The CONTENTS Procedure

Data Set Name	WORK.IMPORT	**Observations**	714
Member Type	DATA	**Variables**	4
Engine	V9	**Indexes**	0
Created	03/05/2023 15:20:01	**Observation Length**	40
Last Modified	03/05/2023 15:20:01	**Deleted Observations**	0
Protection		**Compressed**	NO
Data Set Type		**Sorted**	NO
Label			
Data Representation	SOLARIS_X86_64, LINUX_X86_64, ALPHA_TRU64, LINUX_IA64		
Encoding	utf-8 Unicode (UTF-8)		

Engine/Host Dependent Information	
Data Set Page Size	131072
Number of Data Set Pages	1
First Data Page	1
Max Obs per Page	3265
Obs in First Data Page	714
Number of Data Set Repairs	0
Filename	/saswork/SAS_work342D0001AAB1_odaws01-usw2.oda.sas.com/SAS_work65850001AAB1_odaws01-usw2.oda.sas.com/import.sas7bdat
Release Created	9.0401M7
Host Created	Linux
Inode Number	1610734225
Access Permission	rw-r--r--
Owner Name	u40834596
File Size	256KB
File Size (bytes)	262144

Alphabetic List of Variables and Attributes					
#	**Variable**	**Type**	**Len**	**Format**	**Informat**
4	Individual	Num	8	BEST12.	BEST32.
2	Sex	Char	6	$6.	$6.
1	Test	Num	8	BEST12.	BEST32.
3	Variable	Char	12	$12.	$12.

Fish sex and test effect on line crossed

The ANOVA Procedure

Class Level Information		
Class	**Levels**	**Values**
Test	1	1
Sex	2	Female Male

Number of Observations Read	119
Number of Observations Used	119

Fish sex and test effect on line crossed

The ANOVA Procedure

Dependent Variable: Individual

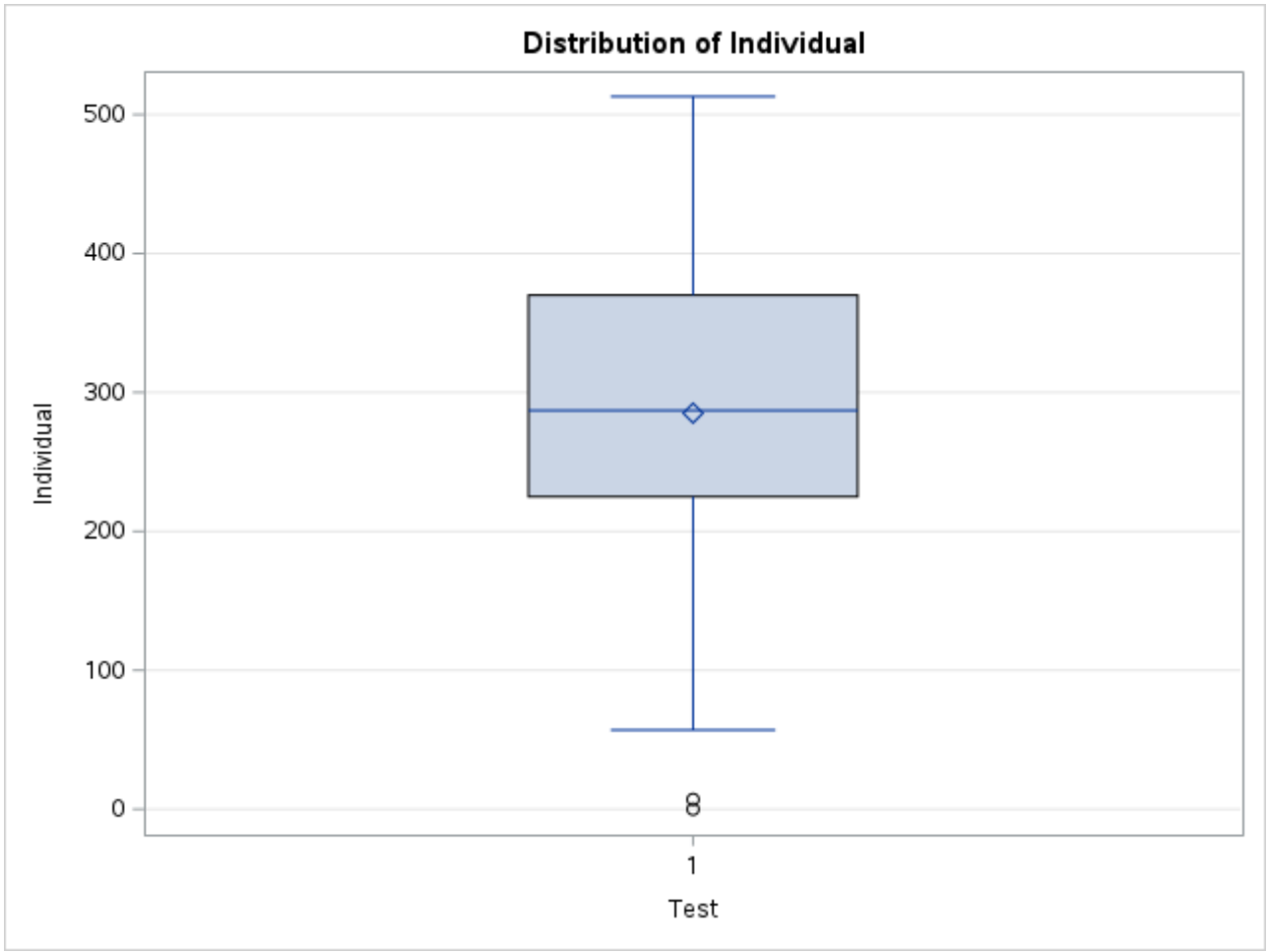
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	45392.841	45392.841	4.29	0.0407
Error	117	1239424.319	10593.370		
Corrected Total	118	1284817.160			

R-Square	Coeff Var	Root MSE	Individual Mean
0.035330	36.10307	102.9241	285.0840

Source	DF	Anova SS	Mean Square	F Value	Pr > F
Test	0	0.00000	.	.	.
Sex	1	45392.84074	45392.84074	4.29	0.0407
Test*Sex	0	0.00000	.	.	.

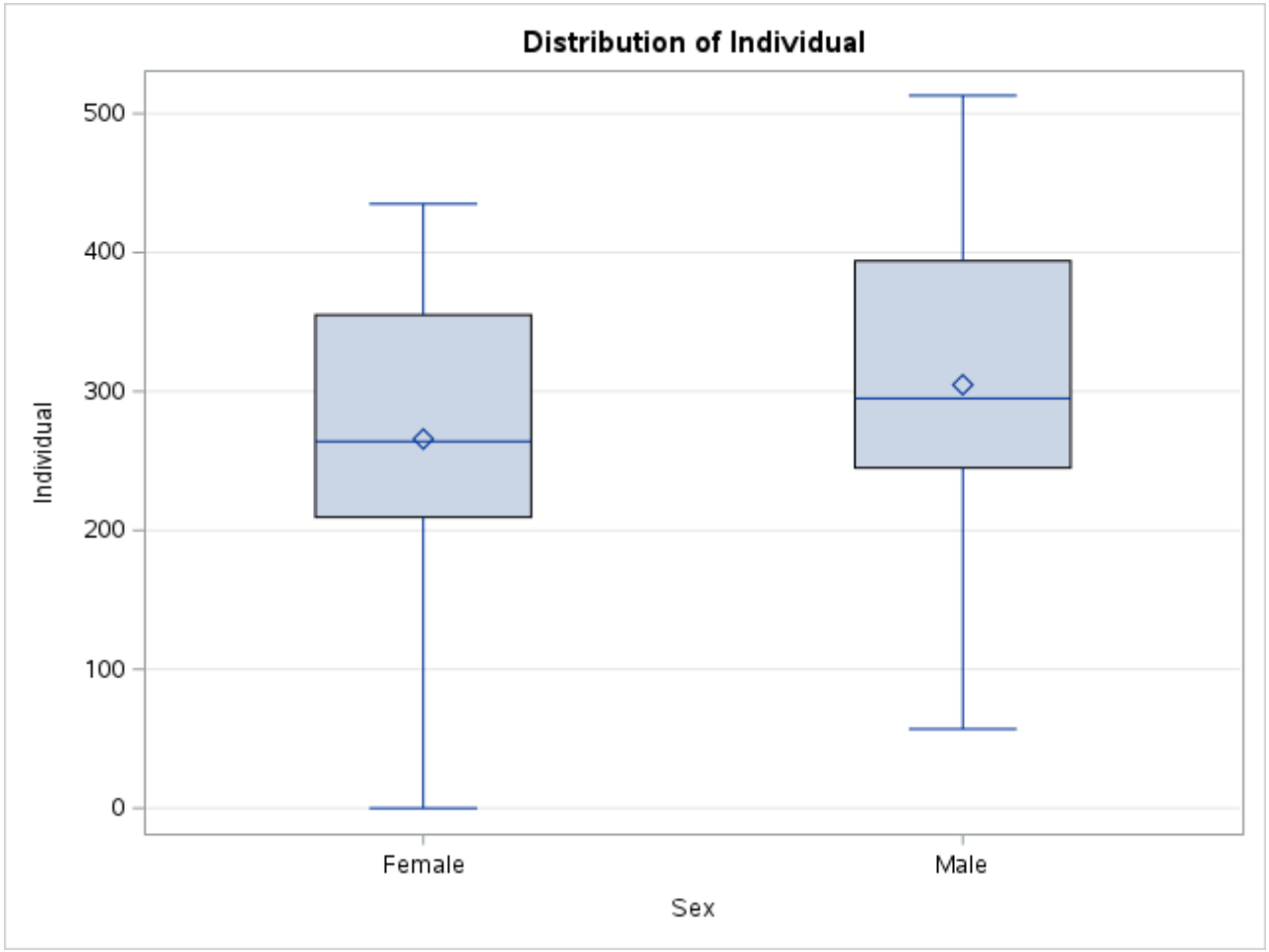
Fish sex and test effect on line crossed

The ANOVA Procedure

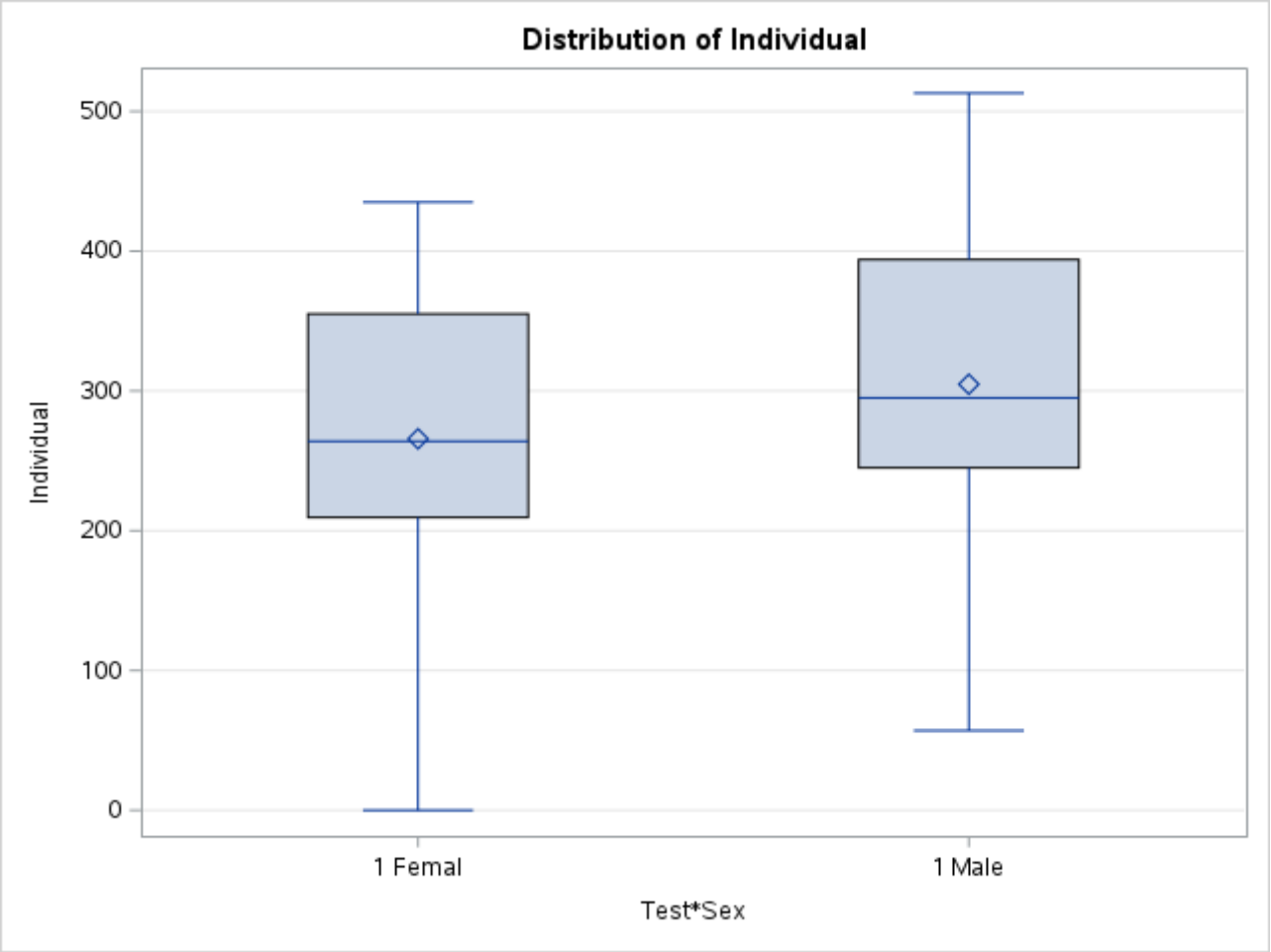


Level of Test	N	Individual	
		Mean	Std Dev

Level of Test	N	Individual	
		Mean	Std Dev
1	119	285.084034	104.346926



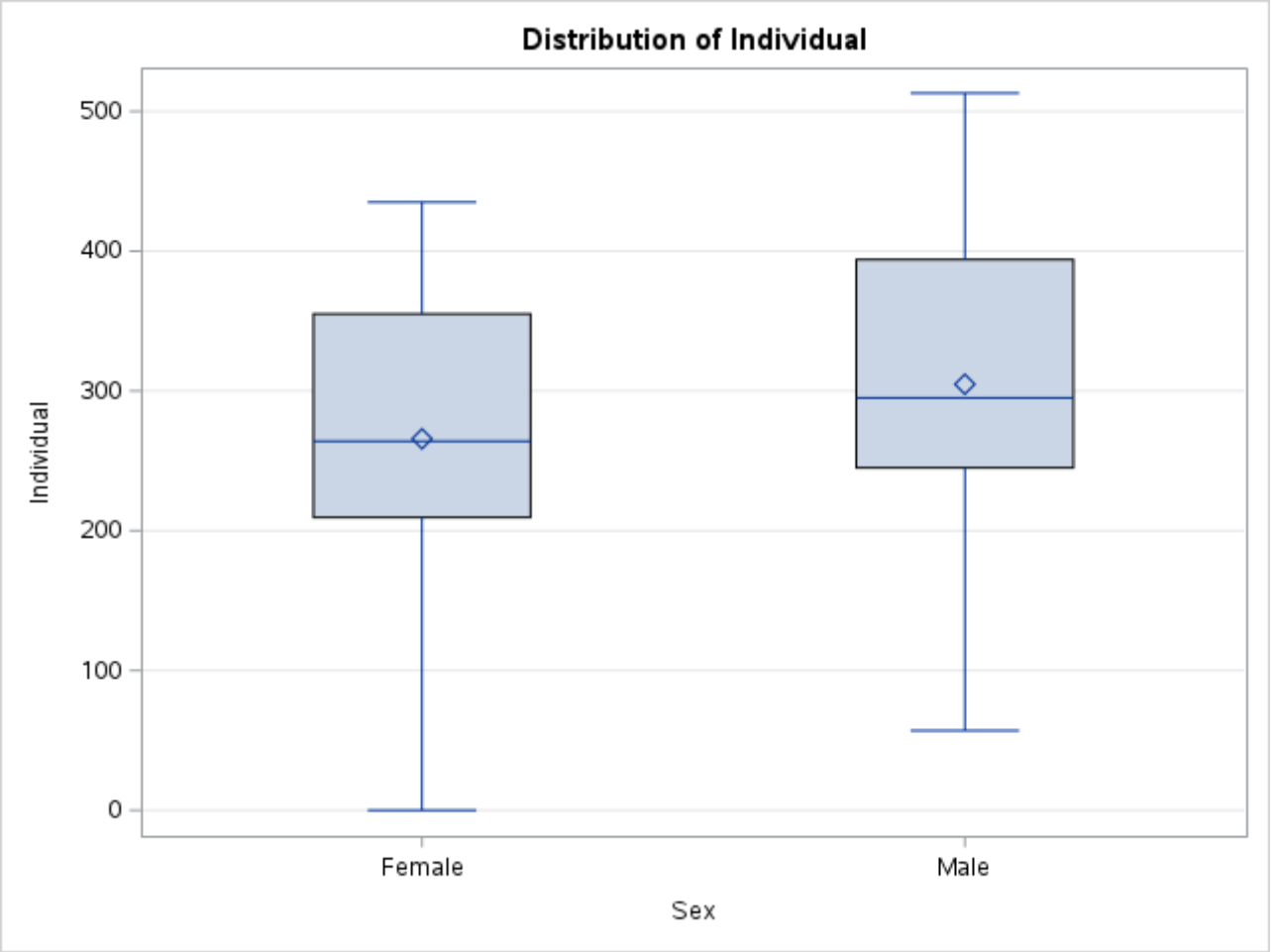
Level of Sex	N	Individual	
		Mean	Std Dev
Female	60	265.716667	106.234804
Male	59	304.779661	99.443290



Level of Test	Level of Sex	N	Individual	
			Mean	Std Dev
1	Female	60	265.716667	106.234804
1	Male	59	304.779661	99.443290

Fish sex and test effect on line crossed

The ANOVA Procedure



Fish sex and test effect on line crossed

The ANOVA Procedure

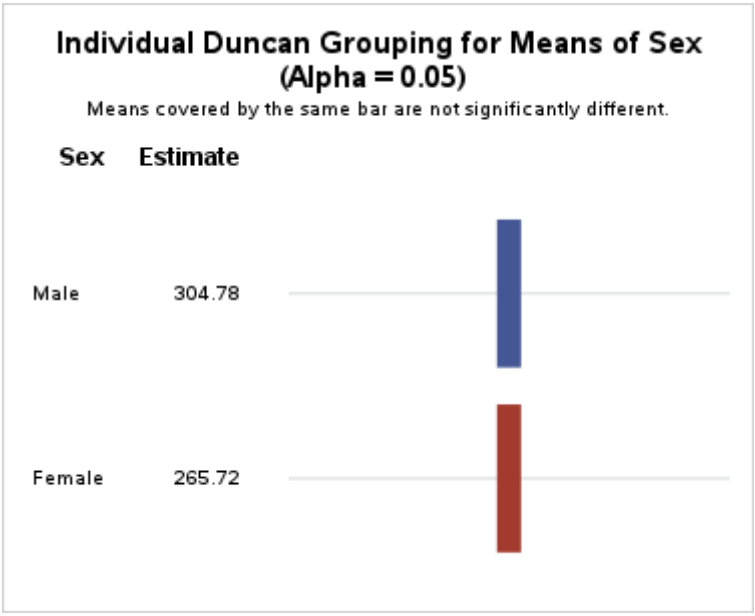
Duncan's Multiple Range Test for Individual

Note: This test controls the Type I comparisonwise error rate, not the experimentwise error rate.

