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THE EFFECTS OF MUSSEL DRAGGING ON MARINE WORM POPULATIONS

FINAL REPORT TO

THE MAINE STATE PLANNING OFFICE

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Maine Department of Marine Resources

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COASTAL ZONE

INFORMATION CENTER

INTRODUCTION

Commercial harvesting of wild mussel populations along intertidal and subtidal areas of the Maine coast has intensified and rapidly expanded during the past several years. The disturbance of soft bottom sediments caused by mussel dragging has recently been the focus of much attention. The apparent destruction of commercially productive habitats due to mussel dragging is a major concern to many of the traditional fisheries, including the marine worm fishery.

Maine's two commercially important marine polychaetes, the bloodworm (Glycera dibranchiata) and the sandworm (Nereis virens), represent a multimillion dollar industry for the State. Since the early 1940's Maine has been the sole domestic commercial source for these marine worms. Marine baitworms are currently shipped nationwide and to a growing international market for use as a sportfishing bait. Maine's baitworm industry provides direct employment for over 1000 individuals, contributes to local economies and stimulates tourism related to coastal sportfishing.

Marine worm industry members believe that productive sandworm intertidal areas can be made unharvestable within two days by mussel dragging. It is their opinion that these intertidal areas take at least one year to recover, if at all. The worm industry feels commercially harvestable sandworm areas are quickly being reduced, which in turn will also impact the bloodworm fishery, since it has been shown that sandworms are a major food item for the bloodworm (Joule, in prep.). Conversely, some members of the mussel industry are of the opinion that dragging a mussel bed rejuvenates and stimulates growth in an area, a situation analogous to rototilling a garden. Although definitive

evidence was lacking to support either side there was enough concern to warrant closer examination of the problem.

Mussel beds are known to harbor large numbers of marine invertebrates, most notably crustaceans and polychaetes (Tsuchiya and Nishihira 1985; 1986). Increased mussel harvesting has raised questions over whether the disruption of the benthic substrate by mussel draggers destroys potential nursery grounds for larval and juvenile forms of the sandworm. Information on the ecology of larval and early juvenile stages of sandworms is virtually nonexistent in the scientific literature. Knowledge of the biological effects of dragging is essential for multispecies management in the intertidal zone. The purpose of this study is to provide a scientific basis for optimal management of intertidal mussel and worm fisheries by determining if mussel beds are favorable nursery areas for juvenile sandworms (Nereis virens) and if the habitat created after mussel harvesting is a poor or productive nursery area for this species.

MATERIALS AND METHODS

The study site was Inner Harbor, Deer Isle, Maine (68° 39', 44° 12') (Fig 1). The site chosen is located in one of the major commercial mussel harvesting areas along the Maine coast and supports a healthy mussel population. Also, commercial sandworm harvesting occurs in Inner Harbor. In September of 1986 a commercial mussel dragger was employed to crop a designated area within a mussel bed. A control area was established within the same mussel bed adjacent to the dragged area. The entire mussel bed was marked with buoys with an understanding

reached among local musselers that the area be off limits during the course of the study. Two replicate quarter meter square sediment samples were manually collected from the control and dragged sites on a monthly basis from September 1986 thru June 1987 with the exception of February when a heavy ice cover prevented sampling. Sediment samples were sieved through a 0.5mm square mesh screen. This mesh size was chosen because all organisms retained by a 0.5mm mesh can be regarded as macrobenthos (McIntyre 1971). The residue containing the benthic organisms was fixed in 10% formalin and stained with rose bengal (Mason and Yevich 1967). After sorting, the animals were rinsed in water and preserved in 70% alcohol. All Mytilus edulis and Nereis virens were sorted separately and enumerated.

Physical and chemical parameters sampled on a monthly basis from the dragged and the control sites include: sediment particle size, percent organic matter of sediment, salinity and sediment temperature as well as visual observations on the effects and changes over time at each area. Rapid partial analysis of sediments was employed to determine granulometry. Grain size intervals were established utilizing the Wentworth grade scale classification. Percent organic matter of sediment was determined by weight loss on ignition at 500° C after carbonate extraction by acid treatment (Holme and McIntyre 1971).

Chi-squared analyses were performed on the numerical counts of M. edulis and N. virens, between and within plots, to discern significant differences in abundances.

RESULTS

Numerical counts of Mytilus edulis and Nereis virens for both the control and dragged area are presented in Table 1. No bloodworms, Glycera dibranchiata, were encountered during the study. Juvenile Nereis virens were encountered in both the control and the dragged areas. Post-larval sandworms, which first appeared in the April samples, accounted for the numerical rise in the dragged area during the latter months of the study. Commercial size sandworms were not encountered at either site. A mussel set, the first in six years (J. Weed, per. comm.), occurred at the study area during the early summer of 1986. Numerical comparison shows that mussel abundance in the control bed outnumbered that in the dragged area by an order of magnitude. Mussel adults and spat are differentiated in Table 1, however total numbers per 0.25 m^2 were used in all statistical analyses.

The significant differences in population densities of sandworms and mussels between and within the study sites, as determined by Chi-squared analysis, are presented in Appendix I. A comparison of dragged versus control areas, month by month, revealed that only during October, March and April were there significant differences in sandworm densities. An overall comparison showed sandworm abundance in the control bed to be significantly higher than the dragged area. The dragged area exhibited a significant increase in the number of sandworms from the fall sampling periods to the spring when there was an influx of post-larval worms. No such trend was seen at the control site.

Analysis of overall mussel densities in the control and the dragged areas, obviously, showed differences as a result of dragging. A

significant rise in juvenile mussel abundance was detected at the dragged area during the spring months.

A summary of the biological and environmental parameters sampled is presented in Table 2. Casual observations made during each sampling period revealed that initial dragging exposed unoxidized sediments to the surface and buried any benthos not collected with the drag. Infaunal benthos were lacking from the samples and a strong hydrogen sulfide smell was evident. For the first two months following dragging one could easily distinguish the marks left by the chain sweep drag. As each month progressed the effects were less noticeable and the sediments appeared to revert back to an aerobic/ anaerobic stratification by January. Abundant numbers of larval invertebrates were collected from the dragged area during the spring months. The Redox Potential Discontinuity Layer (RPD), which was at the sediment-water interface immediately after dragging, decreased to within several millimeters beneath the sediment surface by the finish of the study.

DISCUSSION

Commercial size sandworms were absent from all samples collected, although larval and juvenile stages were shown to inhabit both the control bed and the dragged area. The increase in number of sandworms in the dragged area during the latter part of the study can be attributed to the recruitment of post-larval stages after spawning. This set was not apparent in the control area and there was a decrease in juvenile numbers. This may be explained by nocturnal migrations of juvenile sandworms which occur during the winter months (Dean 1978; Thomas and Jelley 1972; Dauer et al. 1982). The apparent preference of

the post-larval sandworms for the dragged area may be related to the presence of a suitable substrate with apparently reduced competition and predation. While significant differences were shown between control and dragged area sandworm populations, it should be noted numerical values were small, therefore predictions for other areas should be made with caution.

The study area exhibited a mussel set prior to the start of sampling. Large numbers of spat set on the control bed during the study period while only small numbers of spat were detected in the dragged area until the spring months. Observations of the sediments at this time indicated almost complete recovery from the physical effects of dragging. Mussels found in the dragged area were usually attached to mussel shell fragments. This is consistent with Bayne (1964) who has shown spat prefer to set on rough hard surfaces rather than soft sediments. A significant increase in spat was seen during the spring months in the dragged area, again the numerical values used for statistical analysis were small.

The time of year a mussel bed is dragged could be critical to many of the soft-bottom benthos. If mussel dragging occurred in the spring, a disruption of potential settling sites or spawning activities for many invertebrates could result. A definite potential problem exists for sandworms since they experience a degeneration of the body musculature in preparation for spawning. If dragging occurred prior to spawning (mid-late March) mass mortalities of prespawning adults could adversely affect local production of larvae.

SUMMARY

1. No bloodworms, Glycera dibranchiata, were found.
2. Juvenile sandworms, Nereis virens, were found in both the control mussel bed and the dragged area.
3. During the spring, post-larval sandworms inhabited the dragged area but were not abundant in the control area.
4. Mussel spat settled on the existing control bed in greater numbers than on the dragged area.
5. Physical disturbances caused by dragging were not discernable after four months.

To discern the long term impact mussel dragging has on sandworm populations the study period should be extended over a longer time frame. This would enable sampling to continue thru summer months, a time of peak productivity in estuarine environments. The study does indicate some relationships between mussel dragging and subsequent productivity in terms of sandworms and mussels, although it is inadequate as a basis for wide-scale management decisions to sustain those fisheries.

LITERATURE CITED

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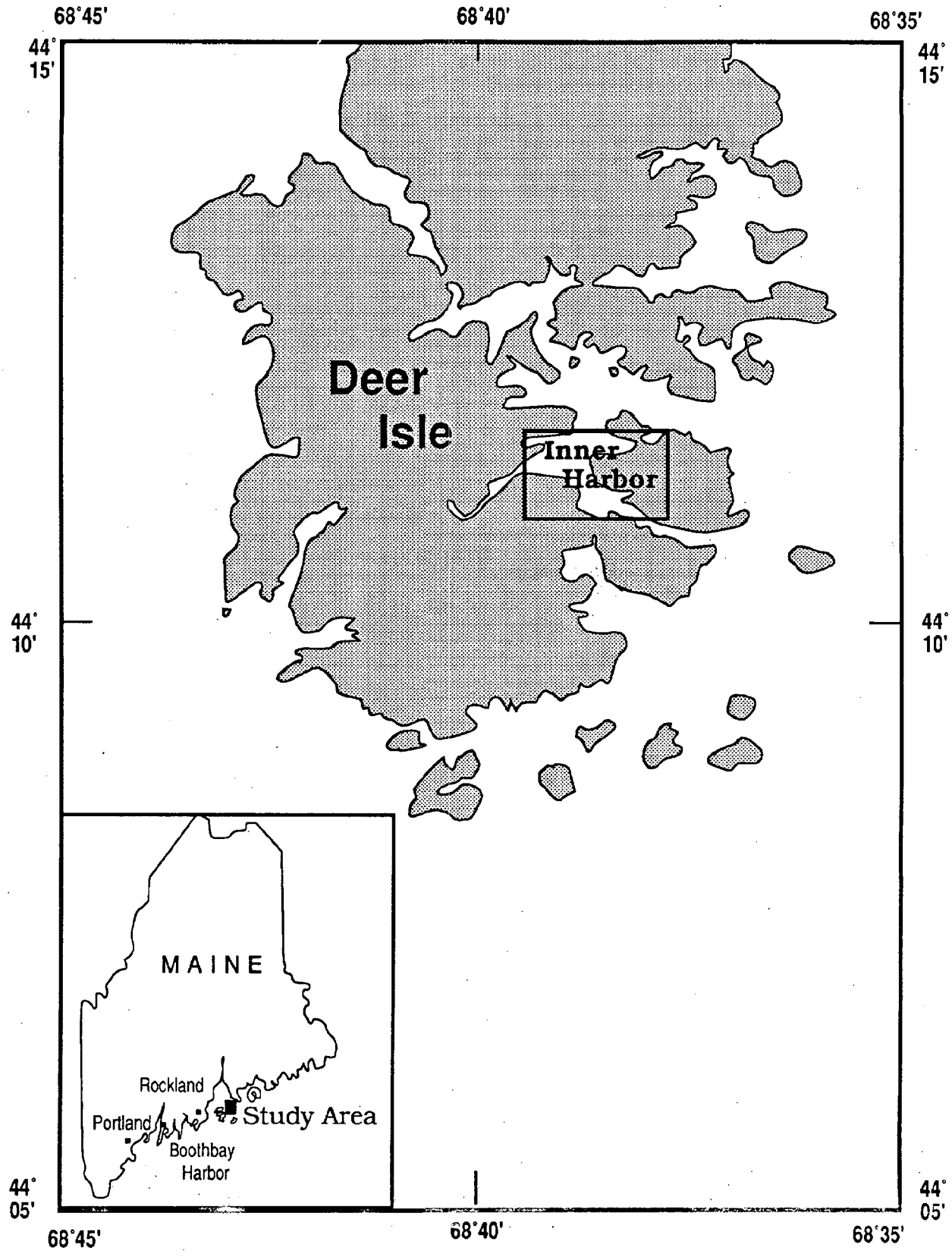

Fig. 1. Area of study, Inner Harbor, Deer Isle, Maine.

Table 1. Numbers of *Mytilus edulis* and *Nereis virens*/0.25m^2

Month	Station	*Mytilus edulis* Adult	*Mytilus edulis* Juvenile	*Mytilus edulis* Total	*Nereis virens*
S	CA	126	140	266	16
	B	148	403	551	30
	DA	1	1	2	3
	B	0	14	14	7
O	CA	21	286	307	22
	B	45	64	109	6
	DA	0	2	2	0
	B	0	0	0	0
N	CA	65	360	425	7
	B	65	230	295	9
	DA	0	2	2	2
	B	3	5	8	3
D	CA	7	377	384	9
	B	17	491	508	20
	DA	1	1	2	2
	B	5	7	12	1
J	CA	60	327	387	6
	B	71	302	373	5
	DA	0	1	1	0
	B	0	1	1	0
F	-	-	-	-	-
M	CA	8	756	764	15
	B	31	736	767	1
	BA	0	3	3	5
	B	1	16	17	12
A	CA	48	262	310	6
	B	77	248	325	8
	DA	0	27	27	13
	B	0	17	17	3
M	CA	25	284	309	7
	B	43	461	504	13
	DA	2	20	22	4
	B	1	2	3	1
J	CA	20	354	374	4
	B	29	345	374	2
	DA	1	9	20	38
	B	0	5	5	14

Table 2. Summary of Environmental and Biological Parameters.

Month	Station	Temp. (°C)	Salinity ‰	% Silt/Clay (<0.062mm)	% Sand (1.00mm-0.062mm)	% Organic Matter
S	Control(C)	14.0	31	-	-	-
	Dragged(D)	14.0	31	-	-	-
O	C	11.0	31	-	-	-
	D	11.0	29	-	-	-
N	C	6.5	28	74.85	25.15	25.48
	D	6.5	28	80.96	19.04	22.40
D	C	3.0	28	96.56	3.44	21.32
	D	2.5	28	96.12	3.88	18.16
J	C	0.0	26	91.58	8.42	27.44
	D	0.0	26	92.88	7.12	25.28
F	i c e c o v e r					
M	C	2.5	28	90.08	9.92	24.67
	D	3.0	28	82.05	17.95	21.11
A	C	7.0	30	93.20	6.80	26.24
	D	7.5	29	87.92	12.08	26.23
M	C	12.0	31	87.88	12.12	25.49
	D	12.5	31	87.17	12.83	22.71
J	C	14.5	30	96.60	3.40	27.63
	D	14.0	31	96.24	3.76	22.57

APPENDIX I

Statistical analysis of *Nereis virens* and *Mytilus edulis*

Summary of significant differences between and within sample plots by species. P = 0.05 .

