000	.000	.	1.000	1.000
1-7	.000	.000	.	1.000	1.000
1-8	.000	.000	.	1.000	1.000
1-9	.000	.000	.	1.000	1.000
1-10	.000	.000	.	1.000	1.000
1-11	.000	.000	.	1.000	1.000
1-12	.000	.000	.	1.000	1.000
1-13	.000	.000	.	1.000	1.000
1-14	.000	.000	.	1.000	1.000
1-15	.000	.000	.	1.000	1.000
2-3	.000	.000	.	1.000	1.000
2-4	.000	.000	.	1.000	1.000
2-5	.000	.000	.	1.000	1.000
2-6	.000	.000	.	1.000	1.000
2-7	.000	.000	.	1.000	1.000
2-8	.000	.000	.	1.000	1.000
2-9	.000	.000	.	1.000	1.000
2-10	.000	.000	.	1.000	1.000
2-11	.000	.000	.	1.000	1.000
2-12	.000	.000	.	1.000	1.000
2-13	.000	.000	.	1.000	1.000
2-14	.000	.000	.	1.000	1.000
2-15	.000	.000	.	1.000	1.000
3-4	.000	.000	.	1.000	1.000

### Pairwise Comparisons of YearsSinceLastPromotion

Sample 1-Sample 2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig. <sup>a</sup>
3-5	.000	.000	.	1.000	1.000
3-6	.000	.000	.	1.000	1.000
3-7	.000	.000	.	1.000	1.000
3-8	.000	.000	.	1.000	1.000
3-9	.000	.000	.	1.000	1.000
3-10	.000	.000	.	1.000	1.000
3-11	.000	.000	.	1.000	1.000
3-12	.000	.000	.	1.000	1.000
3-13	.000	.000	.	1.000	1.000
3-14	.000	.000	.	1.000	1.000
3-15	.000	.000	.	1.000	1.000
4-5	.000	.000	.	1.000	1.000
4-6	.000	.000	.	1.000	1.000
4-7	.000	.000	.	1.000	1.000
4-8	.000	.000	.	1.000	1.000
4-9	.000	.000	.	1.000	1.000
4-10	.000	.000	.	1.000	1.000
4-11	.000	.000	.	1.000	1.000
4-12	.000	.000	.	1.000	1.000
4-13	.000	.000	.	1.000	1.000
4-14	.000	.000	.	1.000	1.000
4-15	.000	.000	.	1.000	1.000
5-6	.000	.000	.	1.000	1.000
5-7	.000	.000	.	1.000	1.000
5-8	.000	.000	.	1.000	1.000
5-9	.000	.000	.	1.000	1.000
5-10	.000	.000	.	1.000	1.000
5-11	.000	.000	.	1.000	1.000
5-12	.000	.000	.	1.000	1.000
5-13	.000	.000	.	1.000	1.000
5-14	.000	.000	.	1.000	1.000
5-15	.000	.000	.	1.000	1.000
6-7	.000	.000	.	1.000	1.000
6-8	.000	.000	.	1.000	1.000
6-9	.000	.000	.	1.000	1.000
6-10	.000	.000	.	1.000	1.000
6-11	.000	.000	.	1.000	1.000
6-12	.000	.000	.	1.000	1.000
6-13	.000	.000	.	1.000	1.000
6-14	.000	.000	.	1.000	1.000
6-15	.000	.000	.	1.000	1.000
7-8	.000	.000	.	1.000	1.000
7-9	.000	.000	.	1.000	1.000

### Pairwise Comparisons of YearsSinceLastPromotion

Sample 1-Sample 2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig. <sup>a</sup>
7-10	.000	.000	.	1.000	1.000
7-11	.000	.000	.	1.000	1.000
7-12	.000	.000	.	1.000	1.000
7-13	.000	.000	.	1.000	1.000
7-14	.000	.000	.	1.000	1.000
7-15	.000	.000	.	1.000	1.000
8-9	.000	.000	.	1.000	1.000
8-10	.000	.000	.	1.000	1.000
8-11	.000	.000	.	1.000	1.000
8-12	.000	.000	.	1.000	1.000
8-13	.000	.000	.	1.000	1.000
8-14	.000	.000	.	1.000	1.000
8-15	.000	.000	.	1.000	1.000
9-10	.000	.000	.	1.000	1.000
9-11	.000	.000	.	1.000	1.000
9-12	.000	.000	.	1.000	1.000
9-13	.000	.000	.	1.000	1.000
9-14	.000	.000	.	1.000	1.000
9-15	.000	.000	.	1.000	1.000
10-11	.000	.000	.	1.000	1.000
10-12	.000	.000	.	1.000	1.000
10-13	.000	.000	.	1.000	1.000
10-14	.000	.000	.	1.000	1.000
10-15	.000	.000	.	1.000	1.000
11-12	.000	.000	.	1.000	1.000
11-13	.000	.000	.	1.000	1.000
11-14	.000	.000	.	1.000	1.000
11-15	.000	.000	.	1.000	1.000
12-13	.000	.000	.	1.000	1.000
12-14	.000	.000	.	1.000	1.000
12-15	.000	.000	.	1.000	1.000
13-14	.000	.000	.	1.000	1.000
13-15	.000	.000	.	1.000	1.000
14-15	.000	.000	.	1.000	1.000

Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same.

Asymptotic significances (2-sided tests) are displayed. The significance level is .050.

a. Significance values have been adjusted by the Bonferroni correction for multiple tests

## Pairwise Comparisons of YearsSinceLastPromotion