Alpha	0.05
Error Degrees of Freedom	117
Error Mean Square	10593.37
Harmonic Mean of Cell Sizes	59.4958

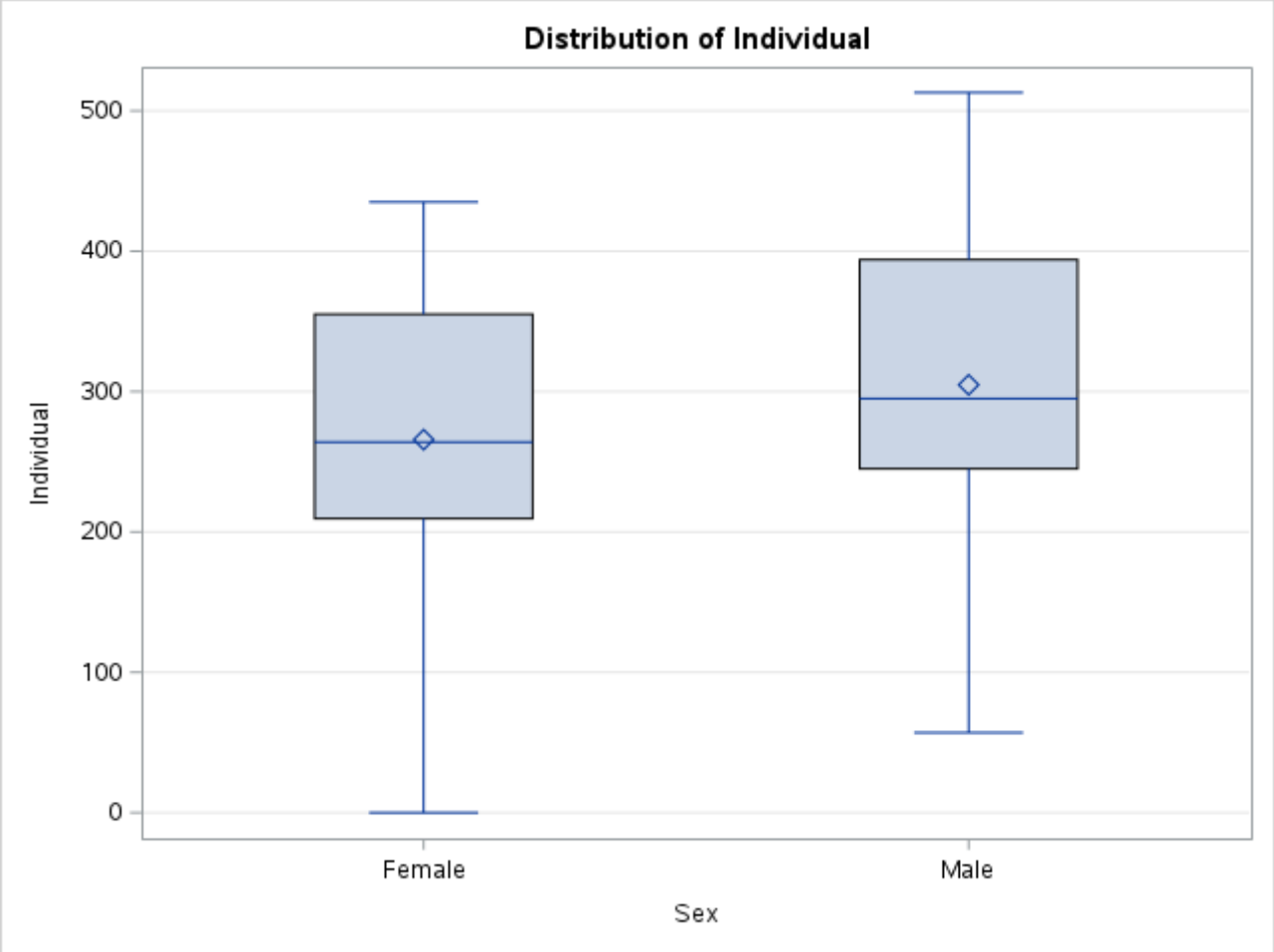
Note: Cell sizes are not equal.

Number of Means	**2**
Critical Range	37.37



Fish sex and test effect on line crossed

The ANOVA Procedure



Fish sex and test effect on line crossed

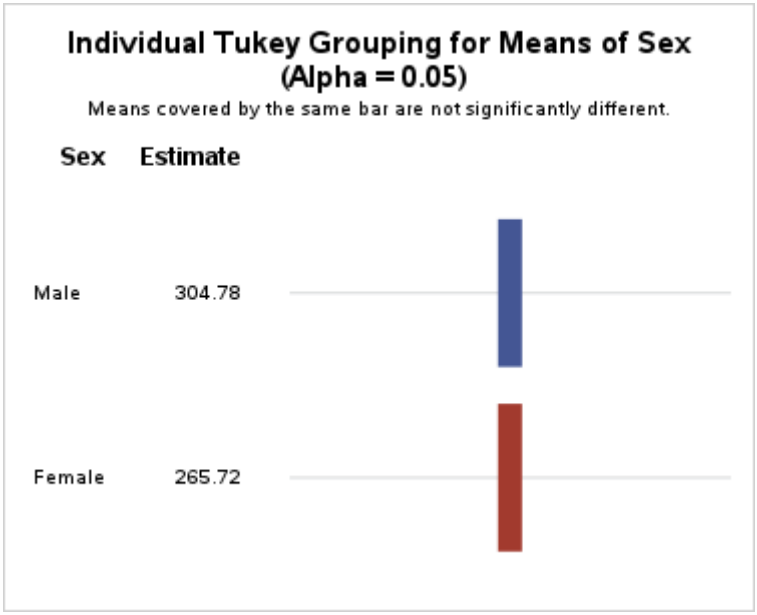
The ANOVA Procedure

Tukey's Studentized Range (HSD) Test for Individual

Note: This test controls the Type I experimentwise error rate, but it generally has a higher Type II error rate than REGWQ.

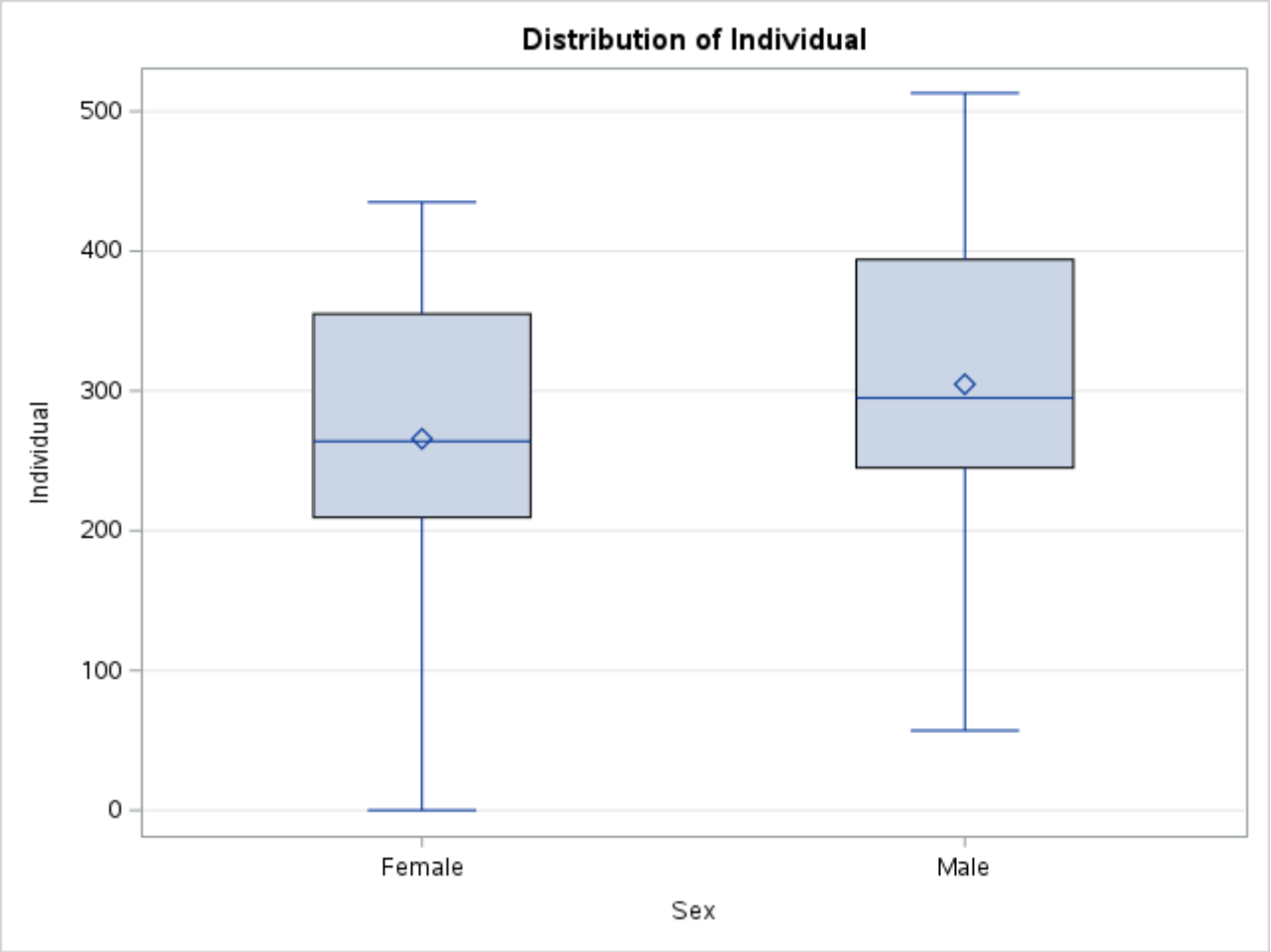
Alpha	0.05
Error Degrees of Freedom	117
Error Mean Square	10593.37
Critical Value of Studentized Range	2.80078
Minimum Significant Difference	37.373
Harmonic Mean of Cell Sizes	59.4958

Note: Cell sizes are not equal.



Fish sex and test effect on line crossed

The ANOVA Procedure



Fish sex and test effect on line crossed

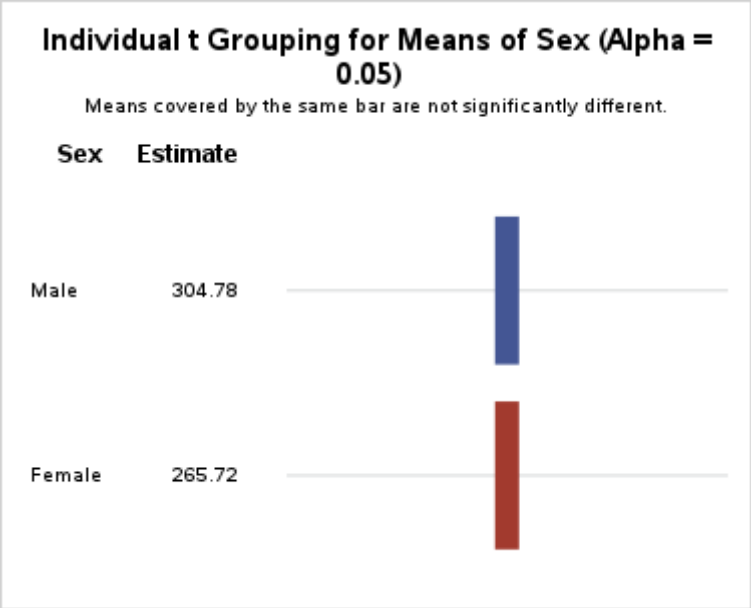
The ANOVA Procedure

t Tests (LSD) for Individual

Note: This test controls the Type I comparisonwise error rate, not the experimentwise error rate.

Alpha	0.05
Error Degrees of Freedom	117
Error Mean Square	10593.37
Critical Value of t	1.98045
Least Significant Difference	37.373
Harmonic Mean of Cell Sizes	59.4958

Note: Cell sizes are not equal.



Fish sex and test effect on entries

The ANOVA Procedure

Class Level Information		
Class	Levels	Values
Test	1	1
Sex	2	Female Male

Number of Observations Read	119
Number of Observations Used	119

Fish sex and test effect on entries

The ANOVA Procedure

Dependent Variable: Individual

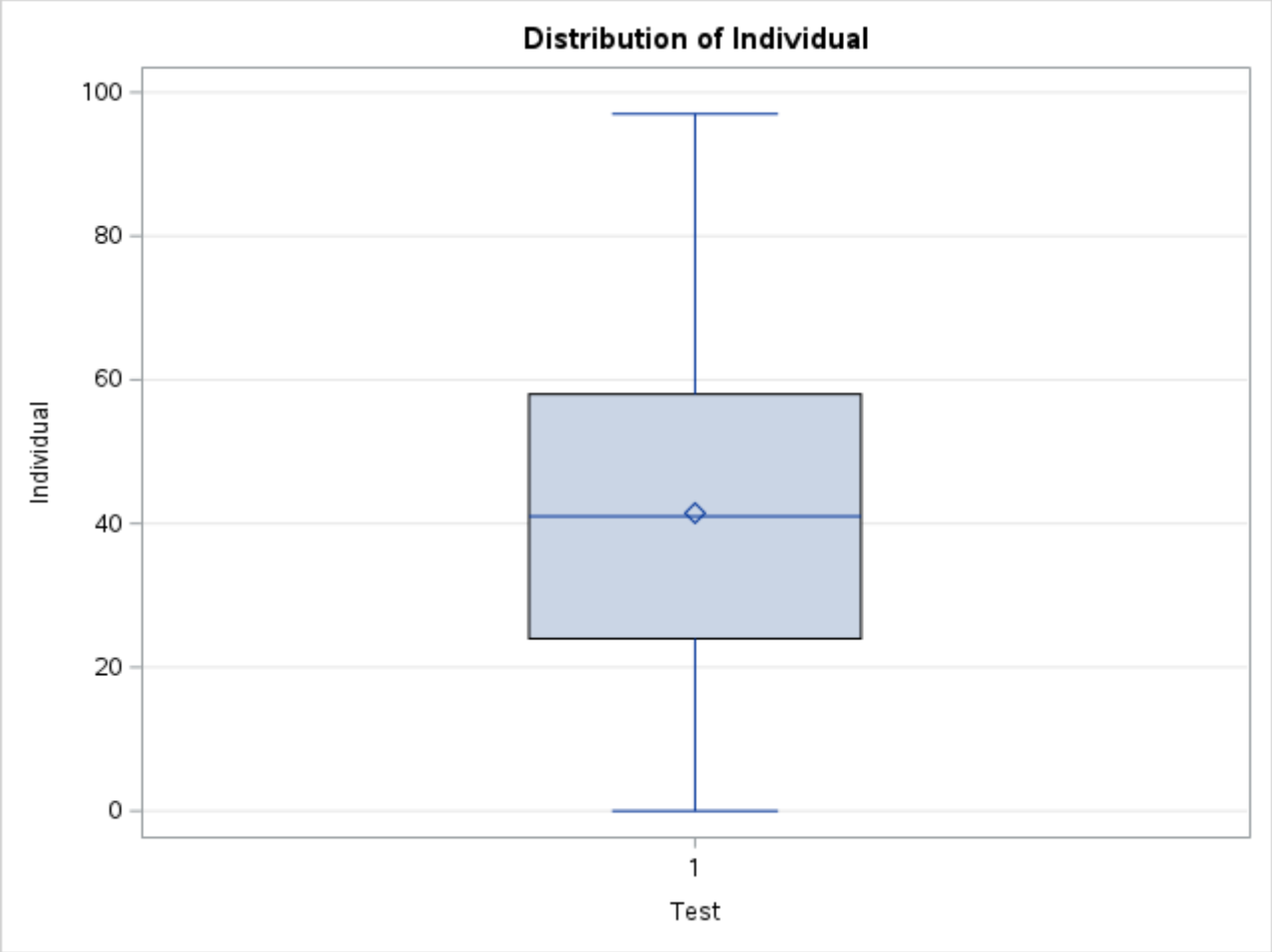
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	172.92462	172.92462	0.36	0.5519
Error	117	56828.47034	485.71342		
Corrected Total	118	57001.39496			

R-Square	Coeff Var	Root MSE	Individual Mean
0.003034	53.17579	22.03891	41.44538

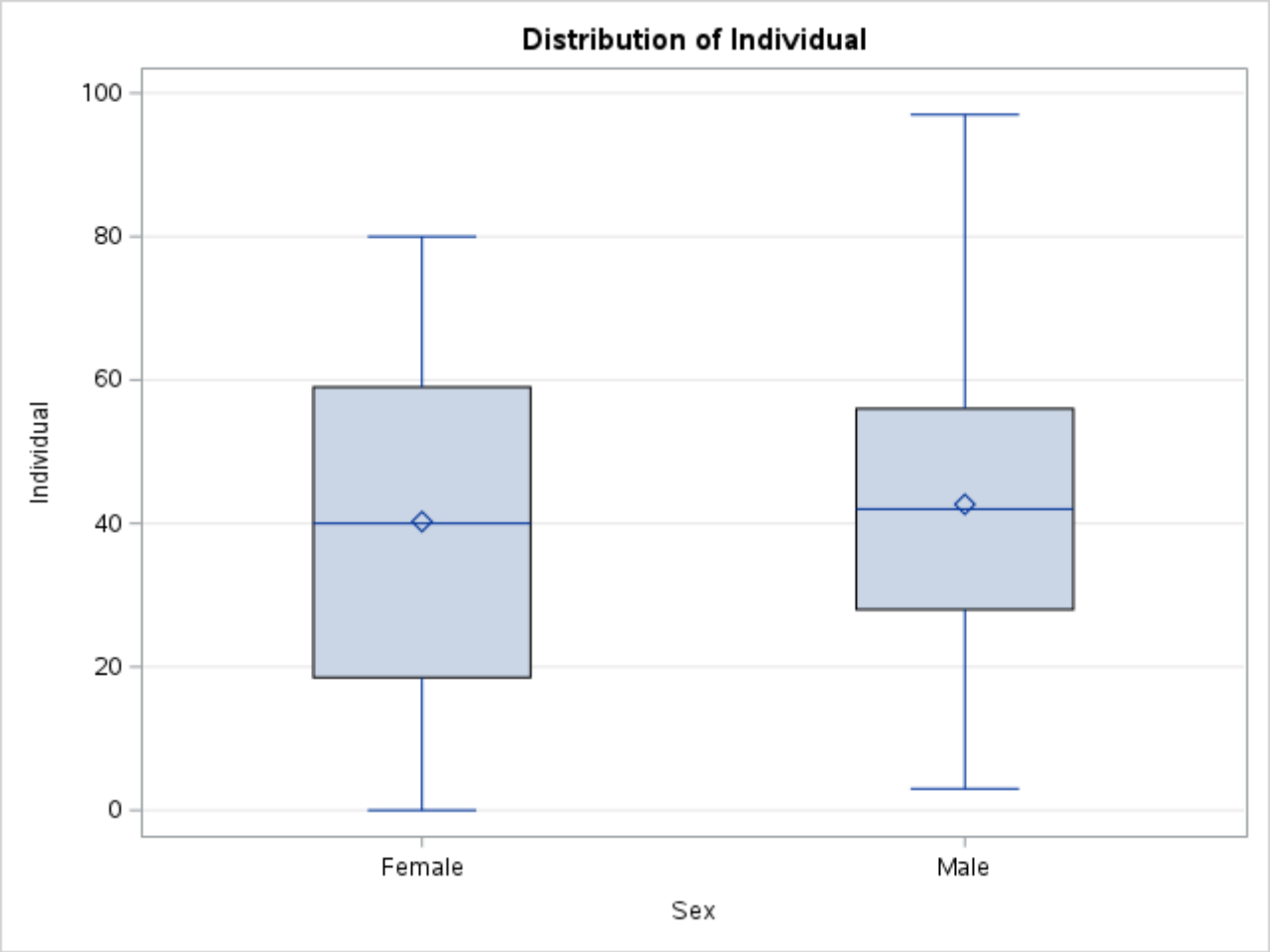
Source	DF	Anova SS	Mean Square	F Value	Pr > F
Test	0	0.0000000	.	.	.
Sex	1	172.9246190	172.9246190	0.36	0.5519
Test*Sex	0	0.0000000	.	.	.