Nereis virens

Total C vs. Total D
Mar C vs. Mar D
Apr C vs. Apr D

Sept C vs. Apr D
" May D
" vs. Jun D

Oct C vs. Sept D
" Mar D

Nov C vs. Apr D
" Jun D

Dec C vs. Apr D
" May D
" Jun D

Mar C vs. Sept D
" Nov D

Apr C vs. Jun D

May C vs. Apr D
" Jun D

Sept C vs. Oct C
" Mar C

Oct C vs Nov C
" Dec C
" Apr C
" May C

Nov C vs. Mar C

Dec C vs. Mar C

Jan C vs. Mar C

Mar C vs. Apr C
" May C

Sept D vs. Apr D
" Jun D

Mar D vs. Apr D
" May D
" Jun D

Mytilus edulis

Total C vs. Total D
Nov C vs. Nov D
Dec C vs. Dec D
Mar C vs. Mar D
May C vs. May D
Jun C vs. Jun D

Sept C vs. Oct D
" Apr D
" May D
" Jun D
Oct C vs. Sept D
" Nov D
" Dec D
" Mar D
Nov C vs. Sept D
" Dec D
" Mar D
" May D
" Jun D
Dec C vs. Sept D
" Mar D
" Apr D
" May D
" Jun D
Jan C vs. Sept D
" Dec D
" Mar D
" May D
" Jun D
Mar C vs. Sept D
" Dec D
" May D
" Jun D
Apr C vs. Sept D
" Dec D
" Mar D
" May D
" Jun D
May C vs. Sept D
" Mar D
" Apr D
" Jun D
Jun C vs. Sept D
" Dec D
" Mar D
" May D

Sept C vs. Oct C
" Nov C
" Dec C
" Jan C
" Mar C
" Apr C
" May C
" Jun C
Oct C vs. Nov C
" Dec C
" Jan C
" Mar C
" Apr C
" May C
" Jun C
Nov C vs. Dec C
" Jan C
" Mar C
" Apr C
" May C
" Jun C
Dec C vs. Jan C
" Mar C
" Apr C
" May C
" Jun C
Jan C vs. May C
Mar C vs. May C
Apr C vs. May C
May C vs. Jun C

Sept D vs. Oct D
" Apr D
" May D
" Jun D
Oct D vs. Dec D
" Mar D
Nov D vs. Apr D
" May D
" Jun D
Dec D vs. Apr D
" May D
" Jun D
Mar D vs. Apr D
" May D
" Jun D
Apr D vs. May D

NEREIS

Nereis virens

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	16	12.02	1.32
2	1	3	6.98	2.27
1	2	30	23.41	1.86
2	2	7	13.59	3.2
1	3	22	13.92	4.69
2	3	0	8.08	8.08
1	4	6	3.8	1.28
2	4	0	2.2	2.2
1	5	7	5.69	.3
2	5	2	3.31	.52
1	6	9	7.59	.26
2	6	3	4.41	.45
1	7	9	6.96	.6
2	7	2	4.04	1.03
1	8	20	13.29	3.39
2	8	1	7.71	5.84
1	9	6	3.8	1.28
2	9	0	2.2	2.2
1	10	5	3.16	1.07
2	10	0	1.84	1.84
1	11	15	12.65	.44
2	11	5	7.35	.75
1	12	1	8.22	6.35
2	12	12	4.78	10.93
1	13	6	12.02	3.02
2	13	13	6.98	5.19
1	14	8	6.96	.16
2	14	3	4.04	.27
1	15	7	6.96	0
2	15	4	4.04	0
1	16	13	8.86	1.94
2	16	1	5.14	3.34
1	17	4	26.57	19.17
2	17	38	15.43	33.02
1	18	2	10.12	6.52
2	18	14	5.88	11.22

CHI SQUARED STATISTICS

DEGREES OF FREEDOM: 17
CHI-SQUARED: 145.98

Month Control Vs. Month Dragged

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: SEPT C GROUP: SEPT D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	16	15.61	.01
2	1	3	3.39	.05
1	2	30	30.39	.01
2	2	7	6.61	.02

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .08

PHI COEFF: 0
CRAMER'S V: .04
CONTINGENCY COEF: .04

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: OCT C GROUP: OCT D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	22	22	0

ERROR - DIVISION BY ZERO

HIT ANY KEY TO CONT., CTRL-Q TO QUIT

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: NOV C GROUP: NOV O

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	7	6.86	0
2	1	2	2.14	.01
1	2	9	9.14	0
2	2	3	2.86	.01

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .02

PHI COEFF: 0
CRAMER'S V: .03
CONTINGENCY COEF: .03

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: DEC C		GROUP: DEC D	
CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	9	9.97	.09
2	1	2	1.03	.91
1	2	20	19.03	.05
2	2	1	1.97	.48

- -

CHI SQUARED STATISTICS

DEGREES OF FREEDOM: 1
CHI-SQUARED: 1.53

PHI COEFF: .05
CRAMER'S V: .22
CONTINGENCY COEF: .21

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: JAN C		GROUP: JAN O	
CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	6	6	0

ERROR - DIVISION BY ZERO
HIT ANY KEY TO CONT., CTRL-Q TO QUIT

- -

WILCOXON RANK-SUM W/MANN WHITNEY U TEST
--- --- --- - ---

GROUP: MAR C GROUP: MAR O

CASES	MEAN RANK	CASES	MEAN RANK
2	2.5	2	2.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
2	2	5	-.7746	.2193

GLASS BISERIAL R = 0

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	15	9.7	2.9
2	1	5	10.3	2.73
1	2	1	6.3	4.46
2	2	12	6.7	4.2

- -

CHI SQUARED STATISTICS
--- --- ---

DEGREES OF FREEDOM: 1
CHI-SQUARED: 14.29

PHI COEFF: .43
CRAMER'S V: .66
CONTINGENCY COEF: .55

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: APR C GROUP: APR D

CASES	MEAN RANK	CASES	MEAN RANK
2	2.5	2	2.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
2	2	5	-.7746	.2193

GLASS BISERIAL R = 0

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	6	8.87	.93
2	1	13	10.13	.81
1	2	8	5.13	1.6
2	2	3	5.87	1.4

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 4.74

PHI COEFF: .16
CRAMER'S V: .4
CONTINGENCY COEF: .37

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: may C		GROUP: may D	
CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	7	8.8	.37
2	1	4	2.2	1.47
1	2	13	11.2	.29
2	2	1	2.8	1.16

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 3.29

PHI COEFF: .13
CRAMER'S V: .36
CONTINGENCY COEF: .34

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: JUNC GROUP: JUND

CASES	MEAN RANK	CASES	MEAN RANK
2	1.5	2	3.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	3	-2.3238	.0101

GLASS BISERIAL R = -1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	4	4.34	.03
2	1	38	37.66	0
1	2	2	1.66	.07
2	2	14	14.34	.01

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .11

PHI COEFF: 0
CRAMER'S V: .04
CONTINGENCY COEF: .04

Month (variable) Control Vs. Month Dragged

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: SEPT C GROUP: OCT O

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	16	16	0

ERROR - DIVISION BY ZERO
HIT ANY KEY TO CONT., CTRL-Q TO QUIT

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: SEPT C GROUP: NOV D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

CORRECTED FOR TIES

U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	16	16.24	0
2	1	2	1.76	.03
1	2	30	29.76	0
2	2	3	3.24	.02

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .05

PHI COEFF: 0
CRAMER'S V: .03
CONTINGENCY COEF: .03

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: SEPT C GROUP: DEC D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	16	16.9	.05
2	1	2	1.1	.73
1	2	30	29.1	.03
2	2	1	1.9	.42

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 1.23

PHI COEFF: .03
CRAMER'S V: .16
CONTINGENCY COEF: .16

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: SEPT C GROUP: JAN D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	16	16	0

ERROR - DIVISION BY ZERO
HIT ANY KEY TO CONT., CTRL-Q TO QUIT

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: SEPT C GROUP: MAR O

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	16	15.33	.03
2	1	5	5.67	.08
1	2	30	30.67	.01
2	2	12	11.33	.04

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .16

PHI COEFF: 0
CRAMER'S V: .05
CONTINGENCY COEF: .05

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: SEPT C GROUP: APR D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

CORRECTED FOR TIES

U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	16	21.52	1.41
2	1	13	7.48	4.07
1	2	30	24.48	1.24
2	2	3	8.52	3.57

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 10.3

PHI COEFF: .17
CRAMER'S V: .41
CONTINGENCY COEF: .38

- - - - - - - - - - - - - - - - - - - -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: SEPT C GROUP: MAY O

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- - - - - - - - - - - - - - - - - - - -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	16	18.04	.23
2	1	4	1.96	2.12
1	2	30	27.96	.15
2	2	1	3.04	1.37

- - - - - - - - - - - - - - - - - - - -

CHI SQUARED STATISTICS

DEGREES OF FREEDOM: 1
CHI-SQUARED: 3.87

PHI COEFF: .08
CRAMER'S V: .28
CONTINGENCY COEF: .27

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: SEPT C GROUP: JUN D

CASES	MEAN RANK	CASES	MEAN RANK
2	2.5	2	2.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
2	2	5	-.7746	.2193

GLASS BISERIAL R = 0

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	16	25.35	3.45
2	1	38	28.65	3.05
1	2	30	20.65	4.23
2	2	14	23.35	3.74

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 14.47

PHI COEFF: .15
CRAMER'S V: .38
CONTINGENCY COEF: .36

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: OCT C GROUP: SEPT D

CASES	MEAN RANK	CASES	MEAN RANK
2	3	2	2

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
1	3	6	0	.5

GLASS BISERIAL R = .5

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	22	18.42	.7
2	1	3	6.58	1.95
1	2	6	9.58	1.34
2	2	7	3.42	3.74

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 7.72

PHI COEFF: .2
CRAMER'S V: .45
CONTINGENCY COEF: .41

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------- - ----

GROUP: OCT C GROUP: NOV O

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	22	20.36	.13
2	1	2	3.64	.74
1	2	6	7.64	.35
2	2	3	1.36	1.96

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 3.18

PHI COEFF: .1
CRAMER'S V: .31
CONTINGENCY COEF: .3

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: OCT C GROUP: DEC D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

CORRECTED FOR TIES

U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	22	21.68	0
2	1	2	2.32	.04
1	2	6	6.32	.02
2	2	1	.68	.15

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .22

PHI COEFF: .01
CRAMER'S V: .08
CONTINGENCY COEF: .08

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: OCT C GROUP: JAN D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	2-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	22	22	0

ERROR - DIVISION BY ZERO
HIT ANY KEY TO CONT., CTRL-Q TO QUIT

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: OCT C GROUP: MAR D

CASES	MEAN RANK	CASES	MEAN RANK
2	3	2	2

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
1	3	6	0	.5

GLASS BISERIAL R = .5

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	22	16.8	1.61
2	1	5	10.2	2.65
1	2	6	11.2	2.41
2	2	12	6.8	3.98

- -

CHI SQUARED STATISTICS

DEGREES OF FREEDOM: 1
CHI-SQUARED: 10.65

PHI COEFF: .24
CRAMER'S V: .49
CONTINGENCY COEF: .44

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: OCT C GROUP: APR D

CASES	MEAN RANK	CASES	MEAN RANK
2	3	2	2

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
1	3	6	0	.5

GLASS BISERIAL R = .5

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	22	22.27	0
2	1	13	12.73	.01
1	2	6	5.73	.01
2	2	3	3.27	.02

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .04

PHI COEFF: 0
CRAMER'S V: .03
CONTINGENCY COEF: .03

- - - - - - - - - - - - - - - - - - - -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: OCT C GROUP: MAY D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- - - - - - - - - - - - - - - - - - - -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	22	22.06	0
2	1	4	3.94	0
1	2	6	5.94	0
2	2	1	1.06	0

- - - - - - - - - - - - - - - - - - - -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .01

PHI COEFF: 0
CRAMER'S V: .01
CONTINGENCY COEF: .01

- - - - - - - - - - - - - - - - - - - -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: OCT C GROUP: JUN D

CASES	MEAN RANK	CASES	MEAN RANK
2	2	2	3

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
1	3	4	-1.5492	.0607

GLASS BISERIAL R = -.5

- - - - - - - - - - - - - - - - - - - -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	22	21	.05
2	1	38	39	.03
1	2	6	7	.14
2	2	14	13	.08

- - - - - - - - - - - - - - - - - - - -

CHI SQUARED STATISTICS

DEGREES OF FREEDOM: 1
CHI-SQUARED: .29

PHI COEFF: 0
CRAMER'S V: .06
CONTINGENCY COEF: .06

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: NOVC GROUP: SEPTO

CASES	MEAN RANK	CASES	MEAN RANK
2	3.25	2	1.75

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
.5	3.5	6.5	.3873	.3493

GLASS BISERIAL R = .75

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	7	6.15	.12
2	1	3	3.85	.19
1	2	9	9.85	.07
2	2	7	6.15	.12

- -

CHI SQUARED STATISTICS

DEGREES OF FREEDOM: 1
CHI-SQUARED: .49

PHI COEFF: .02
CRAMER'S V: .14
CONTINGENCY COEF: .14

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ----------- - ----

GROUP: NOV C GROUP: OCT D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	7	7	0

ERROR - DIVISION BY ZERO
HIT ANY KEY TO CONT., CTRL-Q TO QUIT

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: NOV C GROUP: DEC D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	7	7.58	.04
2	1	2	1.42	.24
1	2	9	8.42	.04
2	2	1	1.58	.21

- -

CHI SQUARED STATISTICS

DEGREES OF FREEDOM: 1
CHI-SQUARED: .53

PHI COEFF: .03
CRAMER'S V: .17
CONTINGENCY COEF: .17

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ----------- - ----

GROUP: NOV C GROUP: JAN D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	7	7	0

ERROR - DIVISION BY ZERO
HIT ANY KEY TO CONT., CTRL-Q TO QUIT

- - - - - - - - - - - - - - - - - - - -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: NOV C GROUP: MAR D

CASES	MEAN RANK	CASES	MEAN RANK
2	2.5	2	2.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
2	2	5	-.7746	.2193

GLASS BISERIAL R = 0

- - - - - - - - - - - - - - - - - - - -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	7	5.82	.24
2	1	5	6.18	.23
1	2	9	10.18	.14
2	2	12	10.82	.13

- - - - - - - - - - - - - - - - - - - -

CHI SQUARED STATISTICS

DEGREES OF FREEDOM: 1
CHI-SQUARED: .73

PHI COEFF: .02
CRAMER'S V: .15
CONTINGENCY COEF: .15

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: NOV C GROUP: MAR D

CASES	MEAN RANK	CASES	MEAN RANK
2	2.5	2	2.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
2	2	5	-.7746	.2193

GLASS BISERIAL R = 0

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	7	10	.9
2	1	13	10	.9
1	2	9	6	1.5
2	2	3	6	1.5

- -

CHI SQUARED STATISTICS

DEGREES OF FREEDOM: 1
CHI-SQUARED: 4.8

PHI COEFF: .15
CRAMER'S V: .39
CONTINGENCY COEF: .36

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: NOV C GROUP: MAY D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	7	8.38	.23
2	1	4	2.62	.73
1	2	9	7.62	.25
2	2	1	2.38	.8

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 2.01

PHI COEFF: .1
CRAMER'S V: .31
CONTINGENCY COEF: .3

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: NOV C GROUP: JUN D

CASES	MEAN RANK	CASES	MEAN RANK
2	1.5	2	3.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	3	-2.3238	.0101

GLASS BISERIAL R = -1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	7	10.59	1.22
2	1	38	34.41	.37
1	2	9	5.41	2.38
2	2	14	17.59	.73

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 4.7

PHI COEFF: .07
CRAMER'S V: .26
CONTINGENCY COEF: .25

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: DEC C GROUP: SEPT D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	9	8.92	0
2	1	3	3.08	0
1	2	20	20.08	0
2	2	7	6.92	0

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 0

PHI COEFF: 0
CRAMER'S V: .01
CONTINGENCY COEF: .01

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------- - ----

GROUP: DEC C GROUP: OCT D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E

ERROR - DIVISION BY ZERO
HIT ANY KEY TO CONT., CTRL-Q TO QUIT

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: DEC C GROUP: NOV D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	9	9.38	.02
2	1	2	1.62	.09
1	2	20	19.62	.01
2	2	3	3.38	.04

- -

CHI SQUARED STATISTICS

DEGREES OF FREEDOM: 1
CHI-SQUARED: .16

PHI COEFF: 0
CRAMER'S V: .07
CONTINGENCY COEF: .07

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: DEC C GROUP: JAN D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	9	9	0

ERROR - DIVISION BY ZERO
HIT ANY KEY TO CONT., CTRL-Q TO QUIT

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------- - ----

GROUP: DEC C GROUP: MAR D

CASES	MEAN RANK	CASES	MEAN RANK
2	3	2	2

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
1	3	6	0	.5

GLASS BISERIAL R = .5

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	9	8.83	0
2	1	5	5.17	.01
1	2	20	20.17	0
2	2	12	11.83	0