Fish sex and test effect on entries

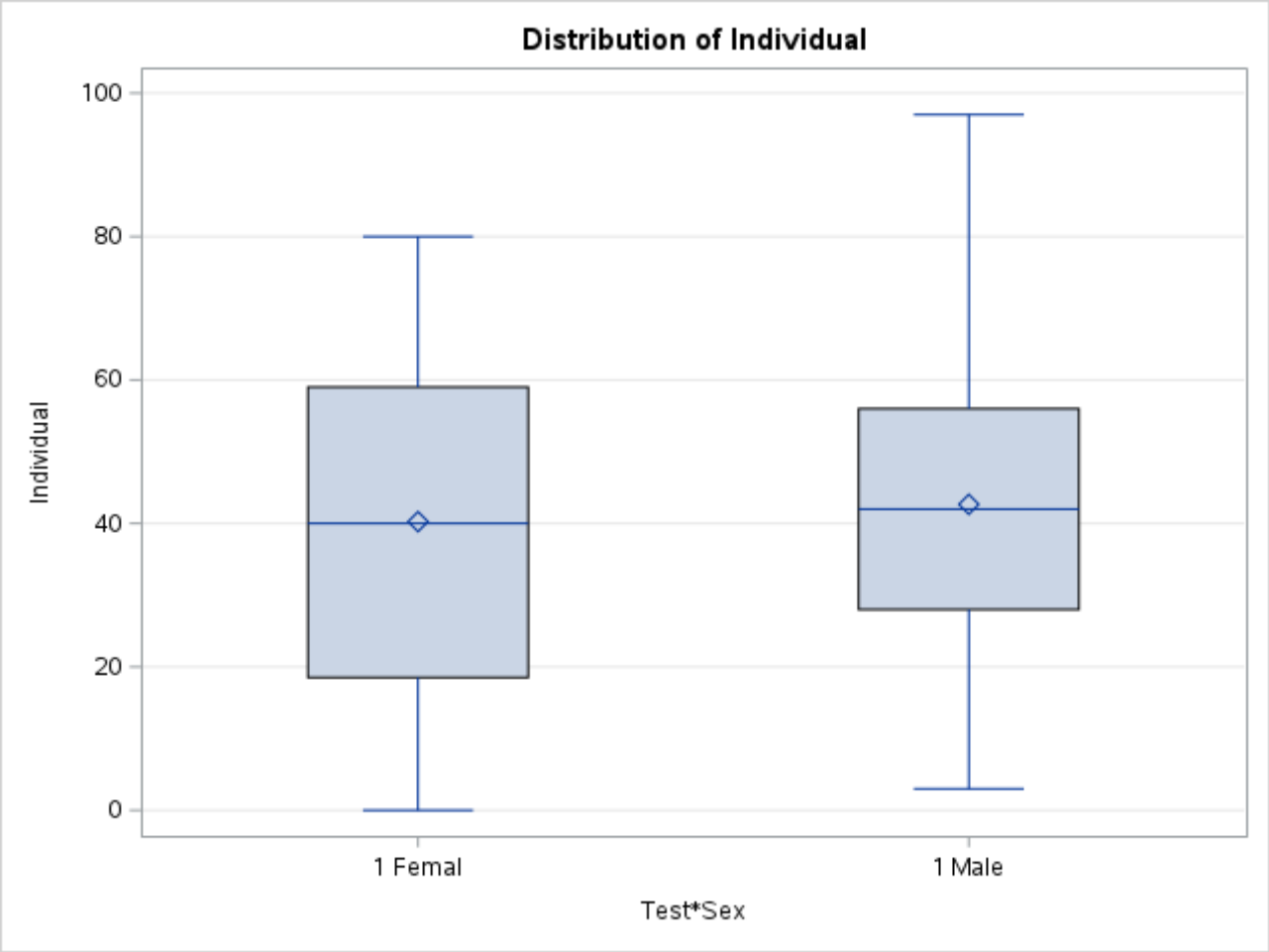
The ANOVA Procedure



Level of Test	N	Individual	
		Mean	Std Dev
1	119	41.4453782	21.9786867



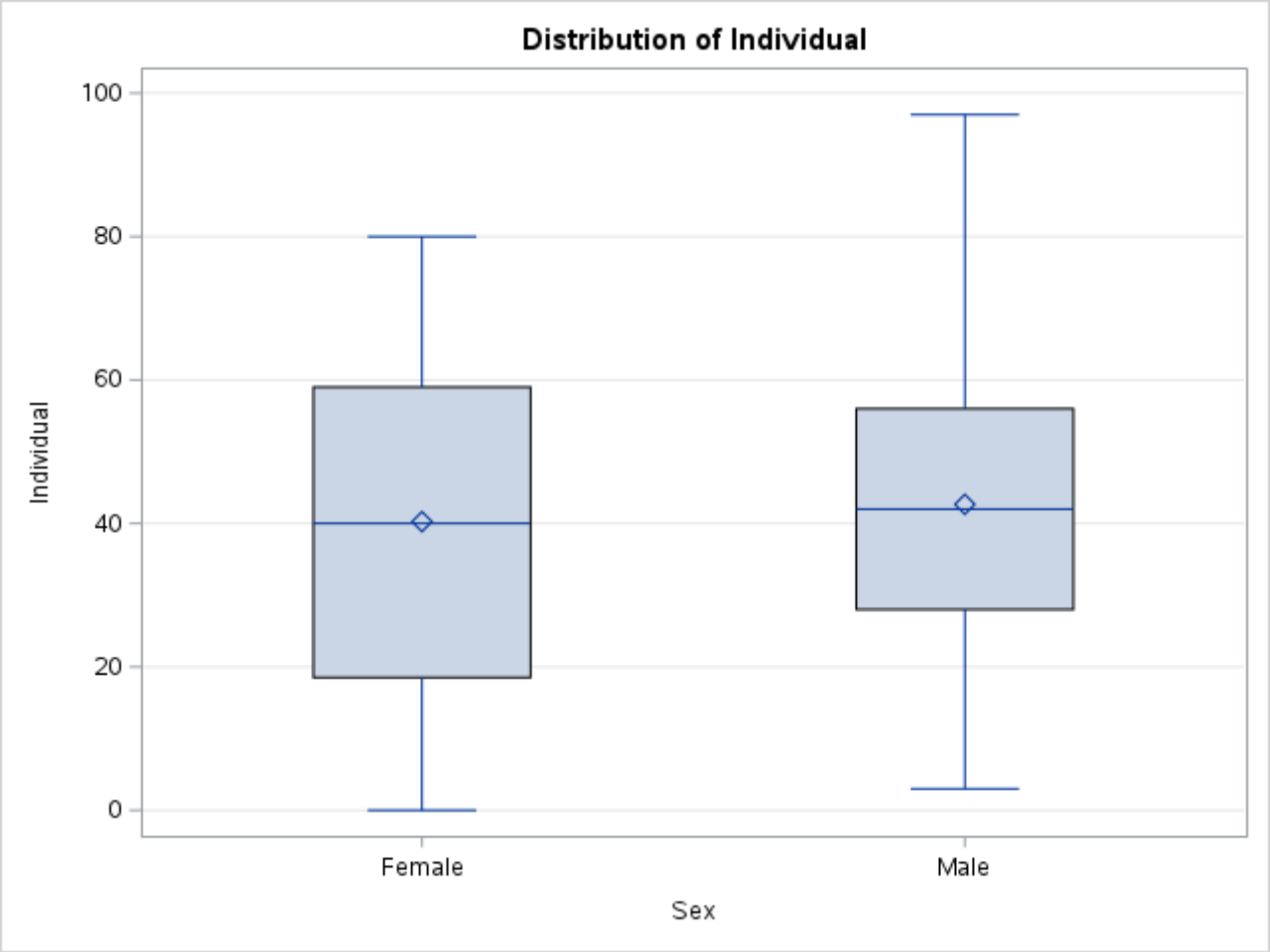
Level of Sex	N	Individual	
		Mean	Std Dev
Female	60	40.2500000	22.8299721
Male	59	42.6610169	21.2039441



Level of Test	Level of Sex	N	Individual	
			Mean	Std Dev
1	Female	60	40.2500000	22.8299721
1	Male	59	42.6610169	21.2039441

Fish sex and test effect on entries

The ANOVA Procedure



Fish sex and test effect on entries

The ANOVA Procedure

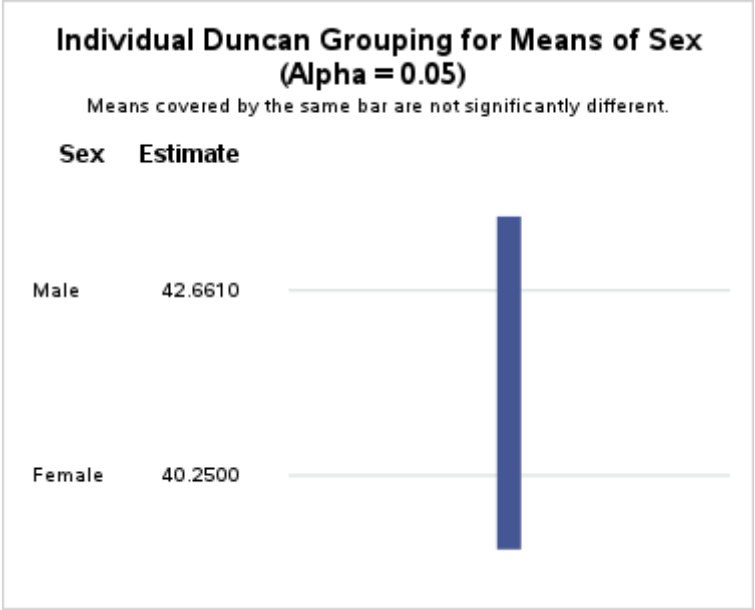
Duncan's Multiple Range Test for Individual

Note: This test controls the Type I comparisonwise error rate, not the experimentwise error rate.

Alpha	0.05
Error Degrees of Freedom	117
Error Mean Square	485.7134
Harmonic Mean of Cell Sizes	59.4958

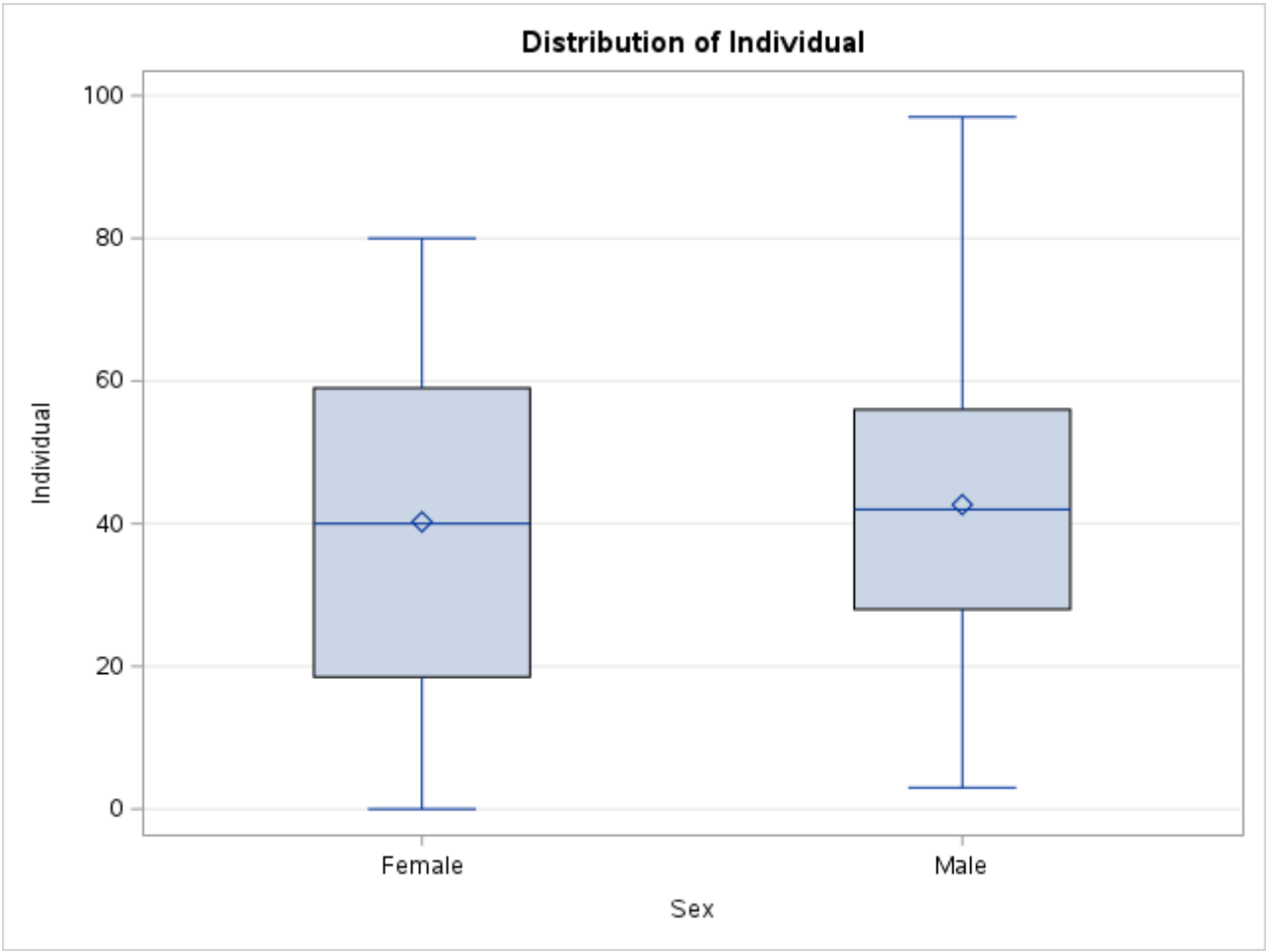
Note: Cell sizes are not equal.

Number of Means	**2**
Critical Range	8.002



Fish sex and test effect on entries

The ANOVA Procedure



Fish sex and test effect on entries

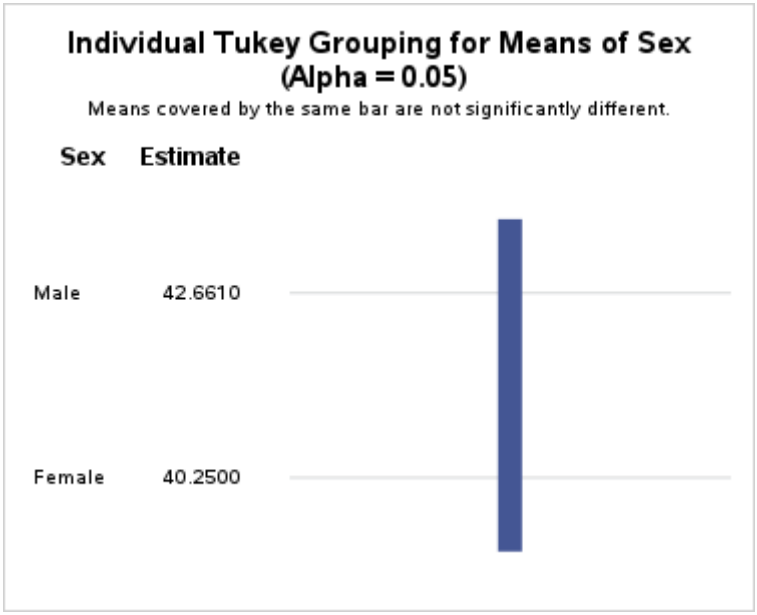
The ANOVA Procedure

Tukey's Studentized Range (HSD) Test for Individual

Note: This test controls the Type I experimentwise error rate, but it generally has a higher Type II error rate than REGWQ.

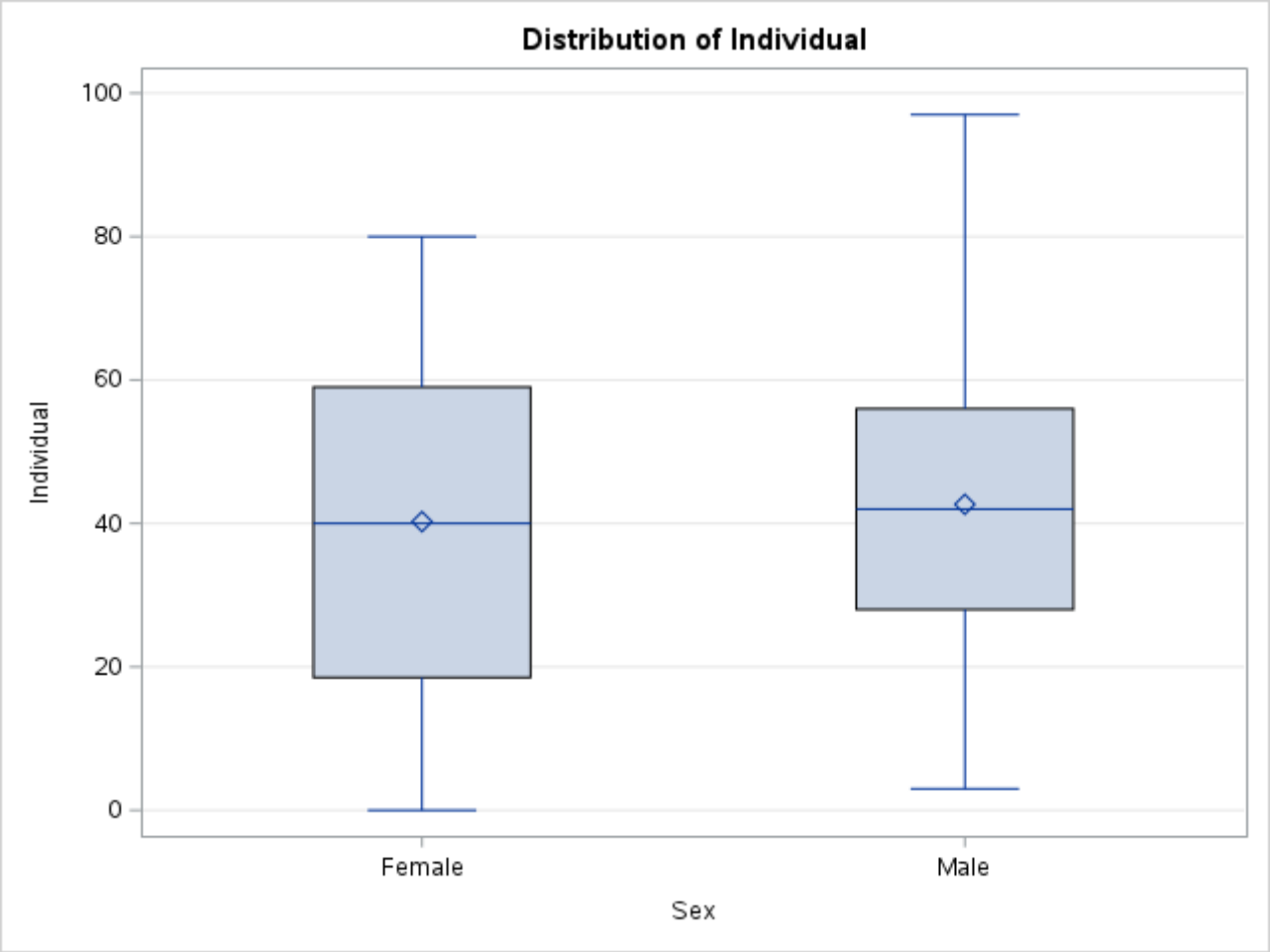
Alpha	0.05
Error Degrees of Freedom	117
Error Mean Square	485.7134
Critical Value of Studentized Range	2.80078
Minimum Significant Difference	8.0025
Harmonic Mean of Cell Sizes	59.4958

Note: Cell sizes are not equal.



Fish sex and test effect on entries

The ANOVA Procedure



Fish sex and test effect on entries

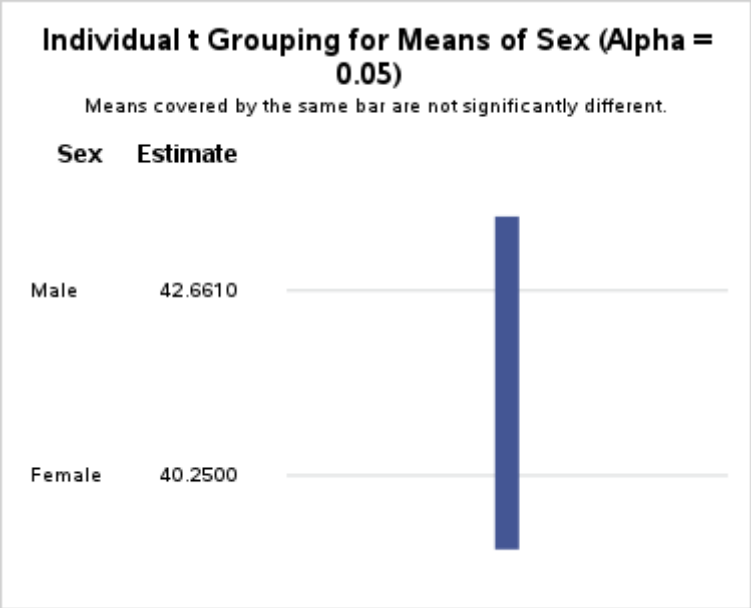
The ANOVA Procedure

t Tests (LSD) for Individual

Note: This test controls the Type I comparisonwise error rate, not the experimentwise error rate.

Alpha	0.05
Error Degrees of Freedom	117
Error Mean Square	485.7134
Critical Value of t	1.98045
Least Significant Difference	8.0025
Harmonic Mean of Cell Sizes	59.4958

Note: Cell sizes are not equal.



Fish sex and test effect on time spent

The ANOVA Procedure

Class Level Information		
Class	Levels	Values
Test	1	1
Sex	2	Female Male

Number of Observations Read	119
Number of Observations Used	119

Fish sex and test effect on time spent

The ANOVA Procedure

Dependent Variable: Individual

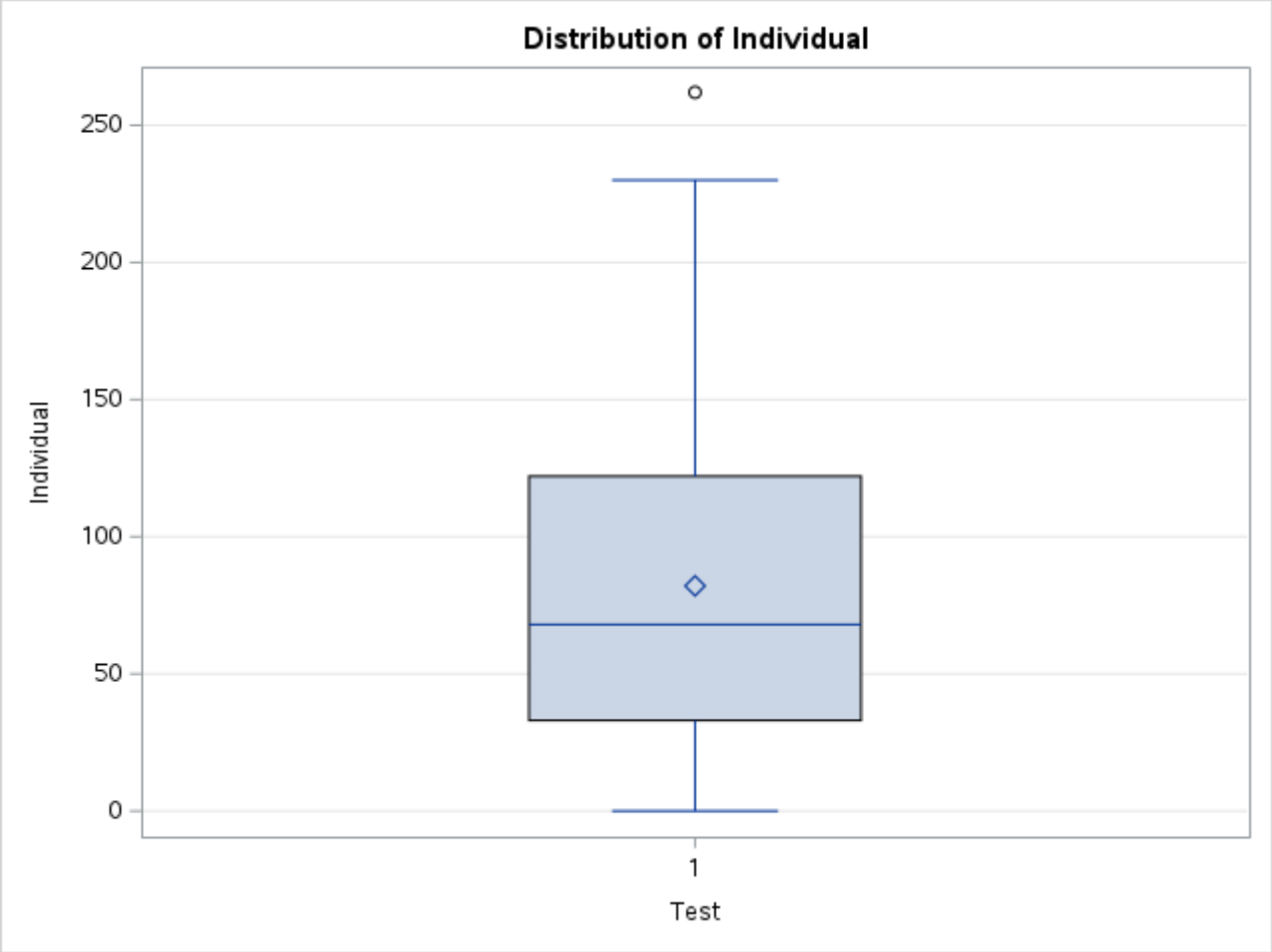
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	425.1642	425.1642	0.11	0.7374
Error	117	440277.1551	3763.0526		
Corrected Total	118	440702.3193			

R-Square	Coeff Var	Root MSE	Individual Mean
0.000965	74.74049	61.34373	82.07563

Source	DF	Anova SS	Mean Square	F Value	Pr > F
Test	0	0.0000000	.	.	.
Sex	1	425.1642430	425.1642430	0.11	0.7374
Test*Sex	0	0.0000000	.	.	.

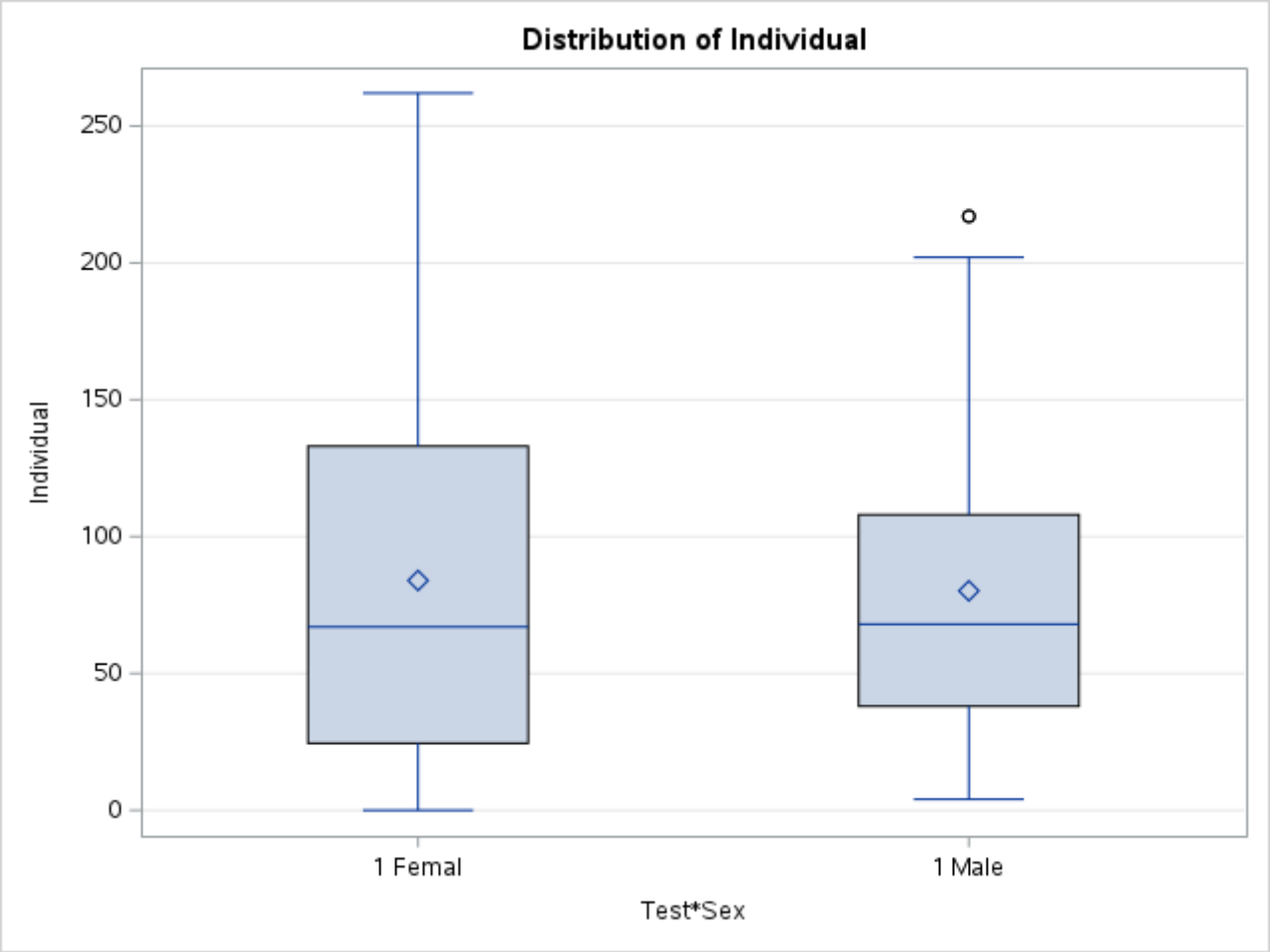
Fish sex and test effect on time spent

The ANOVA Procedure



Level of Test	N	Individual	
		Mean	Std Dev
1	119	82.0756303	61.1127271

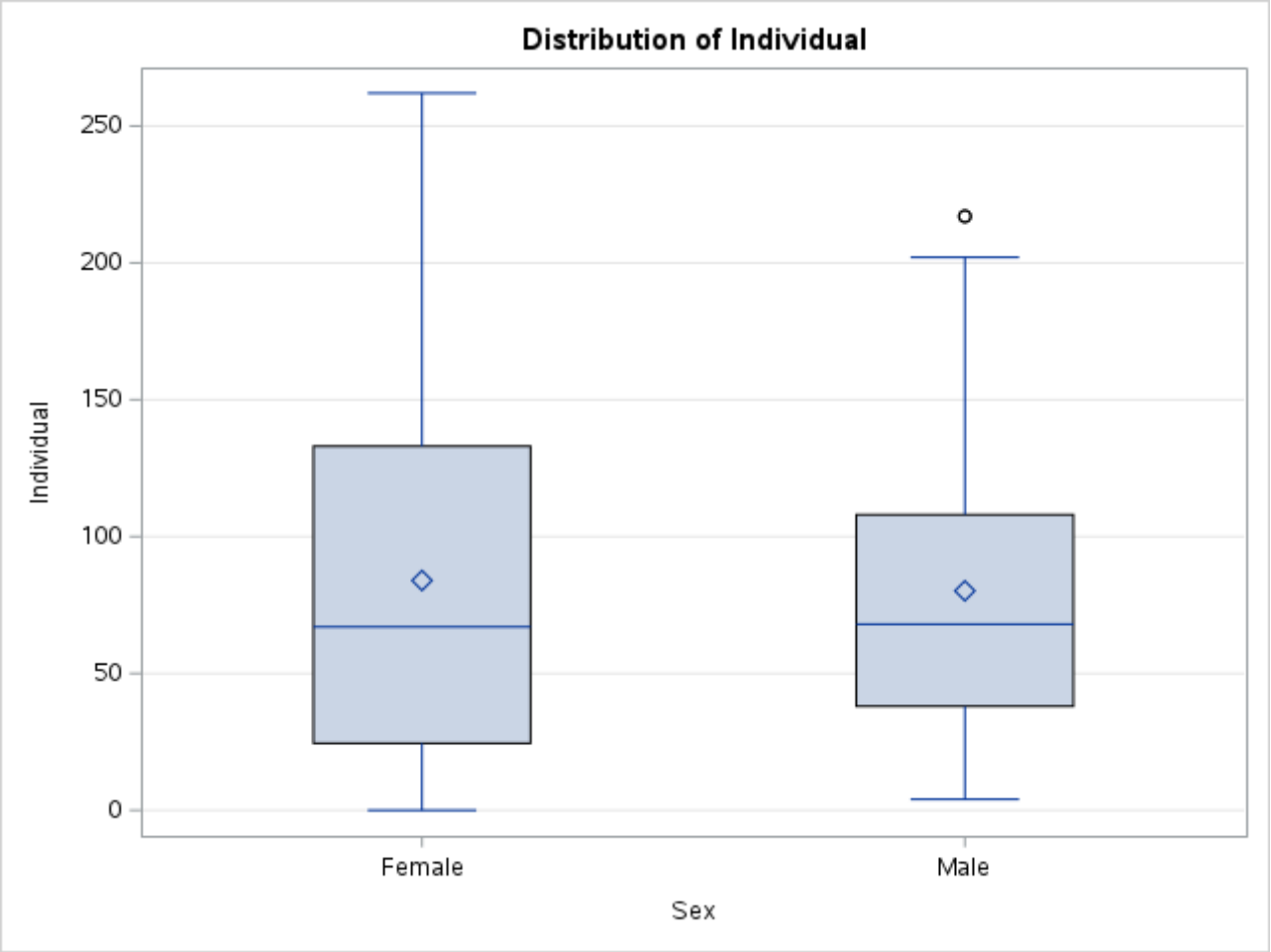
Level of Sex	N	Individual	
		Mean	Std Dev
Female	60	83.9500000	67.3600055
Male	59	80.1694915	54.5470858



Level of Test	Level of Sex	N	Individual	
			Mean	Std Dev
1	Female	60	83.9500000	67.3600055
1	Male	59	80.1694915	54.5470858

Fish sex and test effect on time spent

The ANOVA Procedure



Fish sex and test effect on time spent

The ANOVA Procedure

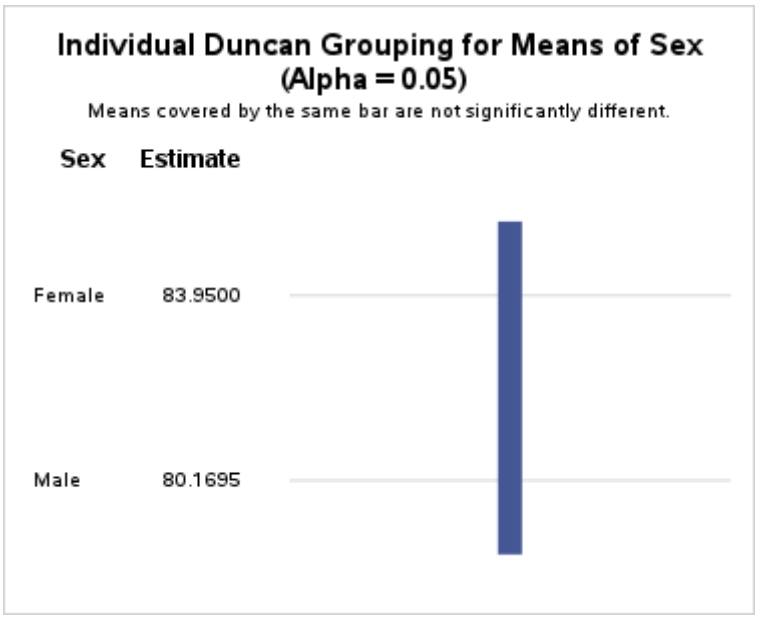
Duncan's Multiple Range Test for Individual

Note: This test controls the Type I comparisonwise error rate, not the experimentwise error rate.

Alpha	0.05
Error Degrees of Freedom	117
Error Mean Square	3763.053
Harmonic Mean of Cell Sizes	59.4958

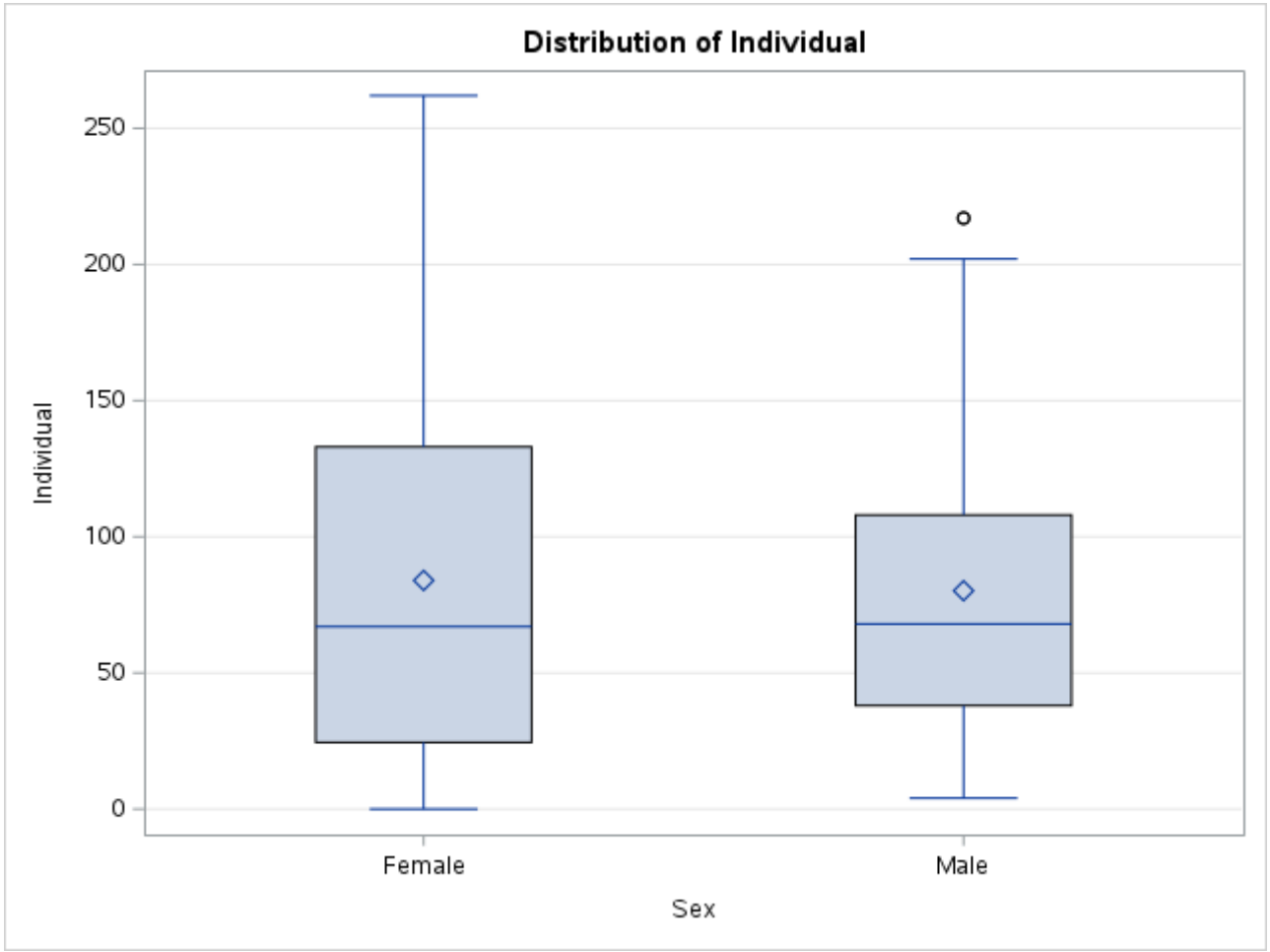
Note: Cell sizes are not equal.

Number of Means	**2**
Critical Range	22.27



Fish sex and test effect on time spent

The ANOVA Procedure



Fish sex and test effect on time spent

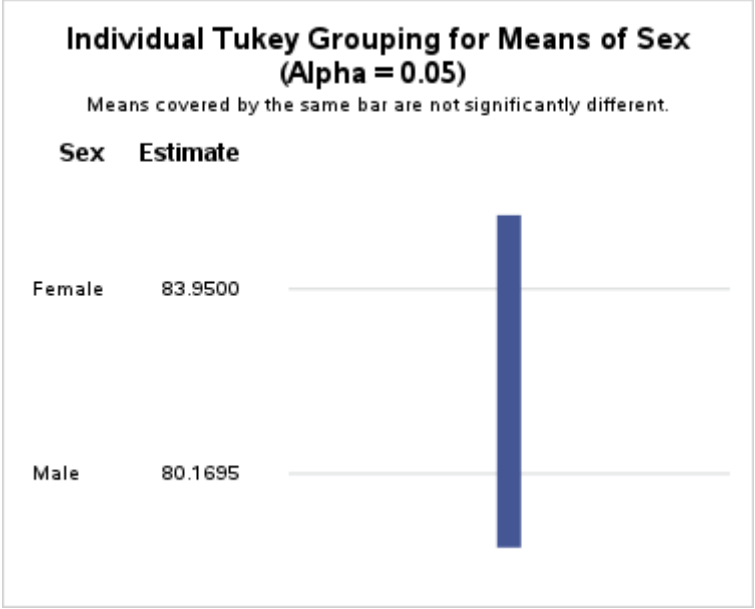
The ANOVA Procedure

Tukey's Studentized Range (HSD) Test for Individual

Note: This test controls the Type I experimentwise error rate, but it generally has a higher Type II error rate than REGWQ.

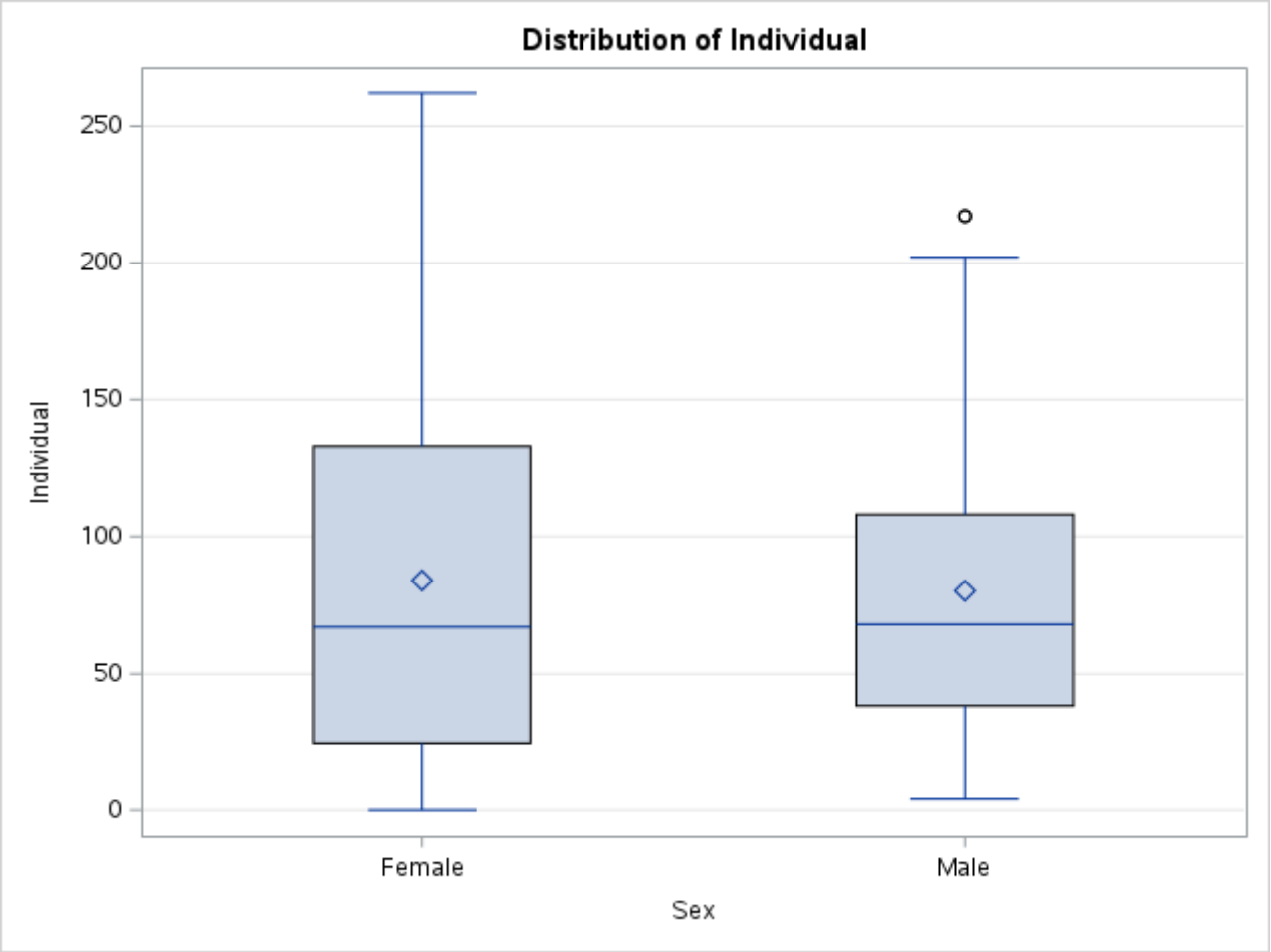
Alpha	0.05
Error Degrees of Freedom	117
Error Mean Square	3763.053
Critical Value of Studentized Range	2.80078
Minimum Significant Difference	22.274
Harmonic Mean of Cell Sizes	59.4958

Note: Cell sizes are not equal.