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .01

PHI COEFF: 0
CRAMER'S V: .02
CONTINGENCY COEF: .02

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: DEC a GROUP: APR D

CASES	MEAN RANK	CASES	MEAN RANK
2	3	2	2

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
1	3	6	0	.5

GLASS BISERIAL R = .5

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	9	14.18	1.89
2	1	13	7.82	3.43
1	2	20	14.82	1.81
2	2	3	8.18	3.28

- -

CHI SQUARED STATISTICS

DEGREES OF FREEDOM: 1
CHI-SQUARED: 10.41

PHI COEFF: .23
CRAMER'S V: .48
CONTINGENCY COEF: .43

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------- - ----

GROUP: DEC C GROUP: MAY D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	9	11.09	.39
2	1	4	1.91	2.28
1	2	20	17.91	.24
2	2	1	3.09	1.41

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 4.33

PHI COEFF: .13
CRAMER'S V: .36
CONTINGENCY COEF: .34

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: DEC C GROUP: JUN D

CASES	MEAN RANK	CASES	MEAN RANK
2	2	2	3

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
1	3	4	-1.5492	.0607

GLASS BISERIAL R = -.5

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	9	16.83	3.64
2	1	38	30.17	2.03
1	2	20	12.17	5.03
2	2	14	21.83	2.81

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 13.51

PHI COEFF: .17
CRAMER'S V: .41
CONTINGENCY COEF: .38

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: JANC GROUP: SEPT 0

CASES	MEAN RANK	CASES	MEAN RANK
2	2.5	2	2.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
2	2	5	-.7746	.2193

GLASS BISERIAL R = 0

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	6	4.71	.35
2	1	3	4.29	.39
1	2	5	6.29	.26
2	2	7	5.71	.29

- -

CHI SQUARED STATISTICS

DEGREES OF FREEDOM: 1
CHI-SQUARED: 1.29

PHI COEFF: .06
CRAMER'S V: .25
CONTINGENCY COEF: .24

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: JAN C GROUP: OCT D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	6	6	0

ERROR - DIVISION BY ZERO
HIT ANY KEY TO CONT., CTRL-Q TO QUIT

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: JAN C GROUP: NOV D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	6	5.5	.05
2	1	2	2.5	.1
1	2	5	5.5	.05
2	2	3	2.5	.1

- -

CHI SQUARED STATISTICS

DEGREES OF FREEDOM: 1
CHI-SQUARED: .29

PHI COEFF: .02
CRAMER'S V: .13
CONTINGENCY COEF: .13

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: JAN C GROUP: DEC. D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	6	6.29	.01
2	1	2	1.71	.05
1	2	5	4.71	.02
2	2	1	1.29	.06

- -

CHI SQUARED STATISTICS

DEGREES OF FREEDOM: 1
CHI-SQUARED: .14

PHI COEFF: .01
CRAMER'S V: .1
CONTINGENCY COEF: .1

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------- - ----

GROUP: JAN C GROUP: MAR D

CASES	MEAN RANK	CASES	MEAN RANK
2	2.25	2	2.75

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
1.5	2.5	4.5	-1.1619	.1226

GLASS BISERIAL R = -.25

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	6	4.32	.65
2	1	5	6.68	.42
1	2	5	6.68	.42
2	2	12	10.32	.27

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 1.77

PHI COEFF: .06
CRAMER'S V: .25
CONTINGENCY COEF: .24

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: JANC GROUP: APR D

CASES	MEAN RANK	CASES	MEAN RANK
2	2.5	2	2.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
2	2	5	-.7746	.2193

GLASS BISERIAL R = 0

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	6	7.74	.39
2	1	13	11.26	.27
1	2	5	3.26	.93
2	2	3	4.74	.64

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 2.23

PHI COEFF: .08
CRAMER'S V: .29
CONTINGENCY COEF: .28

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: JAN C		GROUP: MAY D	
CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	6	6.88	.11
2	1	4	3.13	.24
1	2	5	4.13	.19
2	2	1	1.88	.41

- -

CHI SQUARED STATISTICS

DEGREES OF FREEDOM: 1
CHI-SQUARED: .95

PHI COEFF: .06
CRAMER'S V: .24
CONTINGENCY COEF: .24

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: JAN C GROUP: JUN D

CASES	MEAN RANK	CASES	MEAN RANK
2	1.5	2	3.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	3	-2.3238	.0101

GLASS BISERIAL R = -1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	6	7.68	.37
2	1	38	36.32	.08
1	2	5	3.32	.85
2	2	14	15.68	.18

- -

CHI SQUARED STATISTICS

DEGREES OF FREEDOM: 1
CHI-SQUARED: 1.48

PHI COEFF: .02
CRAMER'S V: .15
CONTINGENCY COEF: .15

- - - - - - - - - - - - - - - - - - - -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: MAR C		GROUP: SEPT D	
CASES	MEAN RANK	CASES	MEAN RANK
2	2.5	2	2.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
2	2	5	-.7746	.2193

GLASS BISERIAL R = 0

- - - - - - - - - - - - - - - - - - - -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	15	11.08	1.39
2	1	3	6.92	2.22
1	2	1	4.92	3.13
2	2	7	3.08	5

- - - - - - - - - - - - - - - - - - - -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 11.74

PHI COEFF: .45
CRAMER'S V: .67
CONTINGENCY COEF: .56

- - - - - - - - - - - - - - - - - - - -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: MAR C GROUP: OCT D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- - - - - - - - - - - - - - - - - - - -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	15	15	0

ERROR - DIVISION BY ZERO
HIT ANY KEY TO CONT., CTRL-Q TO QUIT

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: MAR C GROUP: NOV D

CASES	MEAN RANK	CASES	MEAN RANK
2	2.5	2	2.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
2	2	5	-.7746	.2193

GLASS BISERIAL R = 0

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	15	12.95	.32
2	1	2	4.05	1.04
1	2	1	3.05	1.38
2	2	3	.95	4.4

- -

CHI SQUARED STATISTICS

DEGREES OF FREEDOM: 1
CHI-SQUARED: 7.14

PHI COEFF: .34
CRAMER'S V: .58
CONTINGENCY COEF: .5

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: MAR C GROUP: DEC D

CASES	MEAN RANK	CASES	MEAN RANK
2	2.75	2	2.25

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
1.5	2.5	5.5	-.3873	.3493

GLASS BISERIAL R = .25

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	15	14.32	.03
2	1	2	2.68	.17
1	2	1	1.68	.28
2	2	1	.32	1.48

- -

CHI SQUARED STATISTICS

DEGREES OF FREEDOM: 1
CHI-SQUARED: 1.97

PHI COEFF: .1
CRAMER'S V: .32
CONTINGENCY COEF: .31

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: MARC GROUP: JAN D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	15	15	0

ERROR - DIVISION BY ZERO
HIT ANY KEY TO CONT., CTRL-Q TO QUIT

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: MARC GROUP: APRO

CASES	MEAN RANK	CASES	MEAN RANK
2	2.5	2	2.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
2	2	5	-.7746	.2193

GLASS BISERIAL R = 0

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	15	14	.07
2	1	13	14	.07
1	2	1	2	.5
2	2	3	2	.5

- -

CHI SQUARED STATISTICS

DEGREES OF FREEDOM: 1
CHI-SQUARED: 1.14

PHI COEFF: .04
CRAMER'S V: .19
CONTINGENCY COEF: .19

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: MAR C GROUP: MAY D

CASES	MEAN RANK	CASES	MEAN RANK
2	2.75	2	2.25

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
1.5	2.5	5.5	-.3873	.3493

GLASS BISERIAL R = .25

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	15	14.48	.02
2	1	4	4.52	.06
1	2	1	1.52	.18
2	2	1	.48	.58

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .84

PHI COEFF: .04
CRAMER'S V: .2
CONTINGENCY COEF: .2

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: MAR C GROUP: JUN D

CASES	MEAN RANK	CASES	MEAN RANK
2	2	2	3

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
1	3	4	-1.5492	.0607

GLASS BISERIAL R = -.5

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	15	12.47	.51
2	1	38	40.53	.16
1	2	1	3.53	1.81
2	2	14	11.47	.56

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 3.04

PHI COEFF: .04
CRAMER'S V: .21
CONTINGENCY COEF: .21

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: APR C GROUP: SEPT D

CASES	MEAN RANK	CASES	MEAN RANK
2	3	2	2

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
1	3	6	0	.5

GLASS BISERIAL R = .5

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	6	5.25	.11
2	1	3	3.75	.15
1	2	8	8.75	.06
2	2	7	6.25	.09

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .41

PHI COEFF: .02
CRAMER'S V: .13
CONTINGENCY COEF: .13

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: APR C GROUP: OCT P

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	6	6	0

ERROR - DIVISION BY ZERO
HIT ANY KEY TO CONT., CTRL-Q TO QUIT

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: APR C GROUP: NOV D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

CORRECTED FOR TIES

U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	6	5.89	0
2	1	2	2.11	.01
1	2	8	8.11	0
2	2	3	2.89	0

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .01

PHI COEFF: 0
CRAMER'S V: .03
CONTINGENCY COEF: .03

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: APR C GROUP: DEC D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	6	6.59	.05
2	1	2	1.41	.25
1	2	8	7.41	.05
2	2	1	1.59	.22

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .56

PHI COEFF: .03
CRAMER'S V: .18
CONTINGENCY COEF: .18

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: APR C GROUP: JAN D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	6	6	0

ERROR - DIVISION BY ZERO
HIT ANY KEY TO CONT., CTRL-Q TO QUIT

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: APRC GROUP: MAR O

CASES	MEAN RANK	CASES	MEAN RANK
2	2.5	2	2.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
2	2	5	-.7746	.2193

GLASS BISERIAL R = 0

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	6	4.97	.21
2	1	5	6.03	.18
1	2	8	9.03	.12
2	2	12	10.97	.1

- -

CHI SQUARED STATISTICS

DEGREES OF FREEDOM: 1
CHI-SQUARED: .61

PHI COEFF: .02
CRAMER'S V: .14
CONTINGENCY COEF: .14

- - - - - - - - - - - - - - - - - - - -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: APRC GROUP: MAY O

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- - - - - - - - - - - - - - - - - - - -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	6	7.37	.25
2	1	4	2.63	.71
1	2	8	6.63	.28
2	2	1	2.37	.79

- - - - - - - - - - - - - - - - - - - -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 2.04

PHI COEFF: .11
CRAMER'S V: .33
CONTINGENCY COEF: .31

- - - - - - - - - - - - - - - - - - - -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: APR C GROUP: JUN D

CASES	MEAN RANK	CASES	MEAN RANK
2	1.5	2	3.5

CORRECTED FOR TIES

U	U'	W	Z-VALUE	2-TAILED P
0	4	3	-2.3238	.0101

GLASS BISERIAL R = -1

- - - - - - - - - - - - - - - - - - - -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	6	9.33	1.19
2	1	38	34.67	.32
1	2	8	4.67	2.38
2	2	14	17.33	.64

- - - - - - - - - - - - - - - - - - - -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 4.53

PHI COEFF: .07
CRAMER'S V: .26
CONTINGENCY COEF: .25

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: MAY C GROUP: SEPT D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.25	2	1.75

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
.5	3.5	6.5	.3873	.3493

GLASS BISERIAL R = .75

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	7	6.67	.02
2	1	3	3.33	.03
1	2	13	13.33	.01
2	2	7	6.67	.02

- -

CHI SQUARED STATISTICS

DEGREES OF FREEDOM: 1
CHI-SQUARED: .08

PHI COEFF: 0
CRAMER'S V: .05
CONTINGENCY COEF: .05

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ----------- - ----

GROUP: MAY C GROUP: OCT D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	7	7	0

ERROR - DIVISION BY ZERO
HIT ANY KEY TO CONT., CTRL-Q TO QUIT

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: MAY C GROUP: NOV D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	7	7.2	.01
2	1	2	1.8	.02
1	2	13	12.8	0
2	2	3	3.2	.01

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .04

PHI COEFF: 0
CRAMER'S V: .04
CONTINGENCY COEF: .04

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: MAY C GROUP: DEC O

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	7	7.83	.09
2	1	2	1.17	.58
1	2	13	12.17	.06
2	2	1	1.83	.37

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 1.1

PHI COEFF: .05
CRAMER'S V: .22
CONTINGENCY COEF: .21

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: MAY C GROUP: JAN D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	7	7	0

ERROR - DIVISION BY ZERO
HIT ANY KEY TO CONT., CTRL-Q TO QUIT

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: MAYC GROUP: MARO

CASES	MEAN RANK	CASES	MEAN RANK
2	3	2	2

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
1	3	6	0	.5

GLASS BISERIAL R = .5

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	7	6.49	.04
2	1	5	5.51	.05
1	2	13	13.51	.02
2	2	12	11.49	.02

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .13

PHI COEFF: 0
CRAMER'S V: .06
CONTINGENCY COEF: .06

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: MAY C GROUP: APR O

CASES	MEAN RANK	CASES	MEAN RANK
2	2.75	2	2.25

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
1.5	2.5	5.5	-.3873	.3493

GLASS BISERIAL R = .25

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	7	11.11	1.52
2	1	13	8.89	1.9
1	2	13	8.89	1.9
2	2	3	7.11	2.38

- -

CHI SQUARED STATISTICS

DEGREES OF FREEDOM: 1
CHI-SQUARED: 7.7

PHI COEFF: .21
CRAMER'S V: .46
CONTINGENCY COEF: .42

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: MAY C GROUP: JUN D

CASES	MEAN RANK	CASES	MEAN RANK
2	1.75	2	3.25

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
.5	3.5	3.5	-1.9365	.0264

GLASS BISERIAL R = -.75

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	7	12.68	2.54
2	1	38	32.32	1
1	2	13	7.32	4.4
2	2	13	18.68	1.73

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 9.66

PHI COEFF: .14
CRAMER'S V: .37
CONTINGENCY COEF: .35

Month Control Vs. Month Control

- - - - - - - - - - - - - - - - - - - -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ----------- - ----

GROUP: SEPTC GROUP: OCT C

CASES	MEAN RANK	CASES	MEAN RANK
2	3	2	2

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
1	3	6	0	.5

GLASS BISERIAL R = .5

- - - - - - - - - - - - - - - - - - - -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	16	23.62	2.46
2	1	22	14.38	4.04
1	2	30	22.38	2.6
2	2	6	13.62	4.26

- - - - - - - - - - - - - - - - - - - -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 13.36

PHI COEFF: .18
CRAMER'S V: .42
CONTINGENCY COEF: .39

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: SEPT C GROUP: NOV C

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	16	17.06	.07
2	1	7	5.94	.19
1	2	30	28.94	.04
2	2	9	10.06	.11

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .41

PHI COEFF: .01
CRAMER'S V: .08
CONTINGENCY COEF: .08

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: SEPT C GROUP: DEC C

CASES	MEAN RANK	CASES	MEAN RANK
2	3	2	2

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
1	3	6	0	.5

GLASS BISERIAL R = .5

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	16	15.33	.03
2	1	9	9.67	.05
1	2	30	30.67	.01
2	2	20	19.33	.02

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .11

PHI COEFF: 0
CRAMER'S V: .04
CONTINGENCY COEF: .04

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: SEPT C GROUP: JAN C

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	16	17.75	.17
2	1	6	4.25	.72
1	2	30	28.25	.11
2	2	5	6.75	.46

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 1.46

PHI COEFF: .03
CRAMER'S V: .16
CONTINGENCY COEF: .16

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: SEPTC GROUP: MARC

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	16	23	2.13
2	1	15	8	6.13
1	2	30	23	2.13
2	2	1	8	6.13

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 16.51

PHI COEFF: .27
CRAMER'S V: .52
CONTINGENCY COEF: .46

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: SEPT C GROUP: APR C

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	16	16.87	.04
2	1	6	5.13	.15
1	2	30	29.13	.03
2	2	8	8.87	.08

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .3

PHI COEFF: .01
CRAMER'S V: .07
CONTINGENCY COEF: .07

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: SEPT C GROUP: MAY C

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	16	16.03	0
2	1	7	6.97	0
1	2	30	29.97	0
2	2	13	13.03	0