Fish sex and test effect on time spent

The ANOVA Procedure



Fish sex and test effect on time spent

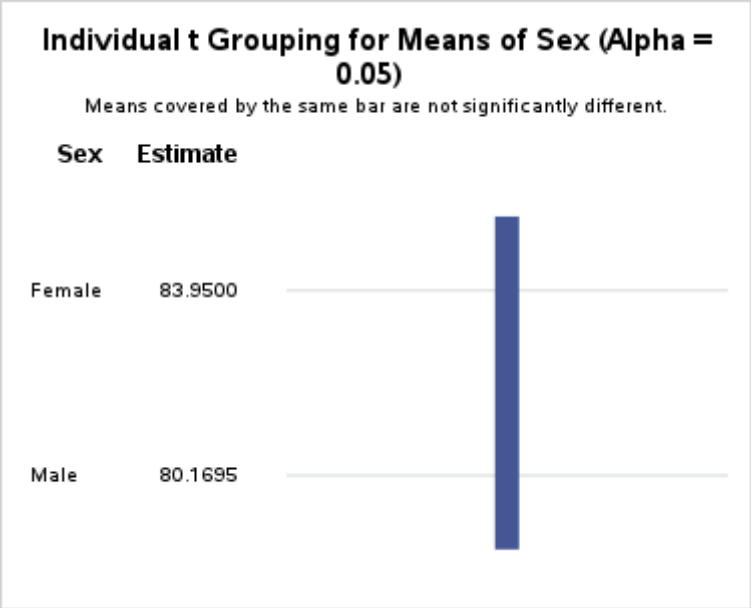
The ANOVA Procedure

t Tests (LSD) for Individual

Note: This test controls the Type I comparisonwise error rate, not the experimentwise error rate.

Alpha	0.05
Error Degrees of Freedom	117
Error Mean Square	3763.053
Critical Value of t	1.98045
Least Significant Difference	22.274
Harmonic Mean of Cell Sizes	59.4958

Note: Cell sizes are not equal.



Fish sex and test effect on line crossed

The ANOVA Procedure

Class Level Information		
Class	Levels	Values
Test	1	2
Sex	2	Female Male

Number of Observations Read	119
Number of Observations Used	119

Fish sex and test effect on line crossed

The ANOVA Procedure

Dependent Variable: Individual

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	169694.838	169694.838	17.49	<.0001
Error	117	1135228.154	9702.805		
Corrected Total	118	1304922.992			

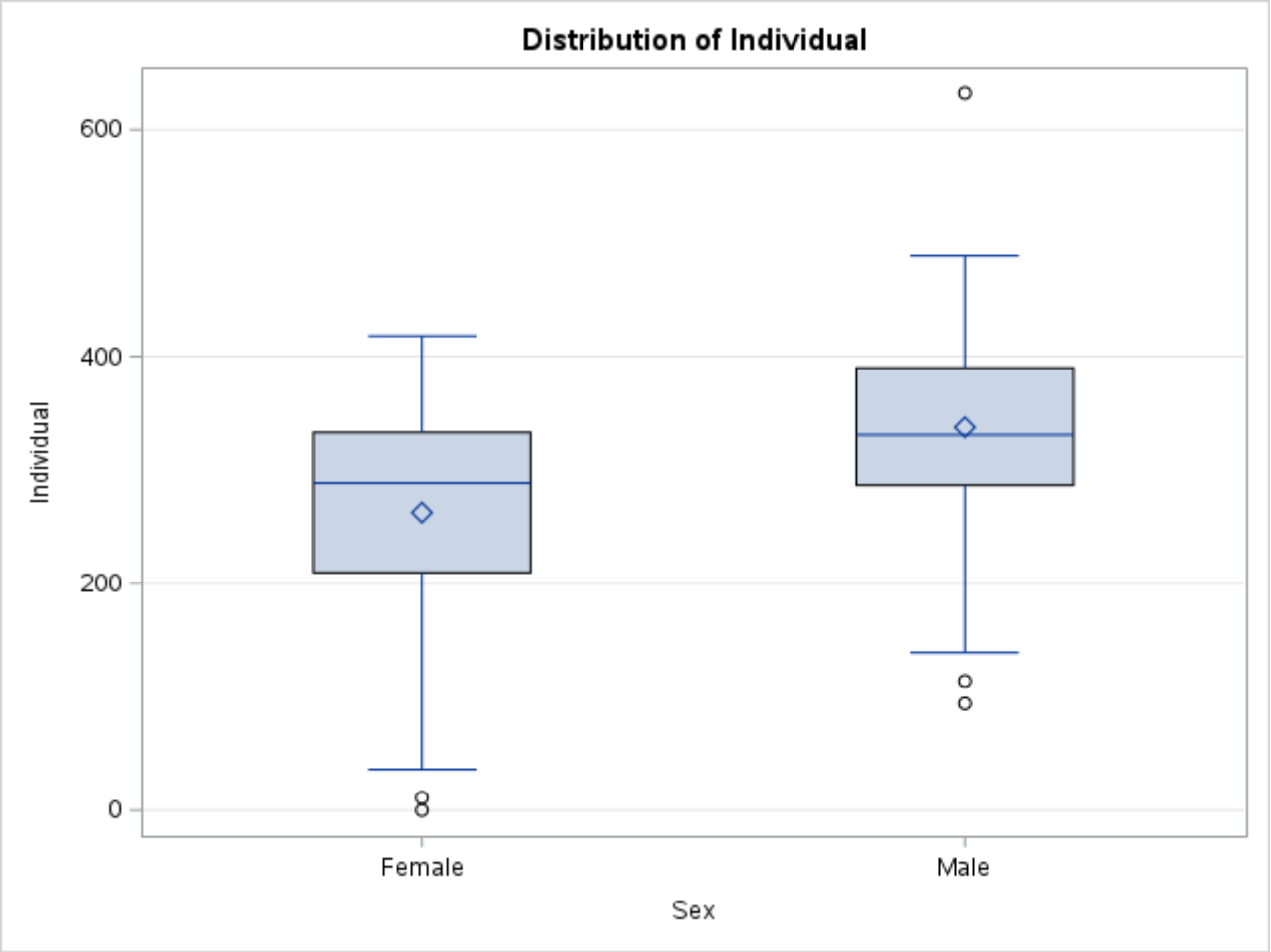
R-Square	Coeff Var	Root MSE	Individual Mean
0.130042	32.88032	98.50282	299.5798

Source	DF	Anova SS	Mean Square	F Value	Pr > F
Test	0	0.0000	.	.	.
Sex	1	169694.8379	169694.8379	17.49	<.0001
Test*Sex	0	0.0000	.	.	.

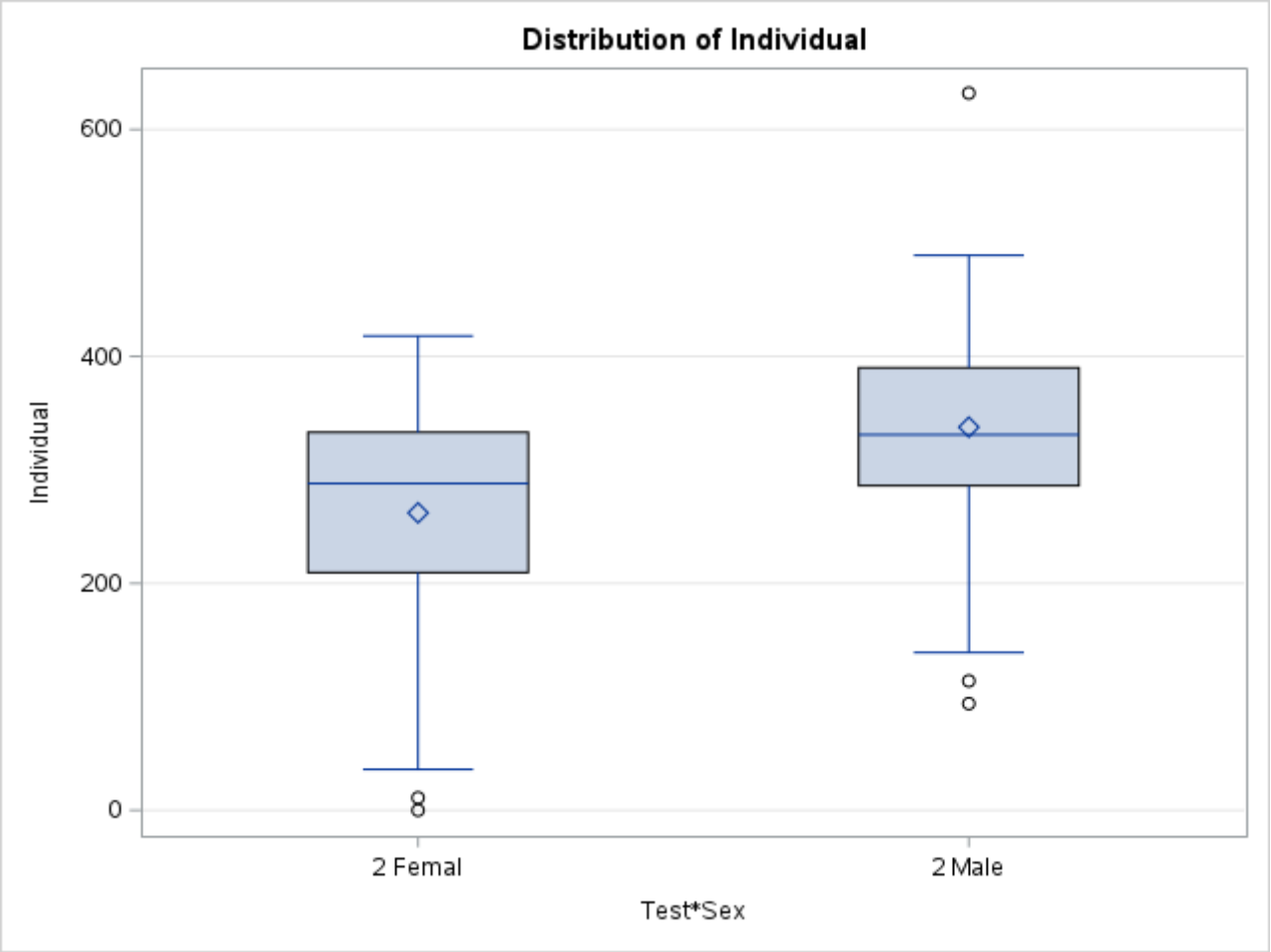
Fish sex and test effect on line crossed

The ANOVA Procedure

Level of Test	N	Individual	
		Mean	Std Dev
2	119	299.579832	105.160208



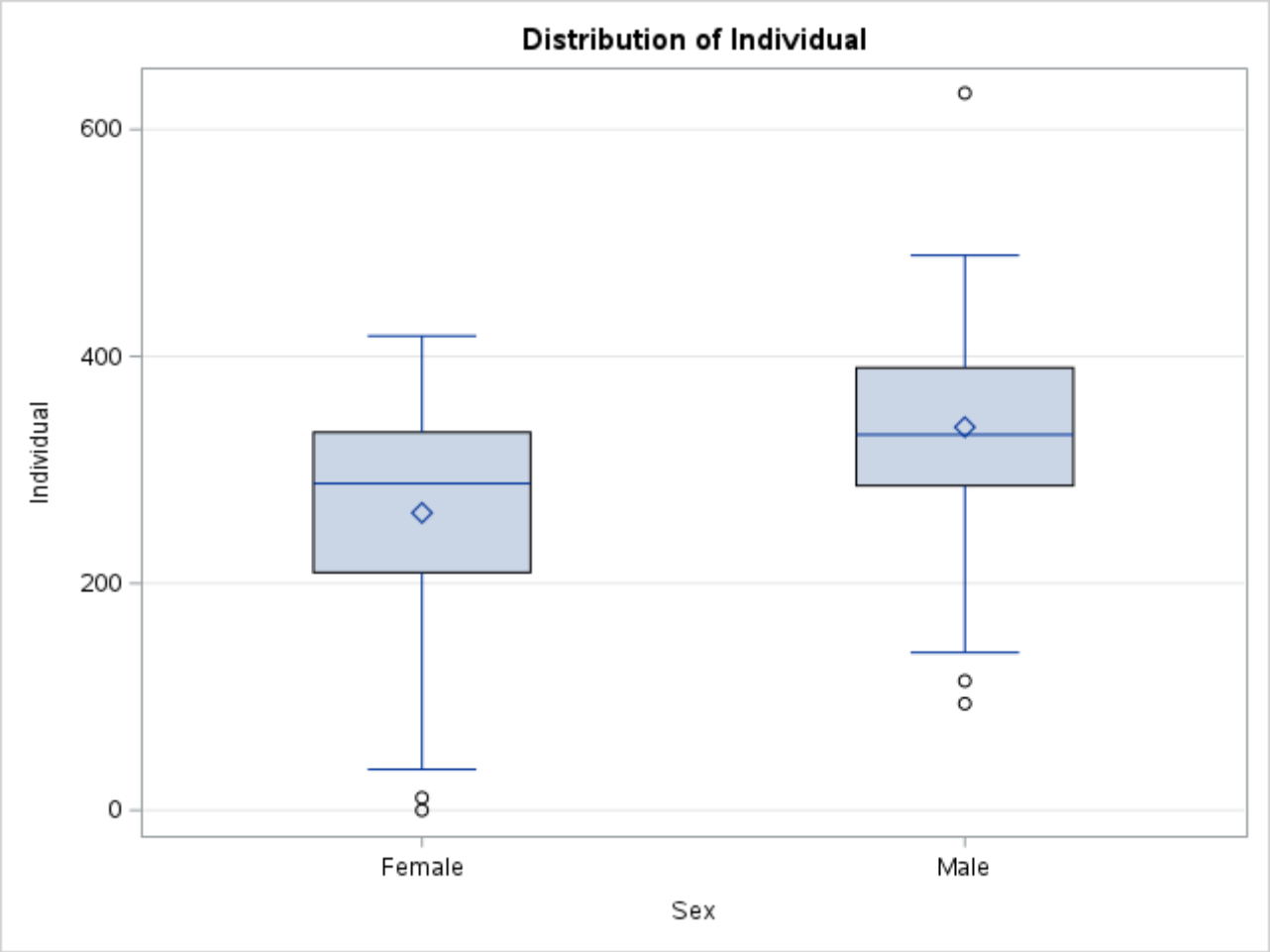
Level of Sex	N	Individual	
		Mean	Std Dev
Female	60	262.133333	100.361122
Male	59	337.661017	96.575789



Level of Test	Level of Sex	N	Individual	
			Mean	Std Dev
2	Female	60	262.133333	100.361122
2	Male	59	337.661017	96.575789

Fish sex and test effect on line crossed

The ANOVA Procedure



Fish sex and test effect on line crossed

The ANOVA Procedure

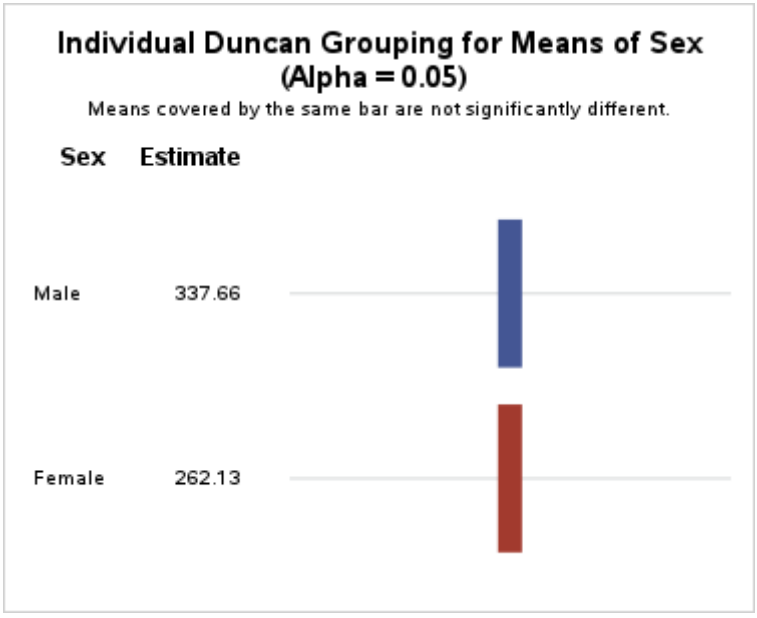
Duncan's Multiple Range Test for Individual

Note: This test controls the Type I comparisonwise error rate, not the experimentwise error rate.

Alpha	0.05
Error Degrees of Freedom	117
Error Mean Square	9702.805
Harmonic Mean of Cell Sizes	59.4958

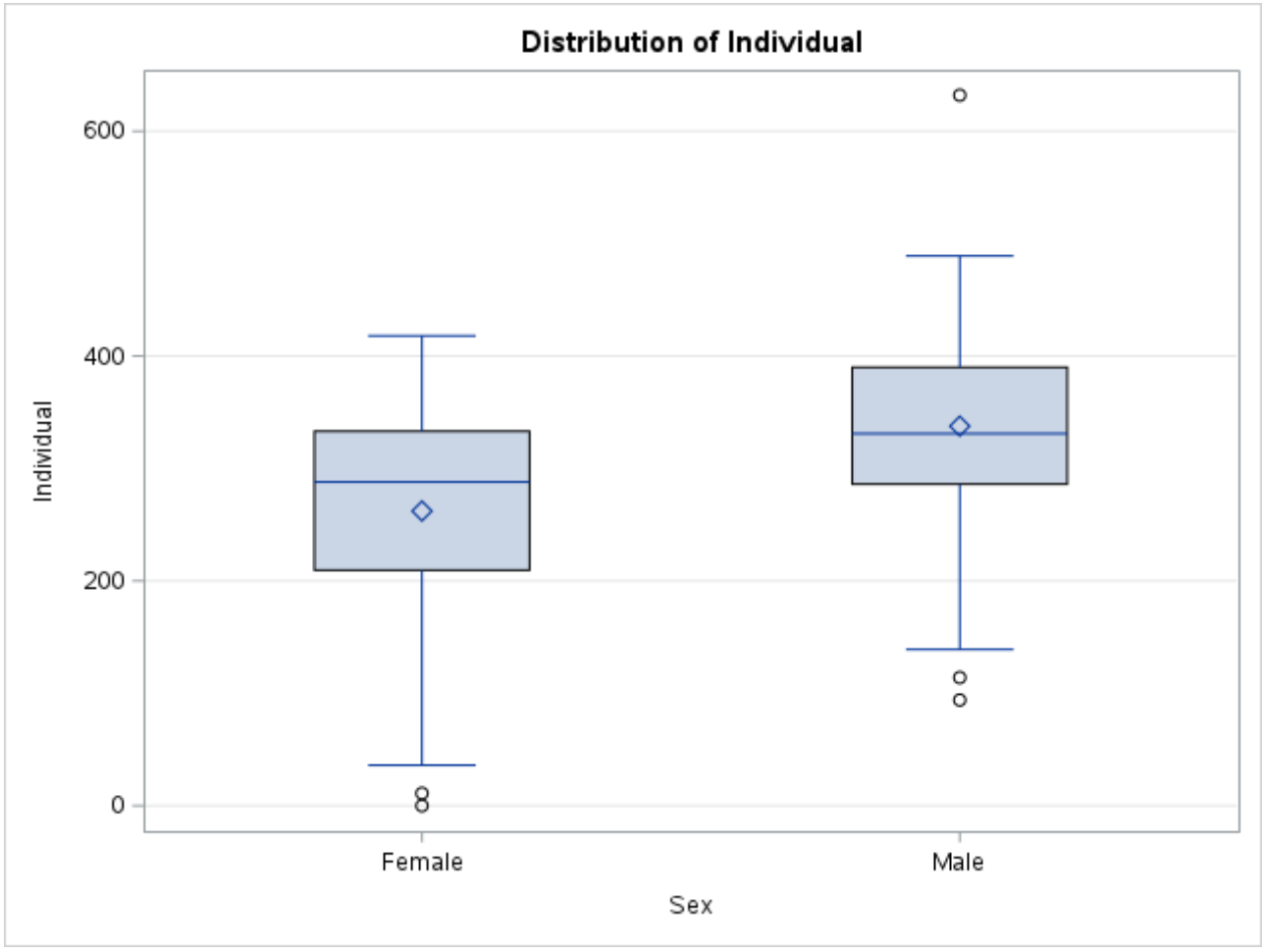
Note: Cell sizes are not equal.

Number of Means	**2**
Critical Range	35.77



Fish sex and test effect on line crossed

The ANOVA Procedure



Fish sex and test effect on line crossed

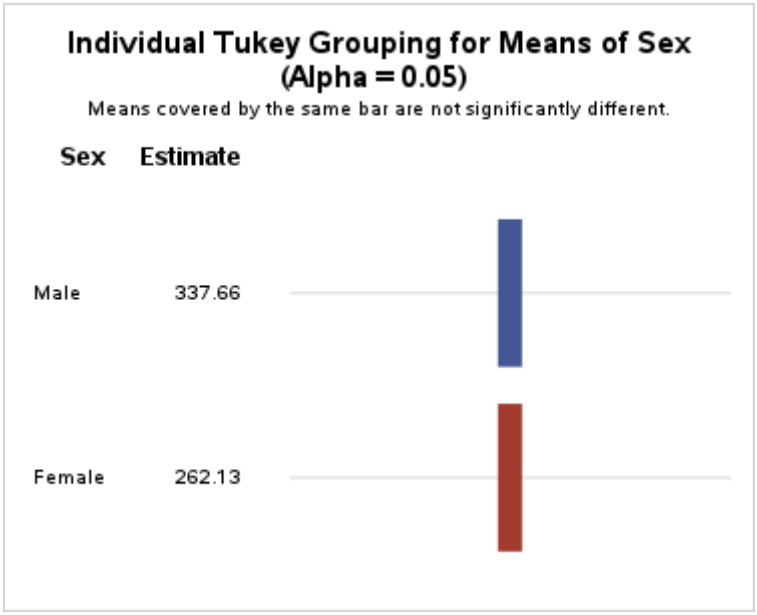
The ANOVA Procedure

Tukey's Studentized Range (HSD) Test for Individual

Note: This test controls the Type I experimentwise error rate, but it generally has a higher Type II error rate than REGWQ.

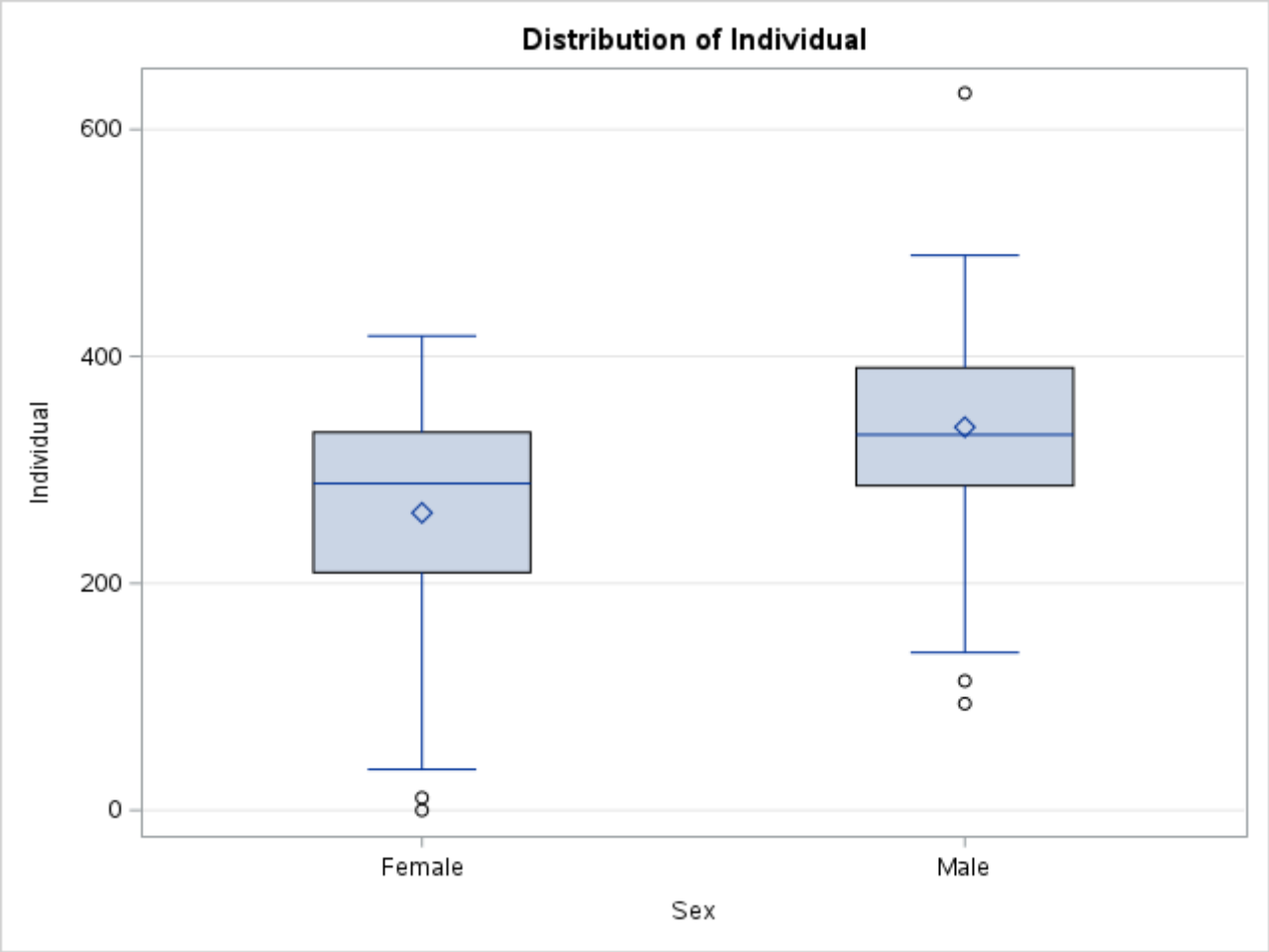
Alpha	0.05
Error Degrees of Freedom	117
Error Mean Square	9702.805
Critical Value of Studentized Range	2.80078
Minimum Significant Difference	35.767
Harmonic Mean of Cell Sizes	59.4958

Note: Cell sizes are not equal.



Fish sex and test effect on line crossed

The ANOVA Procedure



Fish sex and test effect on line crossed

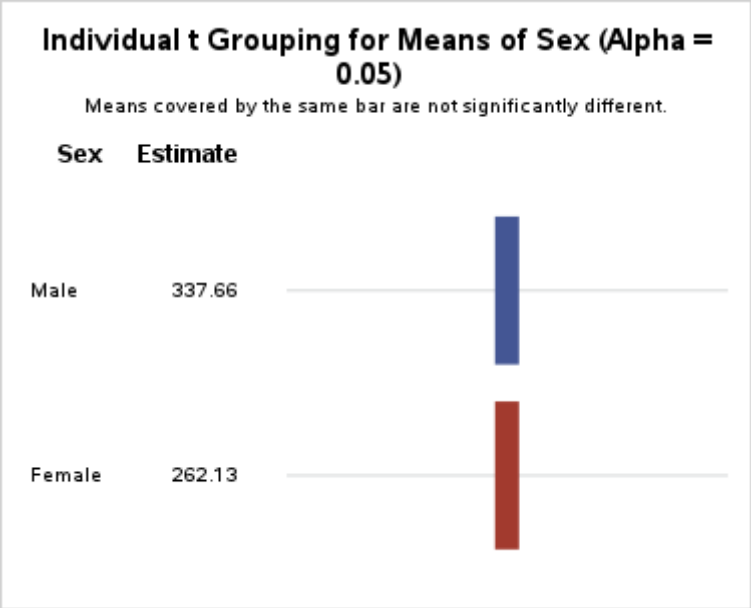
The ANOVA Procedure

t Tests (LSD) for Individual

Note: This test controls the Type I comparisonwise error rate, not the experimentwise error rate.

Alpha	0.05
Error Degrees of Freedom	117
Error Mean Square	9702.805
Critical Value of t	1.98045
Least Significant Difference	35.767
Harmonic Mean of Cell Sizes	59.4958

Note: Cell sizes are not equal.



Fish sex and test effect on entries

The ANOVA Procedure

Class Level Information		
Class	Levels	Values
Test	1	2
Sex	2	Female Male

Number of Observations Read	119
Number of Observations Used	119

Fish sex and test effect on entries

The ANOVA Procedure

Dependent Variable: Individual

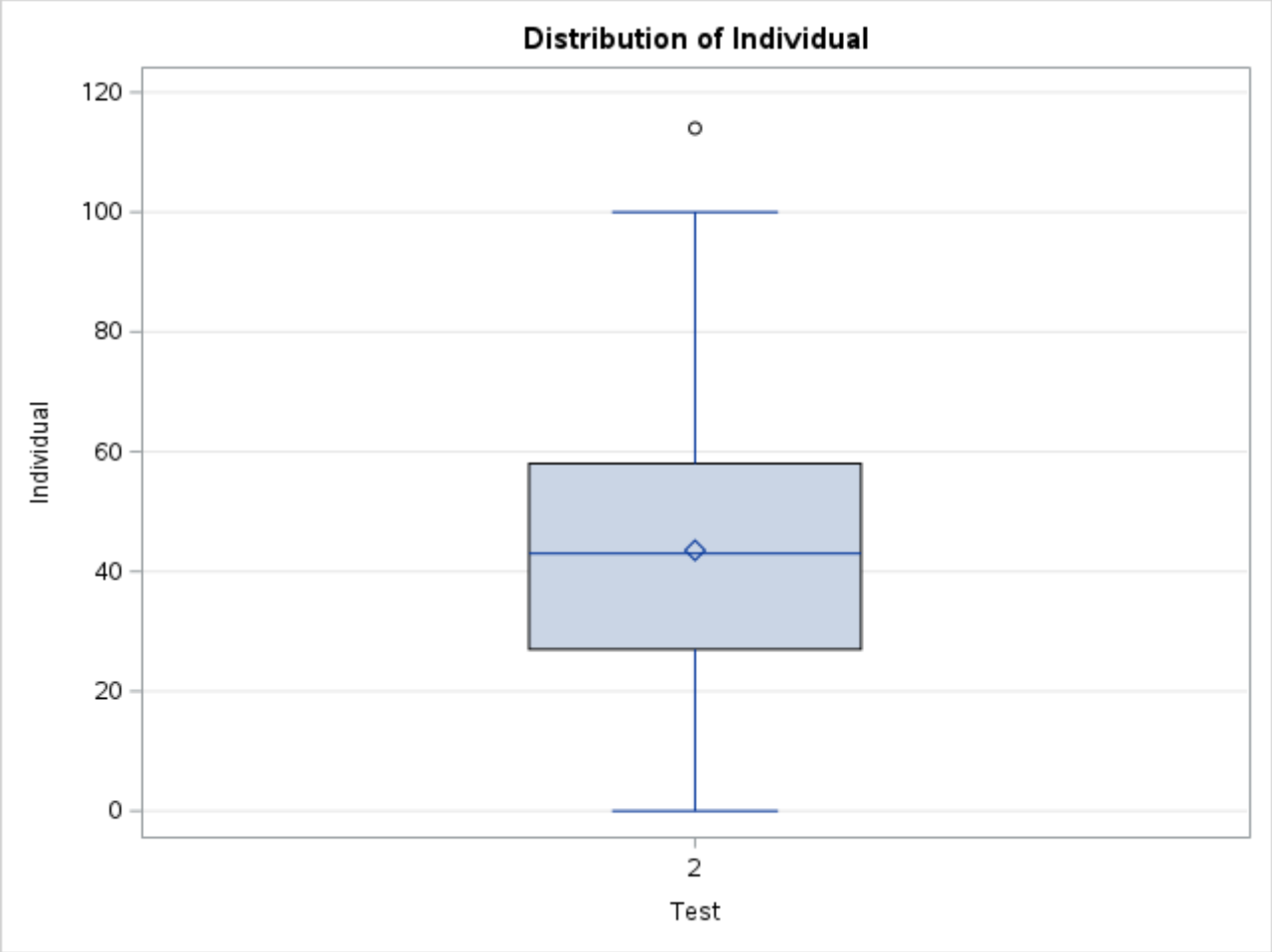
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	4683.47036	4683.47036	8.82	0.0036
Error	117	62154.22712	531.23271		
Corrected Total	118	66837.69748			

R-Square	Coeff Var	Root MSE	Individual Mean
0.070072	52.95945	23.04849	43.52101

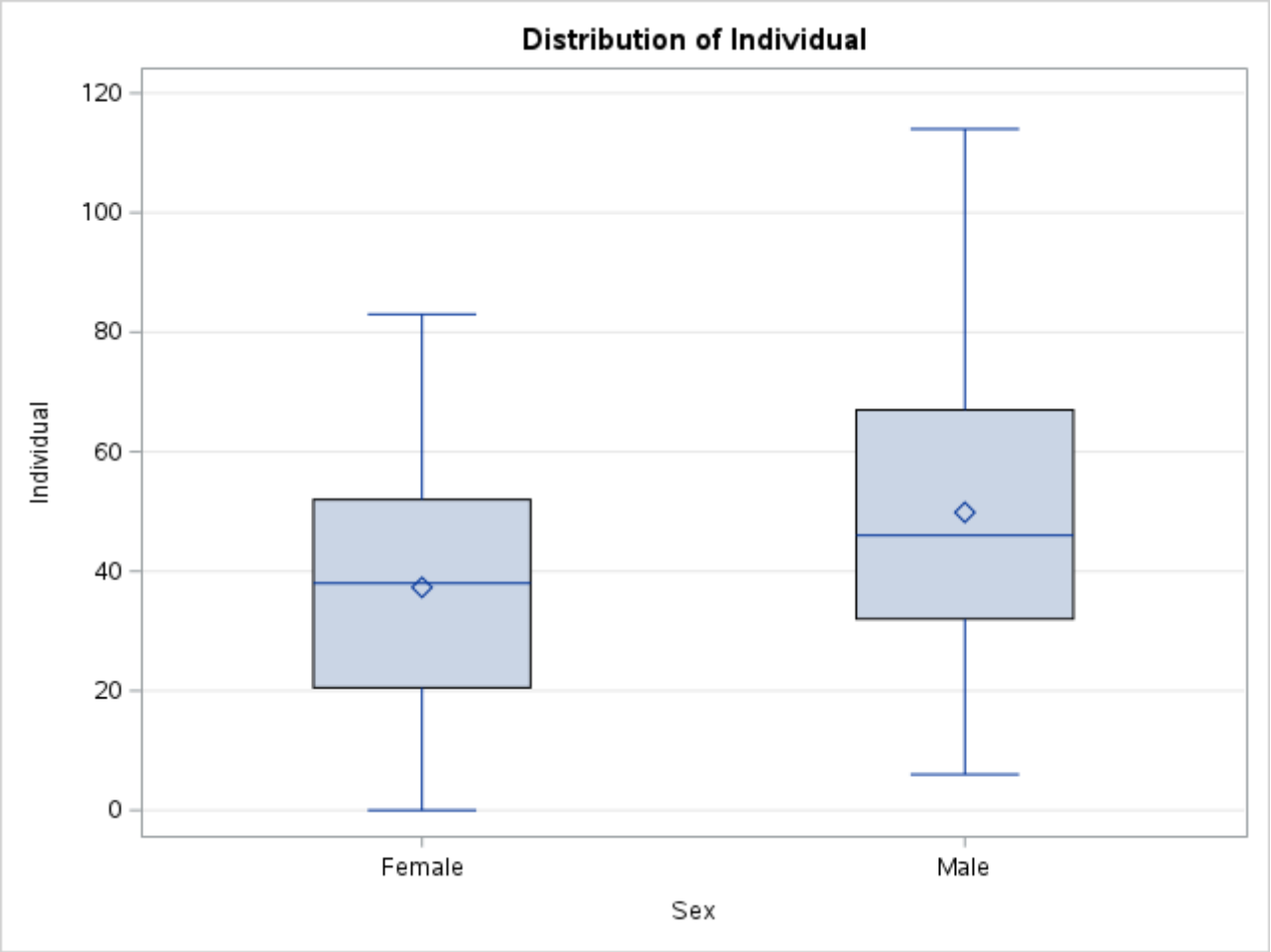
Source	DF	Anova SS	Mean Square	F Value	Pr > F
Test	0	0.000000	.	.	.
Sex	1	4683.470360	4683.470360	8.82	0.0036
Test*Sex	0	0.000000	.	.	.