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 0

PHI COEFF: 0
CRAMER'S V: 0
CONTINGENCY COEF: 0

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: SEPT C GROUP: JUN C

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	16	17.69	.16
2	1	4	2.31	1.24
1	2	30	28.31	.1
2	2	2	3.69	.78

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 2.28

PHI COEFF: .04
CRAMER'S V: .21
CONTINGENCY COEF: .2

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ----------- - ----

GROUP: OCT C GROUP: NOV C

CASES	MEAN RANK	CASES	MEAN RANK
2	2.5	2	2.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
2	2	5	-.7746	.2193

GLASS BISERIAL R = 0

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	22	18.45	.68
2	1	7	10.55	1.19
1	2	6	9.55	1.32
2	2	9	5.45	2.3

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 5.49

PHI COEFF: .12
CRAMER'S V: .35
CONTINGENCY COEF: .33

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: OCT C GROUP: OEC C

CASES	MEAN RANK	CASES	MEAN RANK
2	2.5	2	2.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
2	2	5	-.7746	.2193

GLASS BISERIAL R = 0

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	22	15.23	3.01
2	1	9	15.77	2.91
1	2	6	12.77	3.59
2	2	20	13.23	3.47

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 12.98

PHI COEFF: .23
CRAMER'S V: .48
CONTINGENCY COEF: .43

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: OCT C GROUP: JAN C

CASES	MEAN RANK	CASES	MEAN RANK
2	3.25	2	1.75

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
.5	3.5	6.5	.3873	.3493

GLASS BISERIAL R = .75

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	22	20.1	.18
2	1	6	7.9	.46
1	2	6	7.9	.46
2	2	5	3.1	1.16

- -

CHI SQUARED STATISTICS

DEGREES OF FREEDOM: 1
CHI-SQUARED: 2.25

PHI COEFF: .06
CRAMER'S V: .24
CONTINGENCY COEF: .23

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ----------- - ----

GROUP: OCT C GROUP: MAR C

CASES	MEAN RANK	CASES	MEAN RANK
2	3	2	2

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
1	3	6	0	.5

GLASS BISERIAL R = .5

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	22	23.55	.1
2	1	15	13.45	.18
1	2	6	4.45	.54
2	2	1	2.55	.94

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 1.75

PHI COEFF: .04
CRAMER'S V: .2
CONTINGENCY COEF: .2

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: OCT C GROUP: APR C

CASES	MEAN RANK	CASES	MEAN RANK
2	2.75	2	2.25

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
1.5	2.5	5.5	-.3873	.3493

GLASS BISERIAL R = .25

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	22	18.67	.6
2	1	6	9.33	1.19
1	2	6	9.33	1.19
2	2	8	4.67	2.38

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 5.36

PHI COEFF: .13
CRAMER'S V: .36
CONTINGENCY COEF: .34

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: OCT C GROUP: MAY C

CASES	MEAN RANK	CASES	MEAN RANK
2	2.5	2	2.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
2	2	5	-.7746	.2193

GLASS BISERIAL R = 0

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	22	16.92	1.53
2	1	7	12.08	2.14
1	2	6	11.08	2.33
2	2	13	7.92	3.26

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 9.26

PHI COEFF: .19
CRAMER'S V: .44
CONTINGENCY COEF: .4

- - - - - - - - - - - - - - - - - - - -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ----------- - ----

GROUP: OCT C GROUP: JUNC

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- - - - - - - - - - - - - - - - - - - -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	22	21.41	.02
2	1	4	4.59	.08
1	2	6	6.59	.05
2	2	2	1.41	.25

- - - - - - - - - - - - - - - - - - - -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .39

PHI COEFF: .01
CRAMER'S V: .11
CONTINGENCY COEF: .11

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: NOV C GROUP: DEC C

CASES	MEAN RANK	CASES	MEAN RANK
2	1.75	2	3.25

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
.5	3.5	3.5	-1.9365	.0264

GLASS BISERIAL R = -.75

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	7	5.69	.3
2	1	9	10.31	.17
1	2	9	10.31	.17
2	2	20	18.69	.09

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .73

PHI COEFF: .02
CRAMER'S V: .13
CONTINGENCY COEF: .13

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: NOV C GROUP: JAN C

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	7	7.7	.06
2	1	6	5.3	.09
1	2	9	8.3	.06
2	2	5	5.7	.09

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .3

PHI COEFF: .01
CRAMER'S V: .11
CONTINGENCY COEF: .11

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ----------- - ----

GROUP: NOUC GROUP: MARC

CASES	MEAN RANK	CASES	MEAN RANK
2	2.5	2	2.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
2	2	5	-.7746	.2193

GLASS BISERIAL R = 0

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	7	11	1.45
2	1	15	11	1.45
1	2	9	5	3.2
2	2	1	5	3.2

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 9.31

PHI COEFF: .29
CRAMER'S V: .54
CONTINGENCY COEF: .47

C

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: NOVC GROUP: APR C

CASES	MEAN RANK	CASES	MEAN RANK
2	3	2	2

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
1	3	6	0	.5

GLASS BISERIAL R = .5

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	7	6.93	0
2	1	6	6.07	0
1	2	9	9.07	0
2	2	8	7.93	0

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 0

PHI COEFF: 0
CRAMER'S V: .01
CONTINGENCY COEF: .01

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: NOV C GROUP: MAY C

CASES	MEAN RANK	CASES	MEAN RANK
2	2.25	2	2.75

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
1.5	2.5	4.5	-1.1619	.1226

GLASS BISERIAL R = -.25

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	7	6.22	.1
2	1	7	7.78	.08
1	2	9	9.78	.06
2	2	13	12.22	.05

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .29

PHI COEFF: .01
CRAMER'S V: .09
CONTINGENCY COEF: .09

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: NONC GROUP: JUNC

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	7	8	.13
2	1	4	3	.33
1	2	9	8	.13
2	2	2	3	.33

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .92

PHI COEFF: .04
CRAMER'S V: .2
CONTINGENCY COEF: .2

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: DEC C GROUP: JAN C

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

CORRECTED FOR TIES

U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	9	10.88	.32
2	1	6	4.13	.85
1	2	20	18.13	.19
2	2	5	6.88	.51

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 1.88

PHI COEFF: .05
CRAMER'S V: .22
CONTINGENCY COEF: .21

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: OECC GROUP: MARC

CASES	MEAN RANK	CASES	MEAN RANK
2	3	2	2

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
1	3	6	0	.5

GLASS BISERIAL R = .5

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	9	15.47	2.7
2	1	15	8.53	4.9
1	2	20	13.53	3.09
2	2	1	7.47	5.6

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 16.29

PHI COEFF: .36
CRAMER'S V: .6
CONTINGENCY COEF: .52

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: DEC C GROUP: APR C

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	9	10.12	.12
2	1	6	4.88	.26
1	2	20	18.88	.07
2	2	8	9.12	.14

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .58

PHI COEFF: .01
CRAMER'S V: .12
CONTINGENCY COEF: .12

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: DEC C GROUP: MAY C

CASES	MEAN RANK	CASES	MEAN RANK
2	3	2	2

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
1	3	6	0	.5

GLASS BISERIAL R = .5

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	9	9.47	.02
2	1	7	6.53	.03
1	2	20	19.53	.01
2	2	13	13.47	.02

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .08

PHI COEFF: 0
CRAMER'S V: .04
CONTINGENCY COEF: .04

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: DEC C GROUP: JUN C

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	9	10.77	.29
2	1	4	2.23	1.41
1	2	20	18.23	.17
2	2	2	3.77	.83

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 2.7

PHI COEFF: .08
CRAMER'S V: .28
CONTINGENCY COEF: .27

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: JAN C GROUP: MAR C

CASES	MEAN RANK	CASES	MEAN RANK
2	2.5	2	2.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
2	2	5	-.7746	.2193

GLASS BISERIAL R = 0

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	6	8.56	.76
2	1	15	12.44	.52
1	2	5	2.44	2.67
2	2	1	3.56	1.84

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 5.8

PHI COEFF: .21
CRAMER'S V: .46
CONTINGENCY COEF: .42

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: JANC GROUP: APRC

CASES	MEAN RANK	CASES	MEAN RANK
2	1.75	2	3.25

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
.5	3.5	3.5	-1.9365	.0264

GLASS BISERIAL R = -.75

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	6	5.28	.1
2	1	6	6.72	.08
1	2	5	5.72	.09
2	2	8	7.28	.07

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .34

PHI COEFF: .01
CRAMER'S V: .12
CONTINGENCY COEF: .12

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: JANC GROUP: MAYC

CASES	MEAN RANK	CASES	MEAN RANK
2	1.5	2	3.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	3	-2.3238	.0101

GLASS BISERIAL R = -1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	6	4.61	.42
2	1	7	8.39	.23
1	2	5	6.39	.3
2	2	13	11.61	.17

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 1.11

PHI COEFF: .04
CRAMER'S V: .19
CONTINGENCY COEF: .19

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: JAN C GROUP: JUNC

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	6	6.47	.03
2	1	4	3.53	.06
1	2	5	4.53	.05
2	2	2	2.47	.09

- -

CHI SQUARED STATISTICS
--- ---------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .24

PHI COEFF: .01
CRAMER'S V: .12
CONTINGENCY COEF: .12

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: MARC GROUP: APRC

CASES	MEAN RANK	CASES	MEAN RANK
2	2.5	2	2.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
2	2	5	-.7746	.2193

GLASS BISERIAL R = 0

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	15	11.2	1.29
2	1	6	9.8	1.47
1	2	1	4.8	3.01
2	2	8	4.2	3.44

- -

CHI SQUARED STATISTICS

DEGREES OF FREEDOM: 1
CHI-SQUARED: 9.21

PHI COEFF: .31
CRAMER'S V: .55
CONTINGENCY COEF: .48

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: MARC GROUP: MAYC

CASES	MEAN RANK	CASES	MEAN RANK
2	2.5	2	2.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
2	2	5	-.7746	.2193

GLASS BISERIAL R = 0

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	15	9.78	2.79
2	1	7	12.22	2.23
1	2	1	6.22	4.38
2	2	13	7.78	3.51

- -

CHI SQUARED STATISTICS

DEGREES OF FREEDOM: 1
CHI-SQUARED: 12.91

PHI COEFF: .36
CRAMER'S V: .6
CONTINGENCY COEF: .51

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: MAR C GROUP: JUN C

CASES	MEAN RANK	CASES	MEAN RANK
2	2.5	2	2.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
2	2	5	-.7746	.2193

GLASS BISERIAL R = 0

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	15	13.82	.1
2	1	4	5.18	.27
1	2	1	2.18	.64
2	2	2	.82	1.71

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 2.72

PHI COEFF: .12
CRAMER'S V: .35
CONTINGENCY COEF: .33

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ----------- - ----

GROUP: APR C GROUP: MAY C

CASES	MEAN RANK	CASES	MEAN RANK
2	2	2	3

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
1	3	4	-1.5492	.0607

GLASS BISERIAL R = -.5

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	6	5.35	.08
2	1	7	7.65	.05
1	2	8	8.65	.05
2	2	13	12.35	.03

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .22

PHI COEFF: .01
CRAMER'S V: .08
CONTINGENCY COEF: .08

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: APR C GROUP: JUN C

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	6	7	.14
2	1	4	3	.33
1	2	8	7	.14
2	2	2	3	.33

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .95

PHI COEFF: .05
CRAMER'S V: .22
CONTINGENCY COEF: .21

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: MAY C GROUP: JUN C

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	7	8.46	.25
2	1	4	2.54	.84
1	2	13	11.54	.19
2	2	2	3.46	.62

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 1.9

PHI COEFF: .07
CRAMER'S V: .27
CONTINGENCY COEF: .26

Month Dragged Vs. Month Dragged

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: SEPT D GROUP: OCT D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: SEPT D GROUP: NOV D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.25	2	1.75

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
.5	3.5	6.5	.3873	.3493

GLASS BISERIAL R = .75

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	3	3.33	.03
2	1	2	1.67	.07
1	2	7	6.67	.02
2	2	3	3.33	.03

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .15

PHI COEFF: .01
CRAMER'S V: .1
CONTINGENCY COEF: .1

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: SEPT O GROUP: DEC O

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	3	3.85	.19
2	1	2	1.15	.62
1	2	7	6.15	.12
2	2	1	1.85	.39

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 1.31

PHI COEFF: .1
CRAMER'S V: .32
CONTINGENCY COEF: .3

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: SEPT D GROUP: JAN D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: SEPT 0 GROUP: MAR 0

CASES	MEAN RANK	CASES	MEAN RANK
2	2	2	3

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
1	3	4	-1.5492	.0607

GLASS BISERIAL R = -.5

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	3	2.96	0
2	1	5	5.04	0
1	2	7	7.04	0
2	2	12	11.96	0

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 0

PHI COEFF: 0
CRAMER'S V: .01
CONTINGENCY COEF: .01

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: SEPT D GROUP: APR D

CASES	MEAN RANK	CASES	MEAN RANK
2	2.25	2	2.75

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
1.5	2.5	4.5	-1.1619	.1226

GLASS BISERIAL R = -.25

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	3	6.15	1.62
2	1	13	9.85	1.01
1	2	7	3.85	2.59
2	2	3	6.15	1.62

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 6.83

PHI COEFF: .26
CRAMER'S V: .51
CONTINGENCY COEF: .46

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: SEPT D GROUP: MAY D

CASES	MEAN RANK	CASES	MEAN RANK
2	3	2	2

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
1	3	6	0	.5

GLASS BISERIAL R = .5

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	3	4.67	.6
2	1	4	2.33	1.19
1	2	7	5.33	.52
2	2	1	2.67	1.04

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 3.35

PHI COEFF: .22
CRAMER'S V: .47
CONTINGENCY COEF: .43

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: SEPT D GROUP: JUN D

CASES	MEAN RANK	CASES	MEAN RANK
2	1.5	2	3.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	3	-2.3238	.0101

GLASS BISERIAL R = -1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	3	6.61	1.97
2	1	38	34.39	.38
1	2	7	3.39	3.85
2	2	14	17.61	.74

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 6.95

PHI COEFF: .11
CRAMER'S V: .33
CONTINGENCY COEF: .32

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: OCT D GROUP: NOV D

CASES	MEAN RANK	CASES	MEAN RANK
2	1.5	2	3.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	3	-2.3238	.0101

GLASS BISERIAL R = -1

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: OCT D GROUP: DEC D

CASES	MEAN RANK	CASES	MEAN RANK
2	1.5	2	3.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	3	-2.3238	.0101

GLASS BISERIAL R = -1

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: OCT D GROUP: JAN D

CASES	MEAN RANK	CASES	MEAN RANK
2	2.5	2	2.5

CORRECTED FOR TIES

U	U'	W	Z-VALUE	2-TAILED P
2	2	5	-.7746	.2193

GLASS BISERIAL R = 0

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: OCT D GROUP: MAR D

CASES	MEAN RANK	CASES	MEAN RANK
2	1.5	2	3.5

CORRECTED FOR TIES

U	U'	W	Z-VALUE	2-TAILED P
0	4	3	-2.3238	.0101

GLASS BISERIAL R = -1

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: OCT D GROUP: APR D

CASES	MEAN RANK	CASES	MEAN RANK
2	1.5	2	3.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	3	-2.3238	.0101

GLASS BISERIAL R = -1

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: OCT D GROUP: MAY O

CASES	MEAN RANK	CASES	MEAN RANK
2	1.5	2	3.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	3	-2.3238	.0101

GLASS BISERIAL R = -1

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: OCT D GROUP: JUN D

CASES	MEAN RANK	CASES	MEAN RANK
2	1.5	2	3.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	3	-2.3238	.0101

GLASS BISERIAL R = -1

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: NOV D GROUP: DEC D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.25	2	1.75

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
.5	3.5	6.5	.3873	.3493

GLASS BISERIAL R = .75

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	2	2.5	.1
2	1	2	1.5	.17
1	2	3	2.5	.1
2	2	1	1.5	.17

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .53

PHI COEFF: .07
CRAMER'S V: .26
CONTINGENCY COEF: .25

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: NOV D GROUP: JAN D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: NOV D GROUP: MAR D