Fish sex and test effect on entries

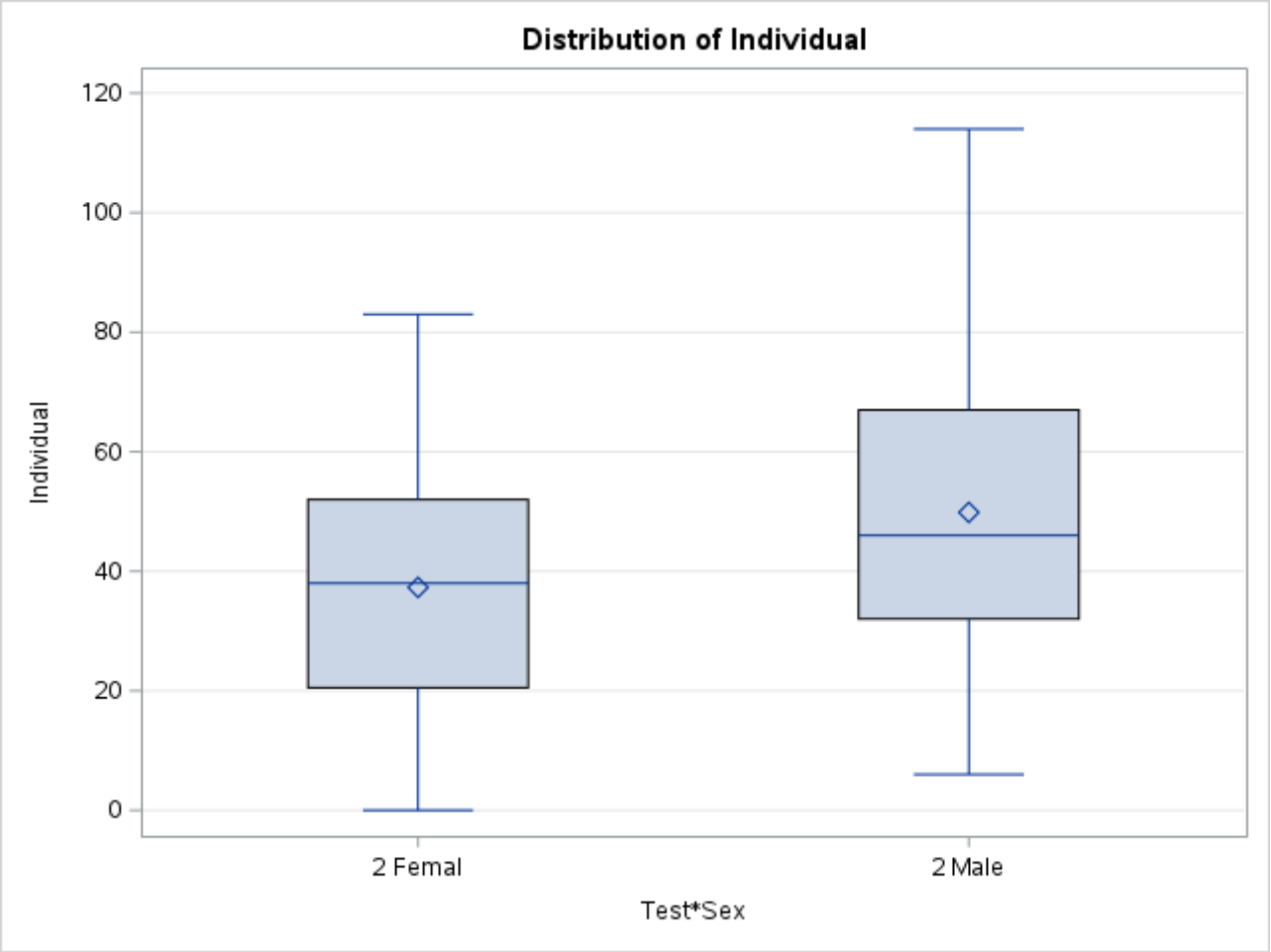
The ANOVA Procedure



Level of Test	N	Individual	
		Mean	Std Dev
2	119	43.5210084	23.7996043



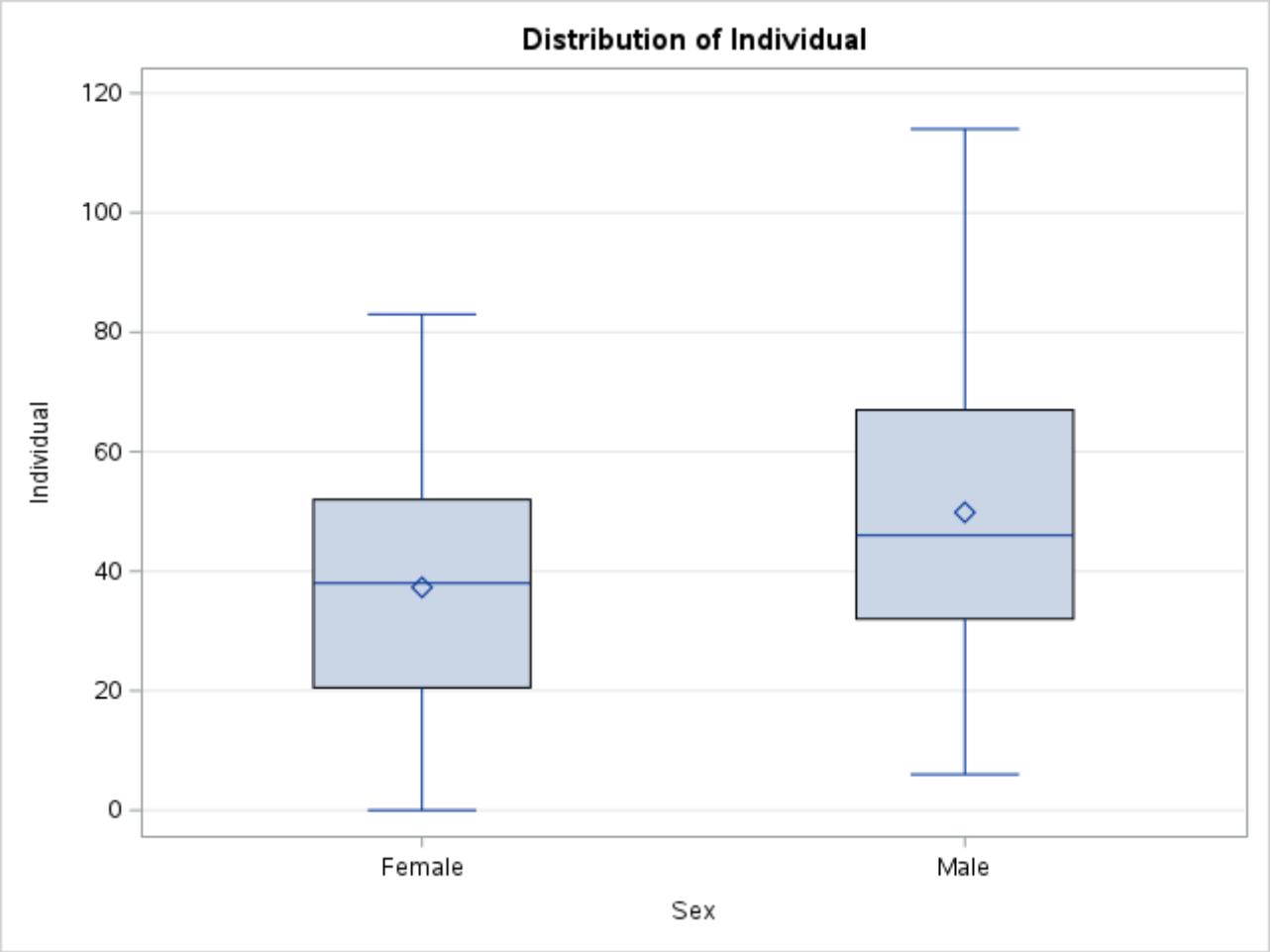
Level of Sex	N	Individual	
		Mean	Std Dev
Female	60	37.3000000	20.9651042
Male	59	49.8474576	24.9902143



Level of Test	Level of Sex	N	Individual	
			Mean	Std Dev
2	Female	60	37.3000000	20.9651042
2	Male	59	49.8474576	24.9902143

Fish sex and test effect on entries

The ANOVA Procedure



Fish sex and test effect on entries

The ANOVA Procedure

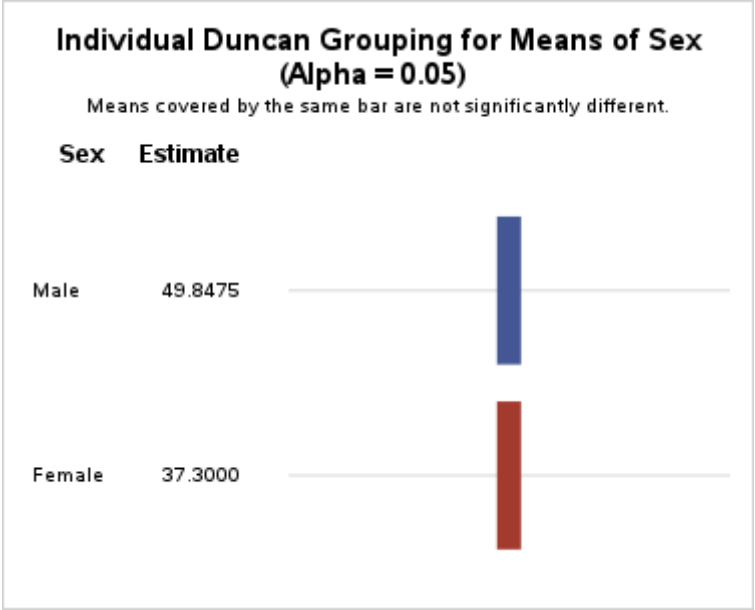
Duncan's Multiple Range Test for Individual

Note: This test controls the Type I comparisonwise error rate, not the experimentwise error rate.

Alpha	0.05
Error Degrees of Freedom	117
Error Mean Square	531.2327
Harmonic Mean of Cell Sizes	59.4958

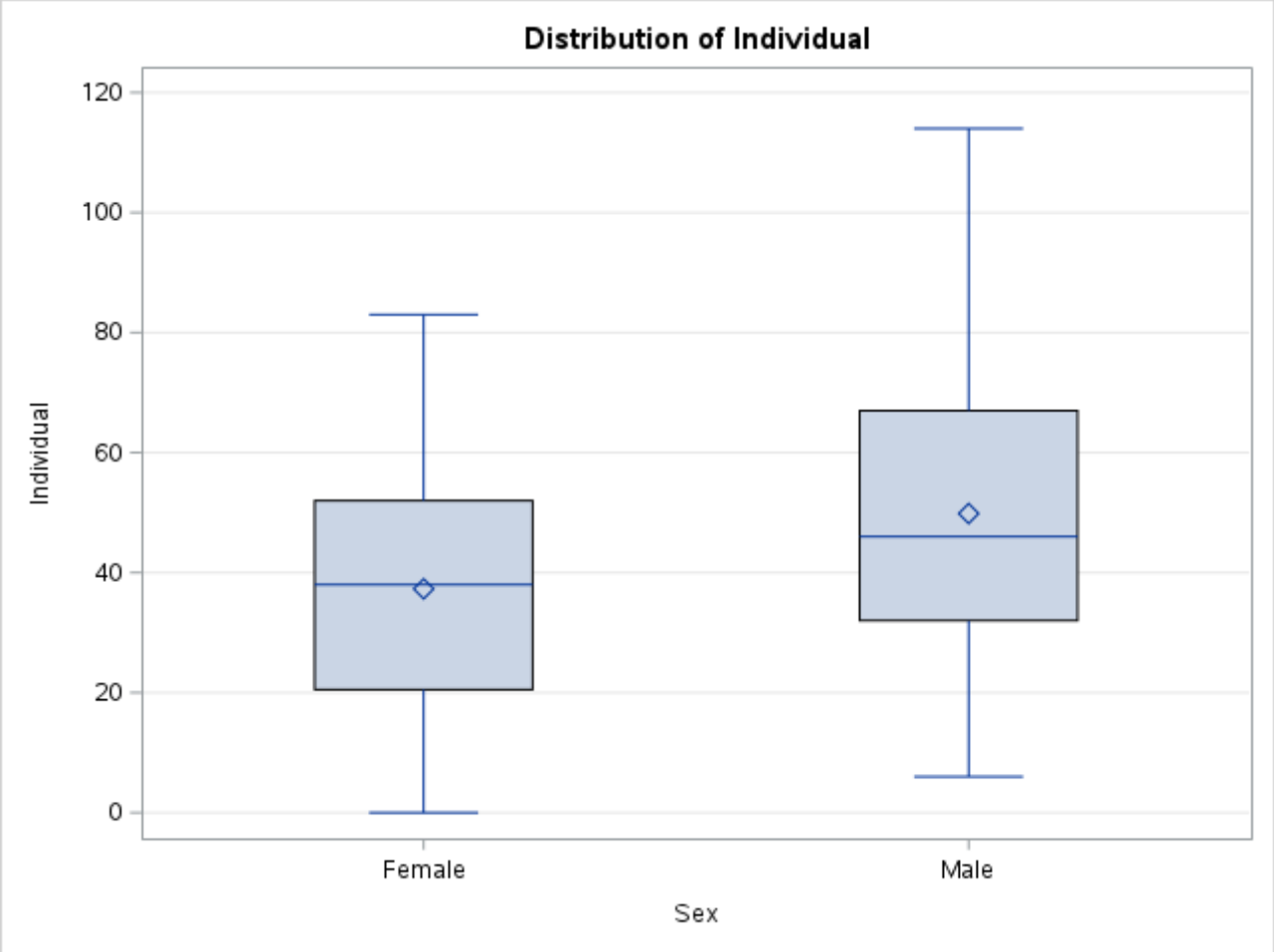
Note: Cell sizes are not equal.

Number of Means	**2**
Critical Range	8.369



Fish sex and test effect on entries

The ANOVA Procedure



Fish sex and test effect on entries

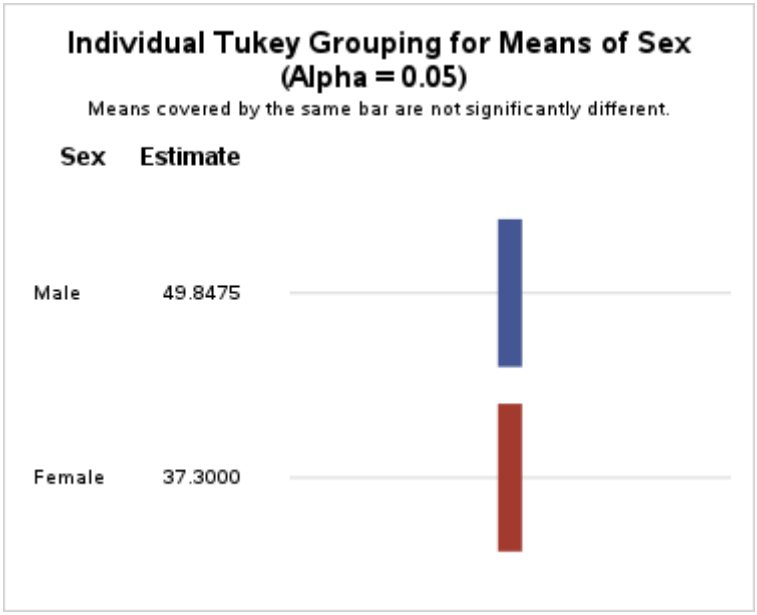
The ANOVA Procedure

Tukey's Studentized Range (HSD) Test for Individual

Note: This test controls the Type I experimentwise error rate, but it generally has a higher Type II error rate than REGWQ.

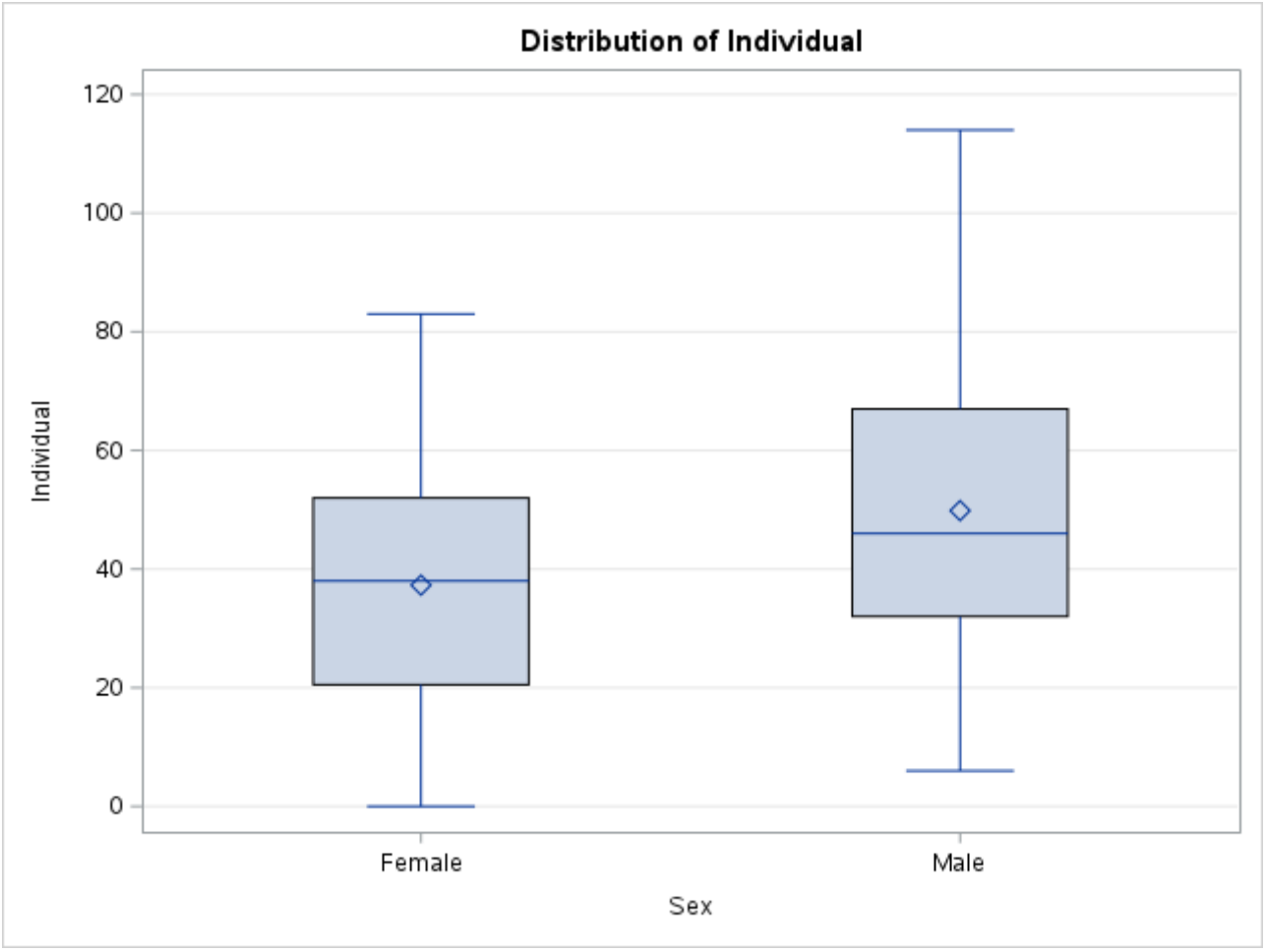
Alpha	0.05
Error Degrees of Freedom	117
Error Mean Square	531.2327
Critical Value of Studentized Range	2.80078
Minimum Significant Difference	8.3691
Harmonic Mean of Cell Sizes	59.4958

Note: Cell sizes are not equal.



Fish sex and test effect on entries

The ANOVA Procedure



Fish sex and test effect on entries

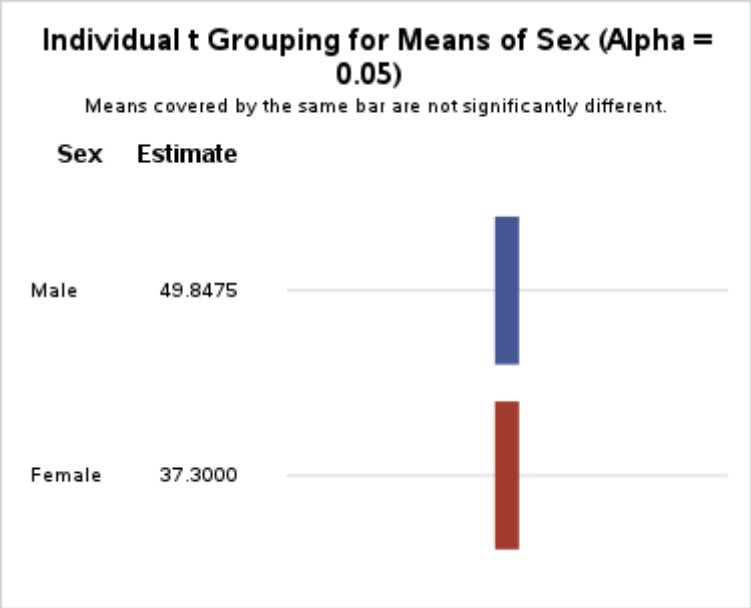
The ANOVA Procedure

t Tests (LSD) for Individual

Note: This test controls the Type I comparisonwise error rate, not the experimentwise error rate.

Alpha	0.05
Error Degrees of Freedom	117
Error Mean Square	531.2327
Critical Value of t	1.98045
Least Significant Difference	8.3691
Harmonic Mean of Cell Sizes	59.4958

Note: Cell sizes are not equal.