CASES	MEAN RANK	CASES	MEAN RANK
2	1.5	2	3.5

CORRECTED FOR TIES

U	U'	W	Z-VALUE	2-TAILED P
0	4	3	-2.3238	.0101

GLASS BISERIAL R = -1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	2	1.59	.11
2	1	5	5.41	.03
1	2	3	3.41	.05
2	2	12	11.59	.01

- -

CHI SQUARED STATISTICS

DEGREES OF FREEDOM: 1
CHI-SQUARED: .2

PHI COEFF: .01
CRAMER'S V: .1
CONTINGENCY COEF: .09

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: NOV O GROUP: APR O

CASES	MEAN RANK	CASES	MEAN RANK
2	1.75	2	3.25

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
.5	3.5	3.5	-1.9365	.0264

GLASS BISERIAL R = -.75

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	2	3.57	.69
2	1	13	11.43	.22
1	2	3	1.43	1.73
2	2	3	4.57	.54

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 3.18

PHI COEFF: .15
CRAMER'S V: .39
CONTINGENCY COEF: .36

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: NOV 0 GROUP: MAY 0

CASES	MEAN RANK	CASES	MEAN RANK
2	2.5	2	2.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
2	2	5	-.7746	.2193

GLASS BISERIAL R = 0

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	2	3	.33
2	1	4	3	.33
1	2	3	2	.5
2	2	1	2	.5

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 1.67

PHI COEFF: .17
CRAMER'S V: .41
CONTINGENCY COEF: .38

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: NOND GROUP: JUND

CASES	MEAN RANK	CASES	MEAN RANK
2	1.5	2	3.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	3	-2.3238	.0101

GLASS BISERIAL R = -1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	2	3.51	.65
2	1	38	36.49	.06
1	2	3	1.49	1.53
2	2	14	15.51	.15

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 2.38

PHI COEFF: .04
CRAMER'S V: .2
CONTINGENCY COEF: .2

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: DEC D GROUP: JAN D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: OEC D GROUP: MAR D

CASES	MEAN RANK	CASES	MEAN RANK
2	1.5	2	3.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	3	-2.3238	.0101

GLASS BISERIAL R = -1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	2	1.05	.86
2	1	5	5.95	.15
1	2	1	1.95	.46
2	2	12	11.05	.08

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 1.56

PHI COEFF: .08
CRAMER'S V: .28
CONTINGENCY COEF: .27

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: DEC D GROUP: APR D

CASES	MEAN RANK	CASES	MEAN RANK
2	1.5	2	3.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	3	-2.3238	.0101

GLASS BISERIAL R = -1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	2	2.37	.06
2	1	13	12.63	.01
1	2	1	.63	.21
2	2	3	3.37	.04

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .32

PHI COEFF: .02
CRAMER'S V: .13
CONTINGENCY COEF: .13

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: DEC D GROUP: MAY D

CASES	MEAN RANK	CASES	MEAN RANK
2	2.25	2	2.75

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
1.5	2.5	4.5	-1.1619	.1226

GLASS BISERIAL R = -.25

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	2	2.25	.03
2	1	4	3.75	.02
1	2	1	.75	.08
2	2	1	1.25	.05

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .18

PHI COEFF: .02
CRAMER'S V: .15
CONTINGENCY COEF: .15

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------- - ----

GROUP: DEC D GROUP: JUN D

CASES	MEAN RANK	CASES	MEAN RANK
2	1.5	2	3.5

CORRECTED FOR TIES

U	U'	W	Z-VALUE	2-TAILED P
0	4	3	-2.3238	.0101

GLASS BISERIAL R = -1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	2	2.18	.02
2	1	38	37.82	0
1	2	1	.82	.04
2	2	14	14.18	0

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .06

PHI COEFF: 0
CRAMER'S V: .03
CONTINGENCY COEF: .03

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: JAN D GROUP: MAR D

CASES	MEAN RANK	CASES	MEAN RANK
2	1.5	2	3.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	3	-2.3238	.0101

GLASS BISERIAL R = -1

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: JAN O GROUP: APR O

CASES	MEAN RANK	CASES	MEAN RANK
2	1.5	2	3.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	3	-2.3238	.0101

GLASS BISERIAL R = -1

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: JAN D GROUP: MAY D

CASES	MEAN RANK	CASES	MEAN RANK
2	1.5	2	3.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	3	-2.3238	.0101

GLASS BISERIAL R = -1

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: JAN D		GROUP: JUN D	
CASES	MEAN RANK	CASES	MEAN RANK
2	1.5	2	3.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	3	-2.3238	.0101

GLASS BISERIAL R = -1

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: MAR 0 GROUP: APR 0

CASES	MEAN RANK	CASES	MEAN RANK
2	2.5	2	2.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
2	2	5	-.7746	.2193

GLASS BISERIAL R = 0

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	5	9.27	1.97
2	1	13	8.73	2.09
1	2	12	7.73	2.36
2	2	3	7.27	2.51

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 8.93

PHI COEFF: .27
CRAMER'S V: .52
CONTINGENCY COEF: .46

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: MAR 0 GROUP: MAY 0

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
2	1	4	2.05	1.87
1	1	5	6.95	.55
2	2	1	2.95	1.29
1	2	12	10.05	.38

- -

CHI SQUARED STATISTICS

DEGREES OF FREEDOM: 1
CHI-SQUARED: 4.09

PHI COEFF: .19
CRAMER'S V: .43
CONTINGENCY COEF: .4

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------- - ----

GROUP: MAR D GROUP: JUN D

CASES	MEAN RANK	CASES	MEAN RANK
2	1.5	2	3.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	3	-2.3238	.0101

GLASS BISERIAL R = -1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	5	10.59	2.95
2	1	38	32.41	.97
1	2	12	6.41	4.89
2	2	14	19.59	1.6

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 10.4

PHI COEFF: .15
CRAMER'S V: .39

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------- - ----

GROUP: APR 0 GROUP: MAY 0

CASES	MEAN RANK	CASES	MEAN RANK
2	3	2	2

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
1	3	6	0	.5

GLASS BISERIAL R = .5

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	13	12.95	0
2	1	4	4.05	0
1	2	3	3.05	0
2	2	1	.95	0

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 0

PHI COEFF: 0
CRAMER'S V: .01
CONTINGENCY COEF: .01

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ----------- - ----

GROUP: APR D GROUP: JUN D

CASES	MEAN RANK	CASES	MEAN RANK
2	1.5	2	3.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	3	-2.3238	.0101

GLASS BISERIAL R = -1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	13	12	.08
2	1	38	39	.03
1	2	3	4	.25
2	2	14	13	.08

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .44

PHI COEFF: .01
CRAMER'S V: .08
CONTINGENCY COEF: .08

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: MAY D GROUP: JUN D

CASES	MEAN RANK	CASES	MEAN RANK
2	1.5	2	3.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	3	-2.3238	.0101

GLASS BISERIAL R = -1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	4	3.68	.03
2	1	38	38.32	0
1	2	1	1.32	.08
2	2	14	13.68	.01

- -

CHI SQUARED STATISTICS

DEGREES OF FREEDOM: 1
CHI-SQUARED: .11

PHI COEFF: 0
CRAMER'S V: .04
CONTINGENCY COEF: .04

- -

--EXPECTED VALUES TABLE--

Mytilus edulis

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	266	262.35	.05
2	1	2	5.65	2.36
1	2	551	553.08	.01
2	2	14	11.92	.36
1	3	307	302.48	.07
2	3	2	6.52	3.13
1	4	109	106.7	.05
2	4	0	2.3	2.3
1	5	425	417.99	.12
2	5	2	9.01	5.45
1	6	295	296.61	.01
2	6	8	6.39	.4
1	7	384	377.86	.1
2	7	2	8.14	4.63
1	8	508	509.03	0
2	8	12	10.97	.1
1	9	387	379.82	.14
2	9	1	8.18	6.31
1	10	373	366.11	.13
2	10	1	7.89	6.02
1	11	764	750.82	.23
2	11	3	16.18	10.74
1	12	767	767.46	0
2	12	17	16.54	.01
1	13	310	329.89	1.2
2	13	27	7.11	55.66
1	14	325	334.79	.29
2	14	17	7.21	13.27
1	15	309	324.02	.7
2	15	22	6.98	32.3
1	16	504	496.3	.12
2	16	3	10.7	5.54
1	17	374	385.69	.35
2	17	20	8.31	16.44
1	18	374	371.01	.02
2	18	5	7.99	1.12

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 17
CHI-SQUARED: 169.72

Month Control Vs. Month Dragged

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: SEPT C GROUP: SEPT D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	266	262.85	.04
2	1	2	5.15	1.92
1	2	551	554.15	.02
2	2	14	10.85	.91

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 2.89

PHI COEFF: 0
CRAMER'S V: .06
CONTINGENCY COEF: .06

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: OCT C GROUP: OCT D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	307	307.52	0
2	1	2	1.48	.18
1	2	109	108.48	0
2	2	0	.52	.52

- -

CHI SQUARED STATISTICS

DEGREES OF FREEDOM: 1
CHI-SQUARED: .71

PHI COEFF: 0
CRAMER'S V: .04
CONTINGENCY COEF: .04

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: NOV C GROUP: NOV D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	425	421.15	.04
2	1	2	5.85	2.53
1	2	295	298.85	.05
2	2	8	4.15	3.57

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 6.19

PHI COEFF: .01
CRAMER'S V: .09
CONTINGENCY COEF: .09

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: DEC C GROUP: DEC D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	384	380.04	.04
2	1	2	5.96	2.64
1	2	508	511.96	.03
2	2	12	8.04	1.96

- -

CHI SQUARED STATISTICS

DEGREES OF FREEDOM: 1
CHI-SQUARED: 4.66

PHI COEFF: .01
CRAMER'S V: .07
CONTINGENCY COEF: .07

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: JAN C GROUP: JAN D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	387	386.98	0
2	1	1	1.02	0
1	2	373	373.02	0
2	2	1	.98	0

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 0

PHI COEFF: 0
CRAMER'S V: 0
CONTINGENCY COEF: 0

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: MARC GROUP: MARO

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	764	757.11	.06
2	1	3	9.89	4.8
1	2	767	773.89	.06
2	2	17	10.11	4.7

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 9.62

PHI COEFF: .01
CRAMER'S V: .08
CONTINGENCY COEF: .08

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: APR C GROUP: APR D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	310	315.16	.08
2	1	27	21.84	1.22
1	2	325	319.84	.08
2	2	17	22.16	1.2

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 2.59

PHI COEFF: 0
CRAMER'S V: .06
CONTINGENCY COEF: .06

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: MAY C GROUP: MAY D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	309	321.13	.46
2	1	22	9.87	14.89
1	2	504	491.87	.3
2	2	3	15.13	9.72

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 25.37

PHI COEFF: .03
CRAMER'S V: .17
CONTINGENCY COEF: .17

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: JUNC GROUP: JUND

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	374	381.26	.14
2	1	20	12.74	4.13
1	2	374	366.74	.14
2	2	5	12.26	4.3

- -

CHI SQUARED STATISTICS

DEGREES OF FREEDOM: 1
CHI-SQUARED: 8.71

PHI COEFF: .01
CRAMER'S V: .11
CONTINGENCY COEF: .11

Month (variable) Control Vs. Month Dragged

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: SEPT C GROUP: OCT D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	266	267.35	.01
2	1	2	.65	2.77
1	2	551	549.65	0
2	2	0	1.35	1.35

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 4.12

PHI COEFF: .01
CRAMER'S V: .07
CONTINGENCY COEF: .07

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: SEPT C GROUP: NOV O

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	266	264.76	.01
2	1	2	3.24	.47
1	2	551	552.24	0
2	2	8	6.76	.23

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .71

PHI COEFF: 0
CRAMER'S V: .03
CONTINGENCY COEF: .03

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: SEPTC GROUP: DEC D

CASES MEAN RANK CASES MEAN RANK

2 3.5 2 1.5

CORRECTED FOR TIES

U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	266	263.48	.02
2	1	2	4.52	1.4
1	2	551	553.52	.01
2	2	12	9.48	.67

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 2.1

PHI COEFF: 0
CRAMER'S V: .05
CONTINGENCY COEF: .05

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: SEPT C GROUP: JAN D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	266	266.35	0
2	1	1	.65	.19
1	2	551	550.65	0
2	2	1	1.35	.09

- -

CHI SQUARED STATISTICS

DEGREES OF FREEDOM: 1
CHI-SQUARED: .28

PHI COEFF: 0
CRAMER'S V: .02
CONTINGENCY COEF: .02

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: SEPT C GROUP: MAR O

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	266	262.57	.04
2	1	3	6.43	1.83
1	2	551	554.43	.02
2	2	17	13.57	.87

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 2.76

PHI COEFF: 0
CRAMER'S V: .06
CONTINGENCY COEF: .06

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- ------- ----------- - ----

GROUP: SEPTC GROUP: APR D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	266	278.03	.52
2	1	27	14.97	9.66
1	2	551	538.97	.27
2	2	17	29.03	4.98

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 15.43

PHI COEFF: .02
CRAMER'S V: .13
CONTINGENCY COEF: .13

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: SEPT C GROUP: MAY O

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	266	279.45	.65
2	1	22	8.55	21.15
1	2	551	537.55	.34
2	2	3	16.45	11

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 33.13

PHI COEFF: .04
CRAMER'S V: .2
CONTINGENCY COEF: .19

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: SEPT C GROUP: JUN D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	266	277.51	.48
2	1	20	8.49	15.6
1	2	551	539.49	.25
2	2	5	16.51	8.02

- -

CHI SQUARED STATISTICS

DEGREES OF FREEDOM: 1
CHI-SQUARED: 24.34

PHI COEFF: .03
CRAMER'S V: .17
CONTINGENCY COEF: .17

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: OCT C GROUP: SEPT D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	307	297.56	.3
2	1	2	11.44	7.79
1	2	109	118.44	.75
2	2	14	4.56	19.58

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 28.43

PHI COEFF: .07
CRAMER'S V: .26
CONTINGENCY COEF: .25

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: OCT C GROUP: NOV D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	307	301.75	.09
2	1	2	7.25	3.8
1	2	109	114.25	.24
2	2	8	2.75	10.05

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 14.19

PHI COEFF: .03
CRAMER'S V: .18
CONTINGENCY COEF: .18

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: OCT C GROUP: OEC D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	307	298.94	.22
2	1	2	10.06	6.46
1	2	109	117.06	.56
2	2	12	3.94	16.49

- -

CHI SQUARED STATISTICS

DEGREES OF FREEDOM: 1
CHI-SQUARED: 23.72

PHI COEFF: .06
CRAMER'S V: .23
CONTINGENCY COEF: .23

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: OCT C GROUP: JAN D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	307	306.53	0
2	1	1	1.47	.15
1	2	109	109.47	0
2	2	1	.53	.43

- -

CHI SQUARED STATISTICS

DEGREES OF FREEDOM: 1
CHI-SQUARED: .58

PHI COEFF: 0
CRAMER'S V: .04
CONTINGENCY COEF: .04

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: OCT C GROUP: MAR D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

CORRECTED FOR TIES

U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	307	295.78	.43
2	1	3	14.22	8.85
1	2	109	120.22	1.05
2	2	17	5.78	21.78

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 32.11

PHI COEFF: .07
CRAMER'S V: .27
CONTINGENCY COEF: .26

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: OCT C GROUP: APR D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	307	302.05	.08
2	1	27	31.95	.77
1	2	109	113.95	.21
2	2	17	12.05	2.03

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 3.09

PHI COEFF: .01
CRAMER'S V: .08
CONTINGENCY COEF: .08

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: OCT C GROUP: MAY D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	307	310.35	.04
2	1	22	18.65	.6
1	2	109	105.65	.11
2	2	3	6.35	1.77

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 2.51

PHI COEFF: .01
CRAMER'S V: .08
CONTINGENCY COEF: .08

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: OCT C GROUP: JUN D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

U	U′	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	307	308.46	.01
2	1	20	18.54	.12
1	2	109	107.54	.02
2	2	5	6.46	.33

- -

CHI SQUARED STATISTICS

DEGREES OF FREEDOM: 1
CHI-SQUARED: .47

PHI COEFF: 0
CRAMER'S V: .03
CONTINGENCY COEF: .03

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: NOV C GROUP: SEPT D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	425	417.72	.13
2	1	2	9.28	5.71
1	2	295	302.28	.18
2	2	14	6.72	7.9

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 13.91

PHI COEFF: .02
CRAMER'S V: .14
CONTINGENCY COEF: .14

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: NOV C GROUP: OCT D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	425	425.82	0
2	1	2	1.18	.56
1	2	295	294.18	0
2	2	0	.82	.82

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 1.39

PHI COEFF: 0
CRAMER'S V: .04
CONTINGENCY COEF: .04

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- ------- ------------ - ----

GROUP: NOV C GROUP: DEC D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

CORRECTED FOR TIES

U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	425	418.86	.09
2	1	2	8.14	4.64
1	2	295	301.14	.13
2	2	12	5.86	6.45

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 11.3

PHI COEFF: .02
CRAMER'S V: .12
CONTINGENCY COEF: .12

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: NOVC GROUP: JAND

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	425	424.82	0
2	1	1	1.18	.03
1	2	295	295.18	0
2	2	1	.82	.04

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .07

PHI COEFF: 0
CRAMER'S V: .01
CONTINGENCY COEF: .01

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: NOV C GROUP: MAR D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	425	416.43	.18
2	1	3	11.57	6.35
1	2	295	303.57	.24
2	2	17	8.43	8.7

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 15.47

PHI COEFF: .02
CRAMER'S V: .14
CONTINGENCY COEF: .14

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: NOVC GROUP: APRD

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	425	425.97	0
2	1	27	26.03	.04
1	2	295	294.03	0
2	2	17	17.97	.05

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .09

PHI COEFF: 0
CRAMER'S V: .01
CONTINGENCY COEF: .01

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: NOV C GROUP: MAY O

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	425	432	.11
2	1	22	15	3.27
1	2	295	288	.17
2	2	3	10	4.9

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 8.45

PHI COEFF: .01
CRAMER'S V: .11
CONTINGENCY COEF: .11

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: NOV C GROUP: JUN D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	425	430.07	.06
2	1	20	14.93	1.72
1	2	295	289.93	.09
2	2	5	10.07	2.55

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 4.42

PHI COEFF: .01
CRAMER'S V: .08
CONTINGENCY COEF: .08

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: DEC C GROUP: SEPT D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	384	379.2	.06
2	1	2	6.8	3.39
1	2	508	512.8	.04
2	2	14	9.2	2.51

- -

CHI SQUARED STATISTICS

DEGREES OF FREEDOM: 1
CHI-SQUARED: 6

PHI COEFF: .01
CRAMER'S V: .08
CONTINGENCY COEF: .08

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------- - ----

GROUP: DEC C GROUP: OCT D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	384	385.14	0
2	1	2	.86	1.5
1	2	508	506.86	0
2	2	0	1.14	1.14

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 2.64

PHI COEFF: 0
CRAMER'S V: .05
CONTINGENCY COEF: .05

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------- - ----

GROUP: DEC C GROUP: NOV D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	384	381.72	.01
2	1	2	4.28	1.21
1	2	508	510.28	.01
2	2	8	5.72	.91

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 2.15

PHI COEFF: 0
CRAMER'S V: .05
CONTINGENCY COEF: .05

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: DEC C GROUP: JAN D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	384	384.14	0
2	1	1	.86	.02
1	2	508	507.86	0
2	2	1	1.14	.02

- -

CHI SQUARED STATISTICS

DEGREES OF FREEDOM: 1
CHI-SQUARED: .04

PHI COEFF: 0
CRAMER'S V: .01
CONTINGENCY COEF: .01

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------- - ----

GROUP: DEC C GROUP: MAR D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	384	378.51	.08
2	1	3	8.49	3.55
1	2	508	513.49	.06
2	2	17	11.51	2.61

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 6.3

PHI COEFF: .01
CRAMER'S V: .08
CONTINGENCY COEF: .08

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: DEC C GROUP: APR D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	384	391.68	.15
2	1	27	19.32	3.05
1	2	508	500.32	.12
2	2	17	24.68	2.39

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 5.71

PHI COEFF: .01
CRAMER'S V: .08
CONTINGENCY COEF: .08

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: DEC C GROUP: MAY D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	384	394.93	.3
2	1	22	11.07	10.8
1	2	508	497.07	.24
2	2	3	13.93	8.58

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 19.92

PHI COEFF: .02
CRAMER'S V: .15
CONTINGENCY COEF: .15

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: OECC GROUP: JUNO

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	384	392.99	.21
2	1	20	11.01	7.33
1	2	508	499.01	.16
2	2	5	13.99	5.77

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 13.47

PHI COEFF: .01
CRAMER'S V: .12
CONTINGENCY COEF: .12

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: JAN C GROUP: SEPT O

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	387	380.98	.1
2	1	2	8.02	4.52
1	2	373	379.02	.1
2	2	14	7.98	4.54

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 9.25

PHI COEFF: .01
CRAMER'S V: .11
CONTINGENCY COEF: .11

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: JANC GROUP: OCT O

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	387	387.98	0
2	1	2	1.02	.94
1	2	373	372.02	0
2	2	0	.98	.98

- -

CHI SQUARED STATISTICS

DEGREES OF FREEDOM: 1
CHI-SQUARED: 1.92

PHI COEFF: 0
CRAMER'S V: .05
CONTINGENCY COEF: .05

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: JAN C GROUP: NOV D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	387	383.95	.02
2	1	2	5.05	1.84
1	2	373	376.05	.02
2	2	8	4.95	1.88

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 3.78

PHI COEFF: 0
CRAMER'S V: .07
CONTINGENCY COEF: .07

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: JANC GROUP: DEC D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	387	381.96	.07
2	1	2	7.04	3.6
1	2	373	378.04	.07
2	2	12	6.96	3.64

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 7.38

PHI COEFF: .01
CRAMER'S V: .1
CONTINGENCY COEF: .1

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: JAN C GROUP: MAR D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	387	380	.13
2	1	3	10	4.9
1	2	373	380	.13
2	2	17	10	4.9

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 10.06

PHI COEFF: .01
CRAMER'S V: .11
CONTINGENCY COEF: .11

- - - - - - - - - - - - - - - - - - - -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: JAN C GROUP: APR D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- - - - - - - - - - - - - - - - - - - -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	387	391.34	.05
2	1	27	22.66	.83
1	2	373	368.66	.05
2	2	17	21.34	.88

- - - - - - - - - - - - - - - - - - - -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 1.82

PHI COEFF: 0
CRAMER'S V: .05
CONTINGENCY COEF: .05

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: JAN C GROUP: MAY O

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	387	395.97	.2
2	1	22	13.03	6.18
1	2	373	364.03	.22
2	2	3	11.97	6.73

- -

CHI SQUARED STATISTICS

DEGREES OF FREEDOM: 1
CHI-SQUARED: 13.33

PHI COEFF: .02
CRAMER'S V: .13
CONTINGENCY COEF: .13

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: JAN C GROUP: JUN O

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)^2/E
1	1	387	394.04	.13
2	1	20	12.96	3.82
1	2	373	365.96	.14
2	2	5	12.04	4.11

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 8.2

PHI COEFF: .01
CRAMER'S V: .1
CONTINGENCY COEF: .1

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ----------- - ----

GROUP: MARC GROUP: SEPT D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	764	758.08	.05
2	1	2	7.92	4.43
1	2	767	772.92	.05
2	2	14	8.08	4.34

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 8.86

PHI COEFF: .01
CRAMER'S V: .08
CONTINGENCY COEF: .08

- - - - - - - - - - - - - - - - - - - -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: MAR C GROUP: OCT D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- - - - - - - - - - - - - - - - - - - -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	764	765	0
2	1	2	1	1
1	2	767	766	0
2	2	0	1	1

- - - - - - - - - - - - - - - - - - - -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 2.01

PHI COEFF: 0
CRAMER'S V: .04
CONTINGENCY COEF: .04

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ----------- - ----

GROUP: MARC GROUP: NOUD

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	764	761.03	.01
2	1	2	4.97	1.78
1	2	767	769.97	.01
2	2	8	5.03	1.75

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 3.55

PHI COEFF: 0
CRAMER'S V: .05
CONTINGENCY COEF: .05

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: MARC GROUP: OEC D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	764	759.06	.03
2	1	2	6.94	3.52
1	2	767	771.94	.03
2	2	12	7.06	3.46

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 7.04

PHI COEFF: 0
CRAMER'S V: .07
CONTINGENCY COEF: .07

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: MAR C GROUP: JAN D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	764	764	0
2	1	1	1	0
1	2	767	767	0
2	2	1	1	0

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 0

PHI COEFF: 0
CRAMER'S V: 0
CONTINGENCY COEF: 0

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: MAR C GROUP: APR. O

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	764	768.9	.03
2	1	27	22.1	1.09
1	2	767	762.1	.03
2	2	17	21.9	1.1

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 2.25

PHI COEFF: 0
CRAMER'S V: .04
CONTINGENCY COEF: .04

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: MARC GROUP: MAY D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	764	773.37	.11
2	1	22	12.63	6.95
1	2	767	757.63	.12
2	2	3	12.37	7.1

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 14.28

PHI COEFF: .01
CRAMER'S V: .1
CONTINGENCY COEF: .1

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: MAR C GROUP: JUN D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	764	771.4	.07
2	1	20	12.6	4.35
1	2	767	759.6	.07
2	2	5	12.4	4.42

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 8.91

PHI COEFF: .01
CRAMER'S V: .08
CONTINGENCY COEF: .08

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: APR C GROUP: SEPT D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	310	304.33	.11
2	1	2	7.67	4.19
1	2	325	330.67	.1
2	2	14	8.33	3.86

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 8.25

PHI COEFF: .01
CRAMER'S V: .11
CONTINGENCY COEF: .11

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ---------- - ----

GROUP: APRC GROUP: OCT D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

CORRECTED FOR TIES

U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	310	311.02	0
2	1	2	.98	1.06
1	2	325	323.98	0
2	2	0	1.02	1.02

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 2.09

PHI COEFF: 0
CRAMER'S V: .06
CONTINGENCY COEF: .06

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: APR C GROUP: NOV O

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	310	307.16	.03
2	1	2	4.84	1.66
1	2	325	327.84	.02
2	2	8	5.16	1.56

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 3.27

PHI COEFF: .01
CRAMER'S V: .07
CONTINGENCY COEF: .07

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: APR C GROUP: DEC D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	310	305.27	.07
2	1	2	6.73	3.32
1	2	325	329.73	.07
2	2	12	7.27	3.08

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 6.54

PHI COEFF: .01
CRAMER'S V: .1
CONTINGENCY COEF: .1

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: APR C GROUP: JAN D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	310	310.02	0
2	1	1	.98	0
1	2	325	324.98	0
2	2	1	1.02	0

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 0

PHI COEFF: 0
CRAMER'S V: 0
CONTINGENCY COEF: 0

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: ARC GROUP: MARO

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	310	303.44	.14
2	1	3	9.56	4.5
1	2	325	331.56	.13
2	2	17	10.44	4.12

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 8.89

PHI COEFF: .01
CRAMER'S V: .12
CONTINGENCY COEF: .12

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: APR C GROUP: MAY D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	310	319.42	.28
2	1	22	12.58	7.06
1	2	325	315.58	.28
2	2	3	12.42	7.15

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 14.77

PHI COEFF: .02
CRAMER'S V: .15
CONTINGENCY COEF: .15

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: APR C GROUP: JUN D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	310	317.5	.18
2	1	20	12.5	4.5
1	2	325	317.5	.18
2	2	5	12.5	4.5

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 9.35

PHI COEFF: .01
CRAMER'S V: .12
CONTINGENCY COEF: .12

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------- - ----

GROUP: MAY C GROUP: SEPT D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	309	305	.05
2	1	2	6	2.67
1	2	504	508	.03
2	2	14	10	1.6

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 4.36

PHI COEFF: .01
CRAMER'S V: .07
CONTINGENCY COEF: .07

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: MAY C GROUP: OCT O

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	309	310.24	0
2	1	2	.76	2
1	2	504	502.76	0
2	2	0	1.24	1.24

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 3.25

PHI COEFF: 0
CRAMER'S V: .06
CONTINGENCY COEF: .06

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: MAY C GROUP: NOV D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	309	307.22	.01
2	1	2	3.78	.84
1	2	504	505.78	.01
2	2	8	6.22	.51

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 1.36

PHI COEFF: 0
CRAMER'S V: .04
CONTINGENCY COEF: .04

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: MAY C GROUP: DEC D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	309	305.74	.03
2	1	2	5.26	2.02
1	2	504	507.26	.02
2	2	12	8.74	1.22

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 3.3

PHI COEFF: 0
CRAMER'S V: .06
CONTINGENCY COEF: .06

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: MAYC GROUP: JAND

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	309	309.24	0
2	1	1	.76	.08
1	2	504	503.76	0
2	2	1	1.24	.05

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .12

PHI COEFF: 0
CRAMER'S V: .01
CONTINGENCY COEF: .01

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: MAYC GROUP: MAR O

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	309	304.51	.07
2	1	3	7.49	2.69
1	2	504	508.49	.04
2	2	17	12.51	1.61

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 4.41

PHI COEFF: .01
CRAMER'S V: .07
CONTINGENCY COEF: .07

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: MAY C GROUP: APR D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	309	318.75	.3
2	1	27	17.25	5.51
1	2	504	494.25	.19
2	2	17	26.75	3.55

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 9.55

PHI COEFF: .01
CRAMER'S V: .11
CONTINGENCY COEF: .1

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: MAY C GROUP: JUN D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	309	319.18	.32
2	1	20	9.82	10.57
1	2	504	493.82	.21
2	2	5	15.18	6.83

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 17.94

PHI COEFF: .02
CRAMER'S V: .15
CONTINGENCY COEF: .14

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: JUNC GROUP: SEPT O

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	374	368.13	.09
2	1	2	7.87	4.38
1	2	374	379.87	.09
2	2	14	8.13	4.25

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 8.81

PHI COEFF: .01
CRAMER'S V: .11
CONTINGENCY COEF: .11

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: JUNC		GROUP: OCT O	
CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	374	375	0
2	1	2	1	.99
1	2	374	373	0
2	2	0	1	1

- -

CHI SQUARED STATISTICS

DEGREES OF FREEDOM: 1
CHI-SQUARED: 1.99

PHI COEFF: 0
CRAMER'S V: .05
CONTINGENCY COEF: .05

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: JUN C GROUP: NOV D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	374	371.04	.02
2	1	2	4.96	1.77
1	2	374	376.96	.02
2	2	8	5.04	1.74

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 3.55

PHI COEFF: 0
CRAMER'S V: .07
CONTINGENCY COEF: .07

- -

WILCOXON-RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: JUN C GROUP: DEC D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	374	369.09	.07
2	1	2	6.91	3.49
1	2	374	378.91	.06
2	2	12	7.09	3.4

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 7.01

PHI COEFF: .01
CRAMER'S V: .1
CONTINGENCY COEF: .1

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: JUN C GROUP: JAN D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	374	374	0
2	1	1	1	0
1	2	374	374	0
2	2	1	1	0

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 0

PHI COEFF: 0
CRAMER'S V: 0
CONTINGENCY COEF: 0

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: JUNC GROUP: MARO

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

CORRECTED FOR TIES

U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	374	367.18	.13
2	1	3	9.82	4.73
1	2	374	380.82	.12
2	2	17	10.18	4.56

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 9.55

PHI COEFF: .01
CRAMER'S V: .11
CONTINGENCY COEF: .11

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: JUNC GROUP: APRD

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	374	378.72	.06
2	1	27	22.28	1
1	2	374	369.28	.06
2	2	17	21.72	1.03

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 2.15

PHI COEFF: 0
CRAMER'S V: .05
CONTINGENCY COEF: .05

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: JUNC GROUP: MAYO

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	374	383.19	.22
2	1	22	12.81	6.6
1	2	374	364.81	.23
2	2	3	12.19	6.93

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 13.98

PHI COEFF: .02
CRAMER'S V: .13
CONTINGENCY COEF: .13

Month Control Vs. Month Control

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: SEPTC GROUP: DECC

CASES	MEAN RANK	CASES	MEAN RANK
2	2.5	2	2.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
2	2	5	-.7746	.2193

GLASS BISERIAL R = 0

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	266	310.74	6.44
2	1	384	339.26	5.9
1	2	551	506.26	3.95
2	2	508	552.74	3.62

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 19.91

PHI COEFF: .01
CRAMER'S V: .11
CONTINGENCY COEF: .11

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: SEPT C GROUP: JAN C

CASES	MEAN RANK	CASES	MEAN RANK
2	2.5	2	2.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
2	2	5	-.7746	.2193

GLASS BISERIAL R = 0

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	266	338.3	15.45
2	1	387	314.7	16.61
1	2	551	478.7	10.92
2	2	373	445.3	11.74

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 54.72

PHI COEFF: .03
CRAMER'S V: .19
CONTINGENCY COEF: .18

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: SEPT C GROUP: MARC

CASES	MEAN RANK	CASES	MEAN RANK
2	1.5	2	3.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	3	-2.3238	.0101

GLASS BISERIAL R = -1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	266	358.39	23.82
2	1	764	671.61	12.71
1	2	551	458.61	18.61
2	2	767	859.39	9.93

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 65.08

PHI COEFF: .03
CRAMER'S V: .17
CONTINGENCY COEF: .16

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: SEPTC GROUP: APR C

CASES	MEAN RANK	CASES	MEAN RANK
2	2.5	2	2.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
2	2	5	-.7746	.2193

GLASS BISERIAL R = 0

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	266	324.1	10.42
2	1	310	251.9	13.4
1	2	551	492.9	6.85
2	2	325	383.1	8.81

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 39.47

PHI COEFF: .03
CRAMER'S V: .16
CONTINGENCY COEF: .16

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: SEPTC GROUP: MAY C

CASES	MEAN RANK	CASES	MEAN RANK
2	2.5	2	2.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
2	2	5	-.7746	.2193

GLASS BISERIAL R = 0

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	266	288.21	1.71
2	1	309	286.79	1.72
1	2	551	528.79	.93
2	2	504	526.21	.94

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 5.3

PHI COEFF: 0
CRAMER'S V: .06
CONTINGENCY COEF: .06

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: SEPT C GROUP: JUNC

CASES	MEAN RANK	CASES	MEAN RANK
2	2.5	2	2.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
2	2	5	-.7746	.2193

GLASS BISERIAL R = 0

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	266	334.11	13.88
2	1	374	305.89	15.16
1	2	551	482.89	9.61
2	2	374	442.11	10.49

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 49.15

PHI COEFF: .03
CRAMER'S V: .18
CONTINGENCY COEF: .17

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------- - ----

GROUP: SEPTC GROUP: OCT C

CASES	MEAN RANK	CASES	MEAN RANK
2	3	2	2

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
1	3	6	0	.5

GLASS BISERIAL R = .5

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	266	379.68	34.04
2	1	307	193.32	66.84
1	2	551	437.32	29.55
2	2	109	222.68	58.03

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 188.46

PHI COEFF: .15
CRAMER'S V: .39
CONTINGENCY COEF: .36

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: SEPTC GROUP: NOVC

CASES	MEAN RANK	CASES	MEAN RANK
2	2.5	2	2.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
2	2	5	-.7746	.2193

GLASS BISERIAL R = 0

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	266	367.3	27.94
2	1	425	323.7	31.7
1	2	551	449.7	22.82
2	2	295	396.3	25.9

- -

CHI SQUARED STATISTICS

DEGREES OF FREEDOM: 1
CHI-SQUARED: 108.36

PHI COEFF: .07
CRAMER'S V: .27
CONTINGENCY COEF: .26

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: OCT C GROUP: NOV C

CASES	MEAN RANK	CASES	MEAN RANK
2	2	2	3

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
1	3	4	-1.5492	.0607

GLASS BISERIAL R = -.5

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	307	268.06	5.66
2	1	425	463.94	3.27
1	2	109	147.94	10.25
2	2	295	256.06	5.92

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 25.1

PHI COEFF: .02
CRAMER'S V: .15
CONTINGENCY COEF: .15

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: OCT C GROUP: DEC C

CASES	MEAN RANK	CASES	MEAN RANK
2	1.5	2	3.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	3	-2.3238	.0101

GLASS BISERIAL R = -1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	307	219.77	34.63
2	1	384	471.23	16.15
1	2	109	196.23	38.78
2	2	508	420.77	18.08

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 107.64

PHI COEFF: .08
CRAMER'S V: .29
CONTINGENCY COEF: .28

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: OCT C GROUP: JAN C

CASES	MEAN RANK	CASES	MEAN RANK
2	1.5	2	3.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	3	-2.3238	.0101

GLASS BISERIAL R = -1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	307	245.5	15.41
2	1	387	448.5	8.43
1	2	109	170.5	22.19
2	2	373	311.5	12.14

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 58.17

PHI COEFF: .05
CRAMER'S V: .22
CONTINGENCY COEF: .22

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: OCT C GROUP: MAR C

CASES	MEAN RANK	CASES	MEAN RANK
2	1.5	2	3.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	3	-2.3238	.0101

GLASS BISERIAL R = -1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	307	228.83	26.7
2	1	764	842.17	7.26
1	2	109	187.17	32.65
2	2	767	688.83	8.87

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 75.47

PHI COEFF: .04
CRAMER'S V: .2
CONTINGENCY COEF: .19

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------- - ----

GROUP: OCT C GROUP: APR C

CASES	MEAN RANK	CASES	MEAN RANK
2	1.5	2	3.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	3	-2.3238	.0101

GLASS BISERIAL R = -1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	307	244.22	16.14
2	1	310	372.78	10.57
1	2	109	171.78	22.95
2	2	325	262.22	15.03

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 64.69

PHI COEFF: .06
CRAMER'S V: .25
CONTINGENCY COEF: .24

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: OCT C GROUP: MAY C

CASES	MEAN RANK	CASES	MEAN RANK
2	1.5	2	3.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	3	-2.3238	.0101

GLASS BISERIAL R = -1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	307	208.51	46.52
2	1	309	407.49	23.81
1	2	109	207.49	46.75
2	2	504	405.51	23.92

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 141.01

PHI COEFF: .11
CRAMER'S V: .34
CONTINGENCY COEF: .32

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------- - ----

GROUP: OCT C GROUP: JUN C

CASES	MEAN RANK	CASES	MEAN RANK
2	1.5	2	3.5

U	U'	W	CORRECTED FOR TIES 2-VALUE	2-TAILED P
0	4	3	-2.3238	.0101

GLASS BISERIAL R = -1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	307	243.38	16.63
2	1	374	437.62	9.25
1	2	109	172.62	23.45
2	2	374	310.38	13.04

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 62.36

PHI COEFF: .05
CRAMER'S V: .23
CONTINGENCY COEF: .23

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: NOV C GROUP: DEC C

CASES	MEAN RANK	CASES	MEAN RANK
2	2	2	3

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
1	3	4	-1.5492	.0607

GLASS BISERIAL R = -.5

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	425	361.34	11.22
2	1	384	447.66	9.05
1	2	295	358.66	11.3
2	2	508	444.34	9.12

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 40.69

PHI COEFF: .03
CRAMER'S V: .16
CONTINGENCY COEF: .16

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: NOUC GROUP: JANC

CASES	MEAN RANK	CASES	MEAN RANK
2	2.5	2	2.5

CORRECTED FOR TIES

U	U'	W	Z-VALUE	2-TAILED P
2	2	5	-.7746	.2193

GLASS BISERIAL R = 0

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	425	395.03	2.27
2	1	387	416.97	2.15
1	2	295	324.97	2.76
2	2	373	343.03	2.62

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 9.81

PHI COEFF: .01
CRAMER'S V: .08
CONTINGENCY COEF: .08

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: NOVC GROUP: MARC

CASES	MEAN RANK	CASES	MEAN RANK
2	1.5	2	3.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	3	-2.3238	.0101

GLASS BISERIAL R = -1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	425	380.31	5.25
2	1	764	808.69	2.47
1	2	295	339.69	5.88
2	2	767	722.31	2.76

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 16.36

PHI COEFF: .01
CRAMER'S V: .09
CONTINGENCY COEF: .08

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: NOV C GROUP: APR C

CASES	MEAN RANK	CASES	MEAN RANK
2	2.5	2	2.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
2	2	5	-.7746	.2193

GLASS BISERIAL R = 0

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	425	390.55	3.04
2	1	310	344.45	3.44
1	2	295	329.45	3.6
2	2	325	290.55	4.08

- -

CHI SQUARED STATISTICS
--- ------- ----------

CHI-SQUARED: 14.17

PHI COEFF: .01
CRAMER'S V: .1
CONTINGENCY COEF: .1

- - - - - - - - - - - - - - - - - - - -

NOVC MAYC

CASES	MEAN RANK	CASES	MEAN RANK
2	2	2	3

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
1	3	4	-1.5492	.0607

GLASS BISERIAL R = -.5

- - - - - - - - - - - - - - - - - - - -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	425	344.74	18.69
2	1	309	389.26	16.55
1	2	295	375.26	17.17
2	2	504	423.74	15.2

- - - - - - - - - - - - - - - - - - - -

CHI SQUARED STATISTICS

DEGREES OF FREEDOM: 1
CHI-SQUARED: 67.61

PHI COEFF: .04
CRAMER'S V: .21
CONTINGENCY COEF: .21

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: NOVC		GROUP: JUNC	
CASES	MEAN RANK	CASES	MEAN RANK
2	2.5	2	2.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
2	2	5	-.7746	.2193

GLASS BISERIAL R = 0

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	425	391.88	2.8
2	1	374	407.12	2.69
1	2	295	328.12	3.34
2	2	374	340.88	3.22

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 12.05

PHI COEFF: .01
CRAMER'S V: .09
CONTINGENCY COEF: .09

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: DEC C GROUP: JAN C

CASES	MEAN RANK	CASES	MEAN RANK
2	3	2	2

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
1	3	6	0	.5

GLASS BISERIAL R = .5

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	384	416.3	2.51
2	1	387	354.7	2.94
1	2	508	475.7	2.19
2	2	373	405.3	2.57

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 10.22

PHI COEFF: .01
CRAMER'S V: .08
CONTINGENCY COEF: .08

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: DEC C GROUP: MAR C

CASES	MEAN RANK	CASES	MEAN RANK
2	1.5	2	3.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	3	-2.3238	.0101

GLASS BISERIAL R = -1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	384	422.62	3.53
2	1	764	725.38	2.06
1	2	508	469.38	3.18
2	2	767	805.62	1.85

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 10.62

PHI COEFF: 0
CRAMER'S V: .07
CONTINGENCY COEF: .07

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: DEC C GROUP: APR C

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	384	405.4	1.13
2	1	310	288.6	1.59
1	2	508	486.6	.94
2	2	325	346.4	1.32

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 4.98

PHI COEFF: 0
CRAMER'S V: .06
CONTINGENCY COEF: .06

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: DEC C GROUP: MAY C

CASES	MEAN RANK	CASES	MEAN RANK
2	3	2	2

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
1	3	6	0	.5

GLASS BISERIAL R = .5

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	384	362.55	1.27
2	1	309	330.45	1.39
1	2	508	529.45	.87
2	2	504	482.55	.95

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 4.48

PHI COEFF: 0
CRAMER'S V: .05
CONTINGENCY COEF: .05

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------- - ----

GROUP: OECC GROUP: JUNC

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	384	412.28	1.94
2	1	374	345.72	2.31
1	2	508	479.72	1.67
2	2	374	402.28	1.99

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 7.91

PHI COEFF: 0
CRAMER'S V: .07
CONTINGENCY COEF: .07

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------- - ----

GROUP: JANC GROUP: MARC

CASES	MEAN RANK	CASES	MEAN RANK
2	1.5	2	3.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	3	-2.3238	.0101

GLASS BISERIAL R = -1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	387	381.82	.07
2	1	764	769.18	.03
1	2	373	378.18	.07
2	2	767	761.82	.04

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .21

PHI COEFF: 0
CRAMER'S V: .01
CONTINGENCY COEF: .01

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: JAN C GROUP: APR C

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	387	379.73	.14
2	1	310	317.27	.17
1	2	373	380.27	.14
2	2	325	317.73	.17

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .61

PHI COEFF: 0
CRAMER'S V: .02
CONTINGENCY COEF: .02

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: JANC GROUP: MAY C

CASES	MEAN RANK	CASES	MEAN RANK
2	2.5	2	2.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
2	2	5	-.7746	.2193

GLASS BISERIAL R = 0

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	387	336.27	7.65
2	1	309	359.73	7.15
1	2	373	423.73	6.07
2	2	504	453.27	5.68

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 26.55

PHI COEFF: .02
CRAMER'S V: .13
CONTINGENCY COEF: .13

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: JANC GROUP: JUNC

CASES	MEAN RANK	CASES	MEAN RANK
2	2.5	2	2.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
2	2	5	-.7746	.2193

GLASS BISERIAL R = 0

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	387	383.53	.03
2	1	374	377.47	.03
1	2	373	376.47	.03
2	2	374	370.53	.03

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .13

PHI COEFF: 0
CRAMER'S V: .01
CONTINGENCY COEF: .01

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------- - ----

GROUP: MARC GROUP: APRC

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	764	759.14	.03
2	1	310	314.86	.08
1	2	767	771.86	.03
2	2	325	320.14	.07

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .21

PHI COEFF: 0
CRAMER'S V: .01
CONTINGENCY COEF: .01

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ----------- - ----

GROUP: MAR C GROUP: MAY C

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	764	700.84	5.69
2	1	309	372.16	10.72
1	2	767	830.16	4.81
2	2	504	440.84	9.05

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 30.27

PHI COEFF: .01
CRAMER'S V: .11
CONTINGENCY COEF: .11

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: MARC GROUP: JUNC

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	764	764.49	0
2	1	374	373.51	0
1	2	767	766.51	0
2	2	374	374.49	0

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 0

PHI COEFF: 0
CRAMER'S V: 0
CONTINGENCY COEF: 0

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------- - ----

GROUP: APRC		GROUP: MAYC	
CASES	MEAN RANK	CASES	MEAN RANK
2	2.5	2	2.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
2	2	5	-.7746	.2193

GLASS BISERIAL R = 0

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	310	271.45	5.47
2	1	309	347.55	4.28
1	2	325	363.55	4.09
2	2	504	465.45	3.19

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 17.03

PHI COEFF: .01
CRAMER'S V: .11
CONTINGENCY COEF: .11

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------- - ----

GROUP: APRC		GROUP: JUNC	
CASES	MEAN RANK	CASES	MEAN RANK
2	1.5	2	3.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	3	-2.3238	.0101

GLASS BISERIAL R = -1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	310	314.06	.05
2	1	374	369.94	.04
1	2	325	320.94	.05
2	2	374	378.06	.04

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .19

PHI COEFF: 0
CRAMER'S V: .01
CONTINGENCY COEF: .01

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: MAYC GROUP: JUNC

CASES	MEAN RANK	CASES	MEAN RANK
2	2.5	2	2.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
2	2	5	-.7746	.2193

GLASS BISERIAL R = 0

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	309	355.72	6.14
2	1	374	327.28	6.67
1	2	504	457.28	4.77
2	2	374	420.72	5.19

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 22.77

PHI COEFF: .01
CRAMER'S V: .12
CONTINGENCY COEF: .12

Month Dragged Vs. Month Dragged

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: SEPT 0 GROUP: OCT 0

CASES	MEAN RANK	CASES	MEAN RANK
2	3.25	2	1.75

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
.5	3.5	6.5	.3873	.3493

GLASS BISERIAL R = .75

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	2	3.56	.68
2	1	2	.44	5.44
1	2	14	12.44	.19
2	2	0	1.56	1.56

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 7.87

PHI COEFF: .44
CRAMER'S V: .66
CONTINGENCY COEF: .55

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: SEPT D GROUP: NOV D

CASES	MEAN RANK	CASES	MEAN RANK
2	2.75	2	2.25

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
1.5	2.5	5.5	-.3873	.3493

GLASS BISERIAL R = .25

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	2	2.46	.09
2	1	2	1.54	.14
1	2	14	13.54	.02
2	2	8	8.46	.03

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .27

PHI COEFF: .01
CRAMER'S V: .1
CONTINGENCY COEF: .1

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: SEPTD GROUP: DECD

CASES	MEAN RANK	CASES	MEAN RANK
2	2.75	2	2.25

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
1.5	2.5	5.5	-.3873	.3493

GLASS BISERIAL R = .25

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	2	2.13	.01
2	1	2	1.87	.01
1	2	14	13.87	0
2	2	12	12.13	0

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .02

PHI COEFF: 0
CRAMER'S V: .03
CONTINGENCY COEF: .03

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: SEPTO GROUP: JANO

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	2	2.67	.17
2	1	1	.33	1.33
1	2	14	13.33	.03
2	2	1	1.67	.27

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 1.8

PHI COEFF: .1
CRAMER'S V: .32
CONTINGENCY COEF: .3

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: SEPT 0 GROUP: MAR 0

CASES	MEAN RANK	CASES	MEAN RANK
2	2	2	3

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
1	3	4	-1.5492	.0607

GLASS BISERIAL R = -.5

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	2	2.22	.02
2	1	3	2.78	.02
1	2	14	13.78	0
2	2	17	17.22	0

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .05

PHI COEFF: 0
CRAMER'S V: .04
CONTINGENCY COEF: .04

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ----------- - ----

GROUP: SEPT D GROUP: APR D

CASES	MEAN RANK	CASES	MEAN RANK
2	1.5	2	3.5

CORRECTED FOR TIES

U	U'	W	Z-VALUE	2-TAILED P
0	4	3	-2.3238	.0101

GLASS BISERIAL R = -1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	2	7.73	4.25
2	1	27	21.27	1.55
1	2	14	8.27	3.98
2	2	17	22.73	1.45

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 11.22

PHI COEFF: .19
CRAMER'S V: .43
CONTINGENCY COEF: .4

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: SEPT 0 GROUP: MAY 0

CASES	MEAN RANK	CASES	MEAN RANK
2	2	2	3

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
1	3	4	-1.5492	.0607

GLASS BISERIAL R = -.5

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	2	9.37	5.79
2	1	22	14.63	3.71
1	2	14	6.63	8.18
2	2	3	10.37	5.23

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 22.91

PHI COEFF: .56
CRAMER'S V: .75
CONTINGENCY COEF: .6

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: SEPTO GROUP: JUNO

CASES	MEAN RANK	CASES	MEAN RANK
2	2	2	3

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
1	3	4	-1.5492	.0607

GLASS BISERIAL R = -.5

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	2	8.59	5.05
2	1	20	13.41	3.23
1	2	14	7.41	5.85
2	2	5	11.59	3.74

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 17.88

PHI COEFF: .44
CRAMER'S V: .66
CONTINGENCY COEF: .55

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: OCT D GROUP: NOV D

CASES	MEAN RANK	CASES	MEAN RANK
2	1.75	2	3.25

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
.5	3.5	3.5	-1.9365	.0264

GLASS BISERIAL R = -.75

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	2	.67	2.67
2	1	2	3.33	.53
1	2	0	1.33	1.33
2	2	8	6.67	.27

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 4.8

PHI COEFF: .4
CRAMER'S V: .63
CONTINGENCY COEF: .53

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: OCT D GROUP: DEC D

CASES	MEAN RANK	CASES	MEAN RANK
2	1.75	2	3.25

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
.5	3.5	3.5	-1.9365	.0264

GLASS BISERIAL R = -.75

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	2	.5	4.5
2	1	2	3.5	.64
1	2	0	1.5	1.5
2	2	12	10.5	.21

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 6.86

PHI COEFF: .43
CRAMER'S V: .65
CONTINGENCY COEF: .55

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: OCT D GROUP: JAN D

CASES	MEAN RANK	CASES	MEAN RANK
2	2.5	2	2.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
2	2	5	-.7746	.2193

GLASS BISERIAL R = 0

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	2	1.5	.17
2	1	1	1.5	.17
1	2	0	.5	.5
2	2	1	.5	.5

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 1.33

PHI COEFF: .33
CRAMER'S V: .58
CONTINGENCY COEF: .5

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: OCT D GROUP: APR D

CASES	MEAN RANK	CASES	MEAN RANK
2	1.5	2	3.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	3	-2.3238	.0101

GLASS BISERIAL R = -1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	2	1.26	.43
2	1	27	27.74	.02
1	2	0	.74	.74
2	2	17	16.26	.03

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 1.23

PHI COEFF: .03
CRAMER'S V: .16
CONTINGENCY COEF: .16

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: OCT D GROUP: MAY D

CASES	MEAN RANK	CASES	MEAN RANK
2	1.5	2	3.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	3	-2.3238	.0101

GLASS BISERIAL R = -1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	2	1.78	.03
2	1	22	22.22	0
1	2	0	.22	.22
2	2	3	2.78	.02

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .27

PHI COEFF: .01
CRAMER'S V: .1
CONTINGENCY COEF: .1

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST

GROUP: OCT D GROUP: JUN D

CASES	MEAN RANK	CASES	MEAN RANK
2	1.5	2	3.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	3	-2.3238	.0101

GLASS BISERIAL R = -1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	2	1.63	.08
2	1	20	20.37	.01
1	2	0	.37	.37
2	2	5	4.63	.03

- -

CHI SQUARED STATISTICS

DEGREES OF FREEDOM: 1
CHI-SQUARED: .49

PHI COEFF: .02
CRAMER'S V: .13
CONTINGENCY COEF: .13

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------- - ----

GROUP: NOV 0 GROUP: DEC 0

CASES	MEAN RANK	CASES	MEAN RANK
2	2.25	2	2.75

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
1.5	2.5	4.5	-1.1619	.1226

GLASS BISERIAL R = -.25

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	2	1.67	.07
2	1	2	2.33	.05
1	2	8	8.33	.01
2	2	12	11.67	.01

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .14

PHI COEFF: .01
CRAMER'S V: .08
CONTINGENCY COEF: .08

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------- - ----

GROUP: NON D GROUP: JAN D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	2	2.5	.1
2	1	1	.5	.5
1	2	8	7.5	.03
2	2	1	1.5	.17

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .8

PHI COEFF: .07
CRAMER'S V: .26
CONTINGENCY COEF: .25

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: NOV O GROUP: MAR O

CASES	MEAN RANK	CASES	MEAN RANK
2	2	2	3

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
1	3	4	-1.5492	.0607

GLASS BISERIAL R = -.5

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	2	1.67	.07
2	1	3	3.33	.03
1	2	8	8.33	.01
2	2	17	16.67	.01

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .12

PHI COEFF: 0
CRAMER'S V: .06
CONTINGENCY COEF: .06

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- ------- ------------ - ----

GROUP: NON O GROUP: APR D

CASES	MEAN RANK	CASES	MEAN RANK
2	1.5	2	3.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	3	-2.3238	.0101

GLASS BISERIAL R = -1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	2	5.37	2.12
2	1	27	23.63	.48
1	2	8	4.63	2.45
2	2	17	20.37	.56

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 5.61

PHI COEFF: .1
CRAMER'S V: .32
CONTINGENCY COEF: .31

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: NOV O GROUP: MAY O

CASES	MEAN RANK	CASES	MEAN RANK
2	2	2	3

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
1	3	4	-1.5492	.0607

GLASS BISERIAL R = -.5

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	2	6.86	3.44
2	1	22	17.14	1.38
1	2	8	3.14	7.51
2	2	3	7.86	3

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 15.33

PHI COEFF: .44
CRAMER'S V: .66
CONTINGENCY COEF: .55

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------- - ----

GROUP: NOV O GROUP: JUN O

CASES	MEAN RANK	CASES	MEAN RANK
2	2	2	3

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
1	3	4	-1.5492	.0607

GLASS BISERIAL R = -.5

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	2	6.29	2.92
2	1	20	15.71	1.17
1	2	8	3.71	4.95
2	2	5	9.29	1.98

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 11.01

PHI COEFF: .31
CRAMER'S V: .56
CONTINGENCY COEF: .49

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: DEC D GROUP: JAN D

CASES	MEAN RANK	CASES	MEAN RANK
2	3.5	2	1.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	7	.7746	.2193

GLASS BISERIAL R = 1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	2	2.63	.15
2	1	1	.38	1.04
1	2	12	11.38	.03
2	2	1	1.63	.24

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 1.47

PHI COEFF: .09
CRAMER'S V: .3
CONTINGENCY COEF: .29

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: OCT D GROUP: MAR D

CASES	MEAN RANK	CASES	MEAN RANK
2	1.5	2	3.5

CORRECTED FOR TIES

U	U'	W	Z-VALUE	2-TAILED P
0	4	3	-2.3238	.0101

GLASS BISERIAL R = -1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	2	.45	5.25
2	1	3	4.55	.53
1	2	0	1.55	1.55
2	2	17	15.45	.15

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 7.48

PHI COEFF: .34
CRAMER'S V: .58
CONTINGENCY COEF: .5

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: DEC D GROUP: MAR D

CASES	MEAN RANK	CASES	MEAN RANK
2	2	2	3

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
1	3	4	-1.5492	.0607

GLASS BISERIAL R = -.5

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	2	2.06	0
2	1	3	2.94	0
1	2	12	11.94	0
2	2	17	17.06	0

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 0

PHI COEFF: 0
CRAMER'S V: .01
CONTINGENCY COEF: .01

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: DEC D GROUP: APR D

CASES	MEAN RANK	CASES	MEAN RANK
2	1.5	2	3.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	3	-2.3238	.0101

GLASS BISERIAL R = -1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	2	7	3.57
2	1	27	22	1.14
1	2	12	7	3.57
2	2	17	22	1.14

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 9.42

PHI COEFF: .16
CRAMER'S V: .4
CONTINGENCY COEF: .37

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ----------- - ----

GROUP: DEC D GROUP: MAY D

CASES	MEAN RANK	CASES	MEAN RANK
2	2	2	3

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
1	3	4	-1.5492	.0607

GLASS BISERIAL R = -.5

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	2	8.62	5.08
2	1	22	15.38	2.84
1	2	12	5.38	8.13
2	2	3	9.62	4.55

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 20.6

PHI COEFF: .53
CRAMER'S V: .73
CONTINGENCY COEF: .59

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: DEC 0 GROUP: JUN 0

CASES	MEAN RANK	CASES	MEAN RANK
2	2	2	3

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
1	3	4	-1.5492	.0607

GLASS BISERIAL R = -.5

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	2	7.9	4.4
2	1	20	14.1	2.47
1	2	12	6.1	5.7
2	2	5	10.9	3.19

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 15.76

PHI COEFF: .4
CRAMER'S V: .64
CONTINGENCY COEF: .54

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: JAN D GROUP: MAR D

CASES	MEAN RANK	CASES	MEAN RANK
2	1.5	2	3.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	3	-2.3238	.0101

GLASS BISERIAL R = -1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	1	.36	1.11
2	1	3	3.64	.11
1	2	1	1.64	.25
2	2	17	16.36	.02

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 1.5

PHI COEFF: .07
CRAMER'S V: .26
CONTINGENCY COEF: .25

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: JAN D GROUP: APR D

CASES	MEAN RANK	CASES	MEAN RANK
2	1.5	2	3.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	3	-2.3238	.0101

GLASS BISERIAL R = -1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	1	1.22	.04
2	1	27	26.78	0
1	2	1	.78	.06
2	2	17	17.22	0

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .1

PHI COEFF: 0
CRAMER'S V: .05
CONTINGENCY COEF: .05

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: JAN D GROUP: MAY D

CASES	MEAN RANK	CASES	MEAN RANK
2	1.5	2	3.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
0	4	3	-2.3238	.0101

GLASS BISERIAL R = -1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	1	1.7	.29
2	1	22	21.3	.02
1	2	1	.3	1.67
2	2	3	3.7	.13

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 2.12

PHI COEFF: .08
CRAMER'S V: .28
CONTINGENCY COEF: .27

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: JAN 0 GROUP: JUN 0

CASES	MEAN RANK	CASES	MEAN RANK
2	1.5	2	3.5

U	U'	W	CORRECTED FOR TIES Z-VALUE	2-TAILED P
0	4	3	-2.3238	.0101

GLASS BISERIAL R = -1

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	1	1.56	.2
2	1	20	19.44	.02
1	2	1	.44	.69
2	2	5	5.56	.06

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: .96

PHI COEFF: .04
CRAMER'S V: .19
CONTINGENCY COEF: .19

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ---------- - ----

GROUP: MAR D GROUP: APR D

CASES	MEAN RANK	CASES	MEAN RANK
2	1.75	2	3.25

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
.5	3.5	3.5	-1.9365	.0264

GLASS BISERIAL R = -.75

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	3	9.38	4.34
2	1	27	20.63	1.97
1	2	17	10.63	3.83
2	2	17	23.38	1.74

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 11.87

PHI COEFF: .19
CRAMER'S V: .43
CONTINGENCY COEF: .4

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------- - ----

GROUP: MAR D GROUP: MAY D

CASES	MEAN RANK	CASES	MEAN RANK
2	2.25	2	2.75

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
1.5	2.5	4.5	-1.1619	.1226

GLASS BISERIAL R = -.25

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	3	11.11	5.92
2	1	22	13.89	4.74
1	2	17	8.89	7.4
2	2	3	11.11	5.92

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 23.98

PHI COEFF: .53
CRAMER'S V: .73
CONTINGENCY COEF: .59

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: MAR D GROUP: JUN D

CASES	MEAN RANK	CASES	MEAN RANK
2	2	2	3

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
1	3	4	-1.5492	.0607

GLASS BISERIAL R = -.5

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	3	10.22	5.1
2	1	20	12.78	4.08
1	2	17	9.78	5.33
2	2	5	12.22	4.27

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 18.79

PHI COEFF: .42
CRAMER'S V: .65
CONTINGENCY COEF: .54

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- ------------ - ----

GROUP: APR D GROUP: MAY D

CASES	MEAN RANK	CASES	MEAN RANK
2	3	2	2

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
1	3	6	0	.5

GLASS BISERIAL R = .5

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	27	31.25	.58
2	1	22	17.75	1.02
1	2	17	12.75	1.41
2	2	3	7.25	2.49

- -

CHI SQUARED STATISTICS
--- ------- ----------

DEGREES OF FREEDOM: 1
CHI-SQUARED: 5.49

PHI COEFF: .08
CRAMER'S V: .28
CONTINGENCY COEF: .27

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
-------- -------- -------------- - ----

GROUP: APR D GROUP: JUN D

CASES	MEAN RANK	CASES	MEAN RANK
2	3	2	2

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
1	3	6	0	.5

GLASS BISERIAL R = .5

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	27	29.97	.29
2	1	20	17.03	.52
1	2	17	14.03	.63
2	2	5	7.97	1.11

- -

CHI SQUARED STATISTICS
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DEGREES OF FREEDOM: 1
CHI-SQUARED: 2.55

PHI COEFF: .04
CRAMER'S V: .19
CONTINGENCY COEF: .19

- -

WILCOXON RANK-SUM W/MANN-WHITNEY U TEST
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GROUP: MAYO GROUP: JUNE D

CASES	MEAN RANK	CASES	MEAN RANK
2	2.5	2	2.5

			CORRECTED FOR TIES	
U	U'	W	Z-VALUE	2-TAILED P
2	2	5	-.7746	.2193

GLASS BISERIAL R = 0

- -

--EXPECTED VALUES TABLE--

GRP	CASE	OBSERVED	EXPECTED	(O-E)2/E
1	1	22	21	.05
2	1	20	21	.05
1	2	3	4	.25
2	2	5	4	.25

- -

CHI SQUARED STATISTICS
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DEGREES OF FREEDOM: 1
CHI-SQUARED: .6

PHI COEFF: .01
CRAMER'S V: .11
CONTINGENCY COEF: .11

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