Fish sex and test effect on time spent

The ANOVA Procedure

Class Level Information		
Class	Levels	Values
Test	1	2
Sex	2	Female Male

Number of Observations Read	119
Number of Observations Used	119

Fish sex and test effect on time spent

The ANOVA Procedure

Dependent Variable: Individual

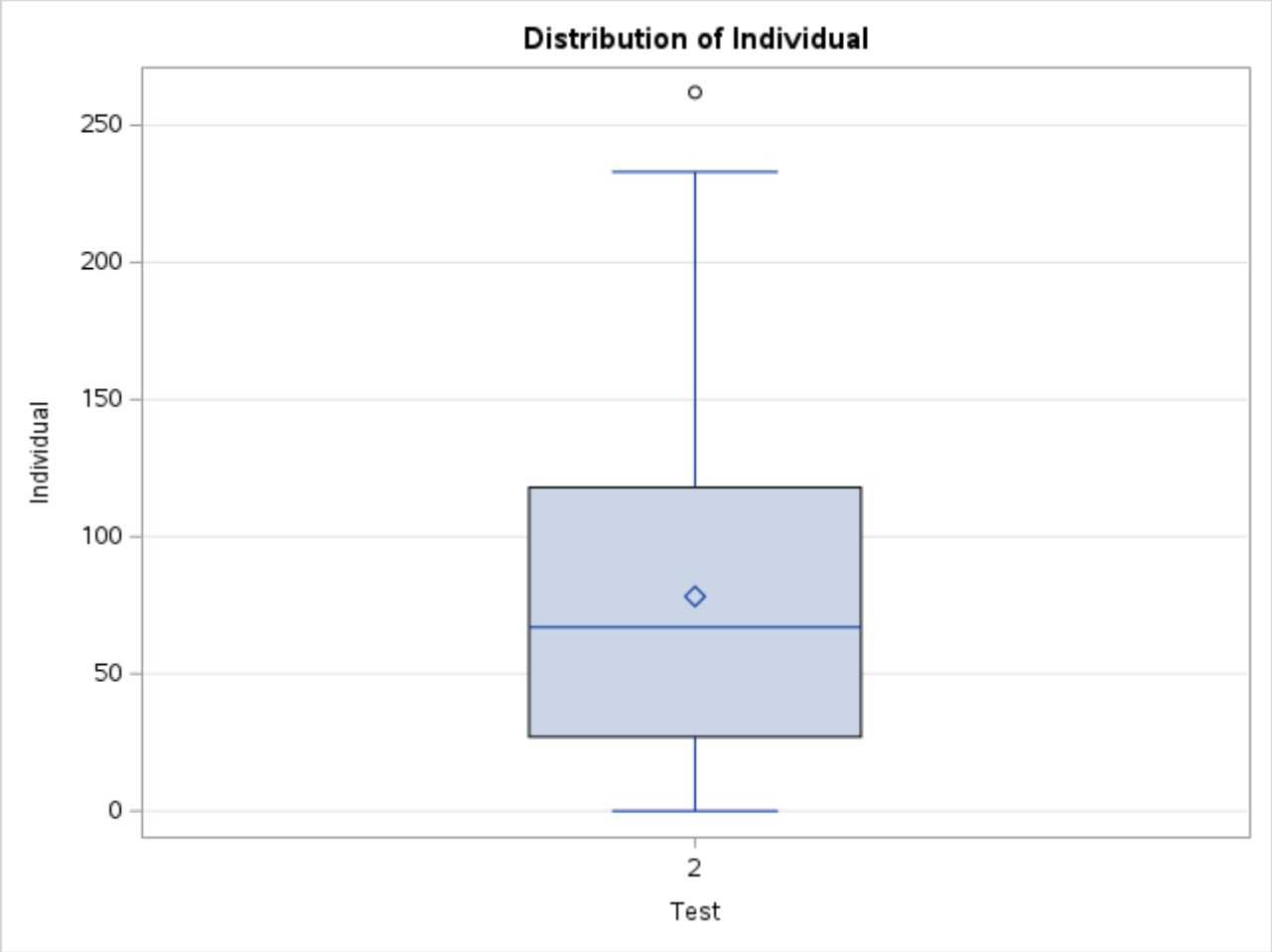
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	214.5541	214.5541	0.06	0.8067
Error	117	417169.7653	3565.5535		
Corrected Total	118	417384.3193			

R-Square	Coeff Var	Root MSE	Individual Mean
0.000514	76.34034	59.71226	78.21849

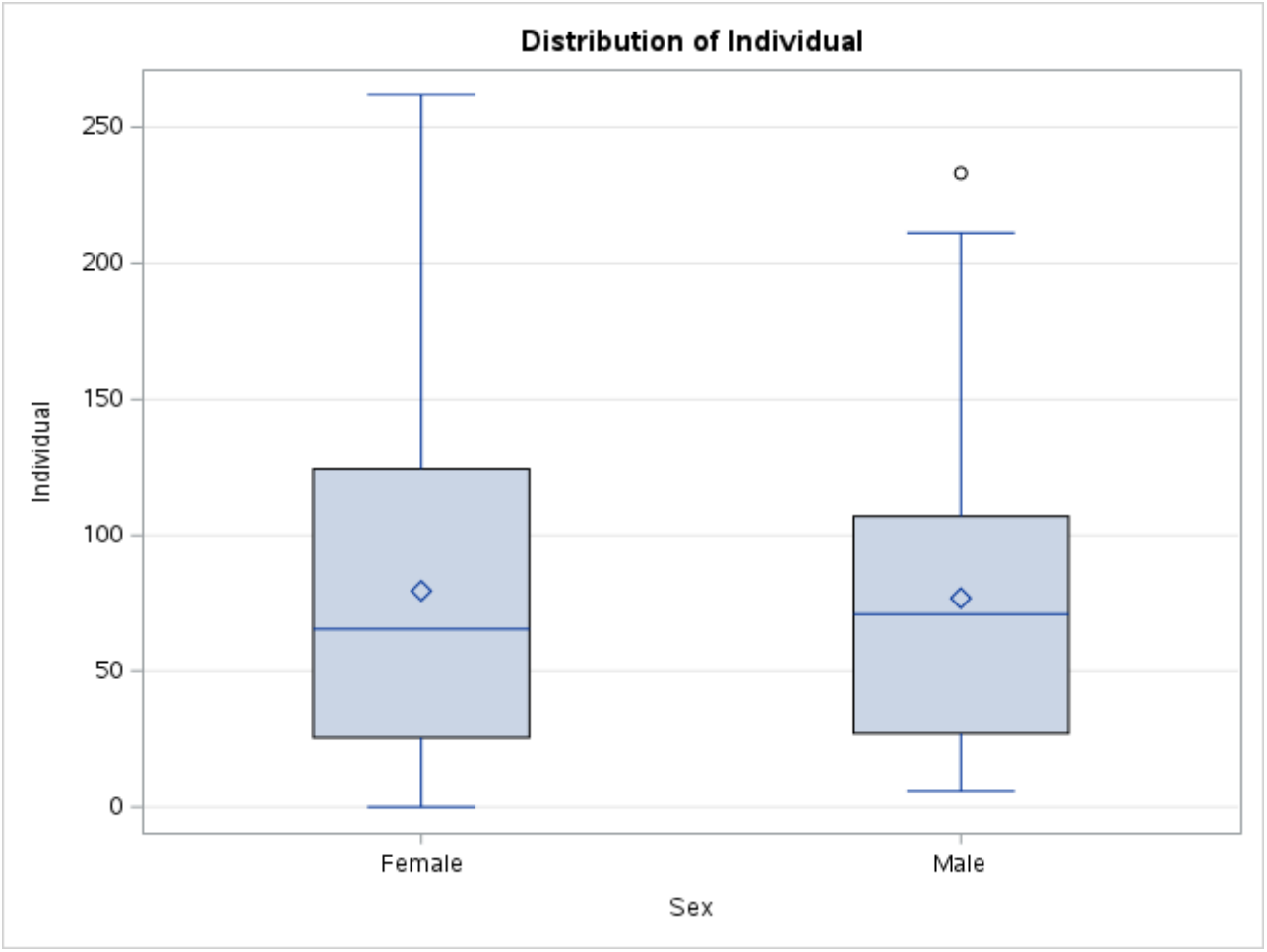
Source	DF	Anova SS	Mean Square	F Value	Pr > F
Test	0	0.0000000	.	.	.
Sex	1	214.5540735	214.5540735	0.06	0.8067
Test*Sex	0	0.0000000	.	.	.

Fish sex and test effect on time spent

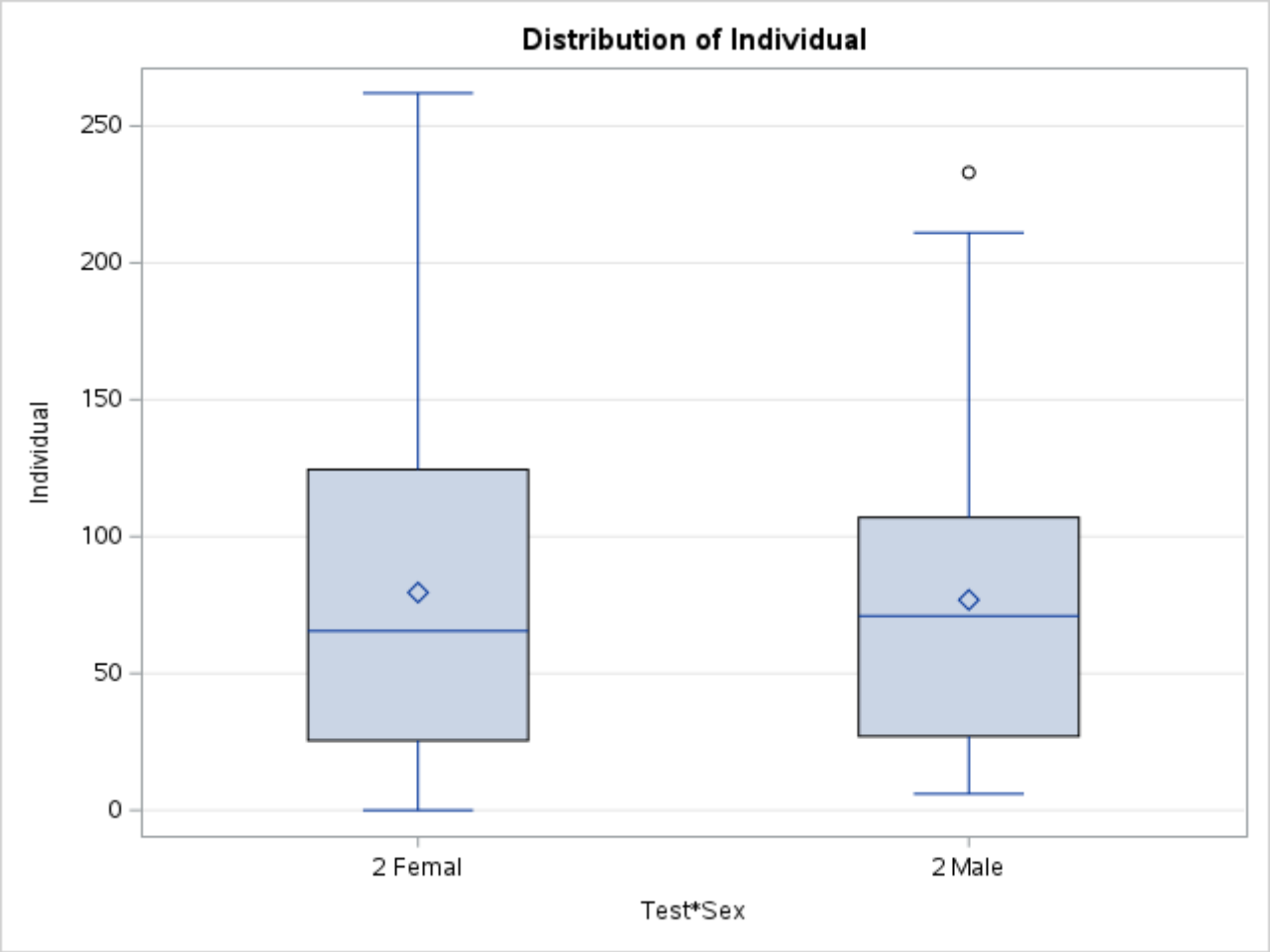
The ANOVA Procedure



Level of Test	N	Individual	
		Mean	Std Dev
2	119	78.2184874	59.4739880



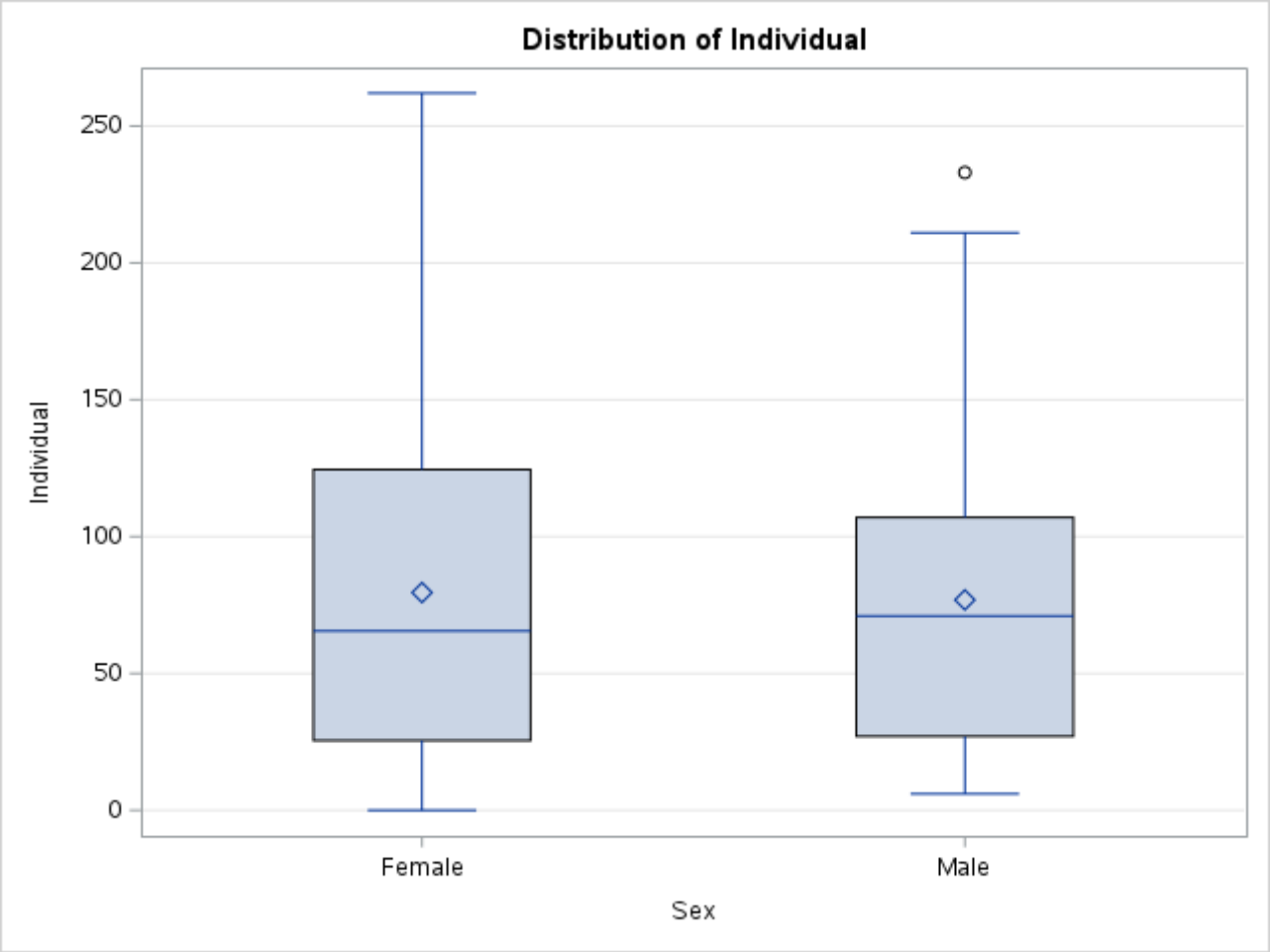
Level of Sex	N	Individual	
		Mean	Std Dev
Female	60	79.5500000	64.5260229
Male	59	76.8644068	54.3800349



Level of Test	Level of Sex	N	Individual	
			Mean	Std Dev
2	Female	60	79.5500000	64.5260229
2	Male	59	76.8644068	54.3800349

Fish sex and test effect on time spent

The ANOVA Procedure



Fish sex and test effect on time spent

The ANOVA Procedure

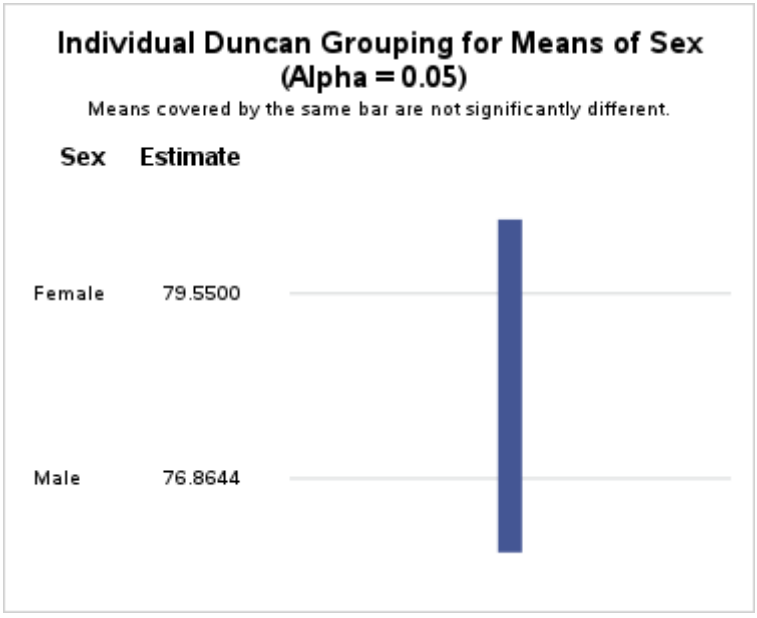
Duncan's Multiple Range Test for Individual

Note: This test controls the Type I comparisonwise error rate, not the experimentwise error rate.

Alpha	0.05
Error Degrees of Freedom	117
Error Mean Square	3565.554
Harmonic Mean of Cell Sizes	59.4958

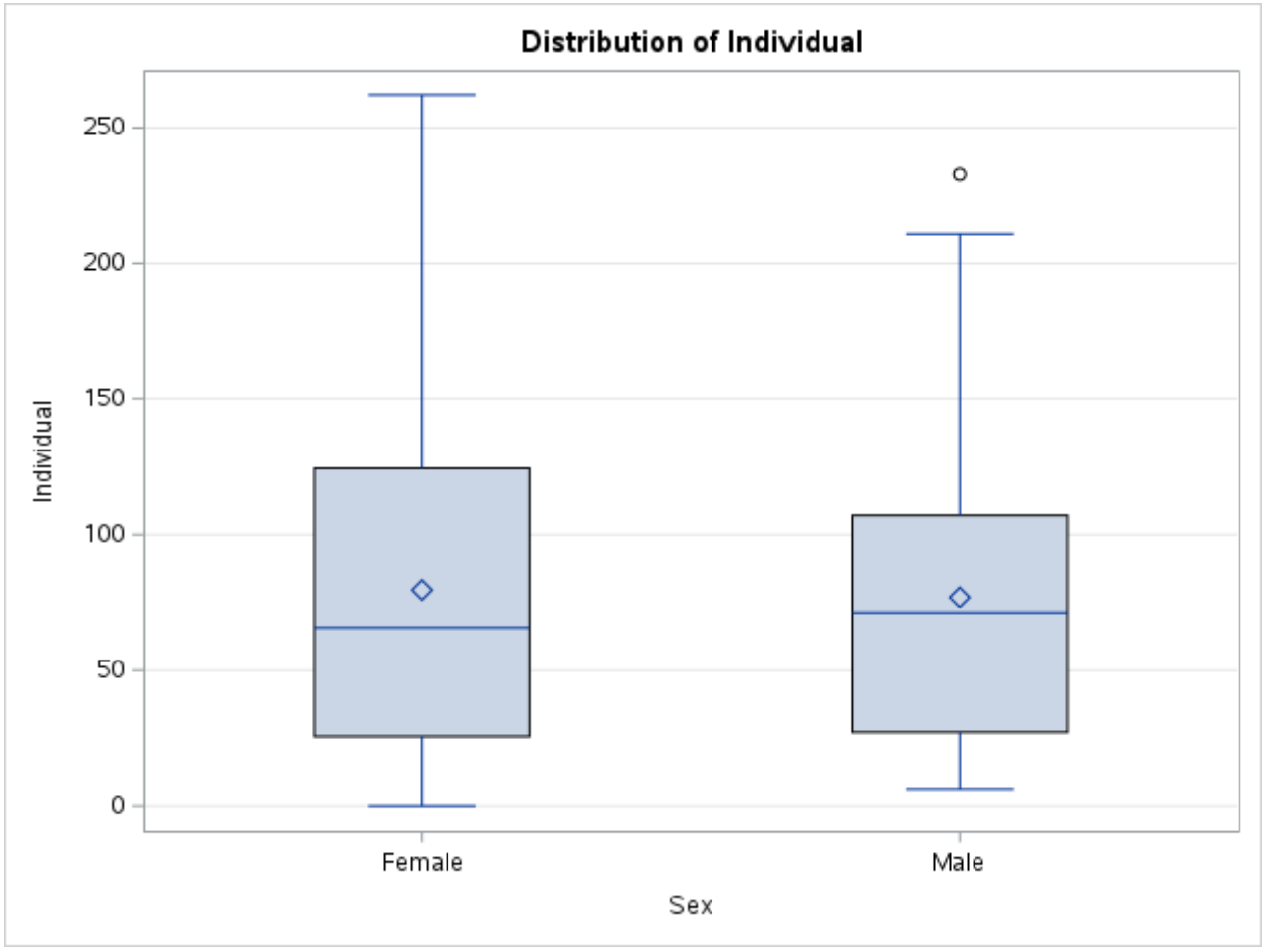
Note: Cell sizes are not equal.

Number of Means	**2**
Critical Range	21.68



Fish sex and test effect on time spent

The ANOVA Procedure



Fish sex and test effect on time spent

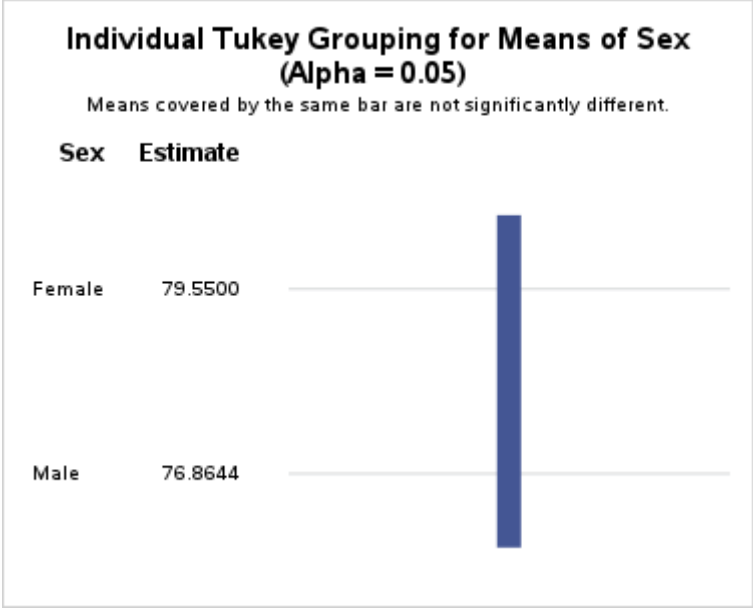
The ANOVA Procedure

Tukey's Studentized Range (HSD) Test for Individual

Note: This test controls the Type I experimentwise error rate, but it generally has a higher Type II error rate than REGWQ.

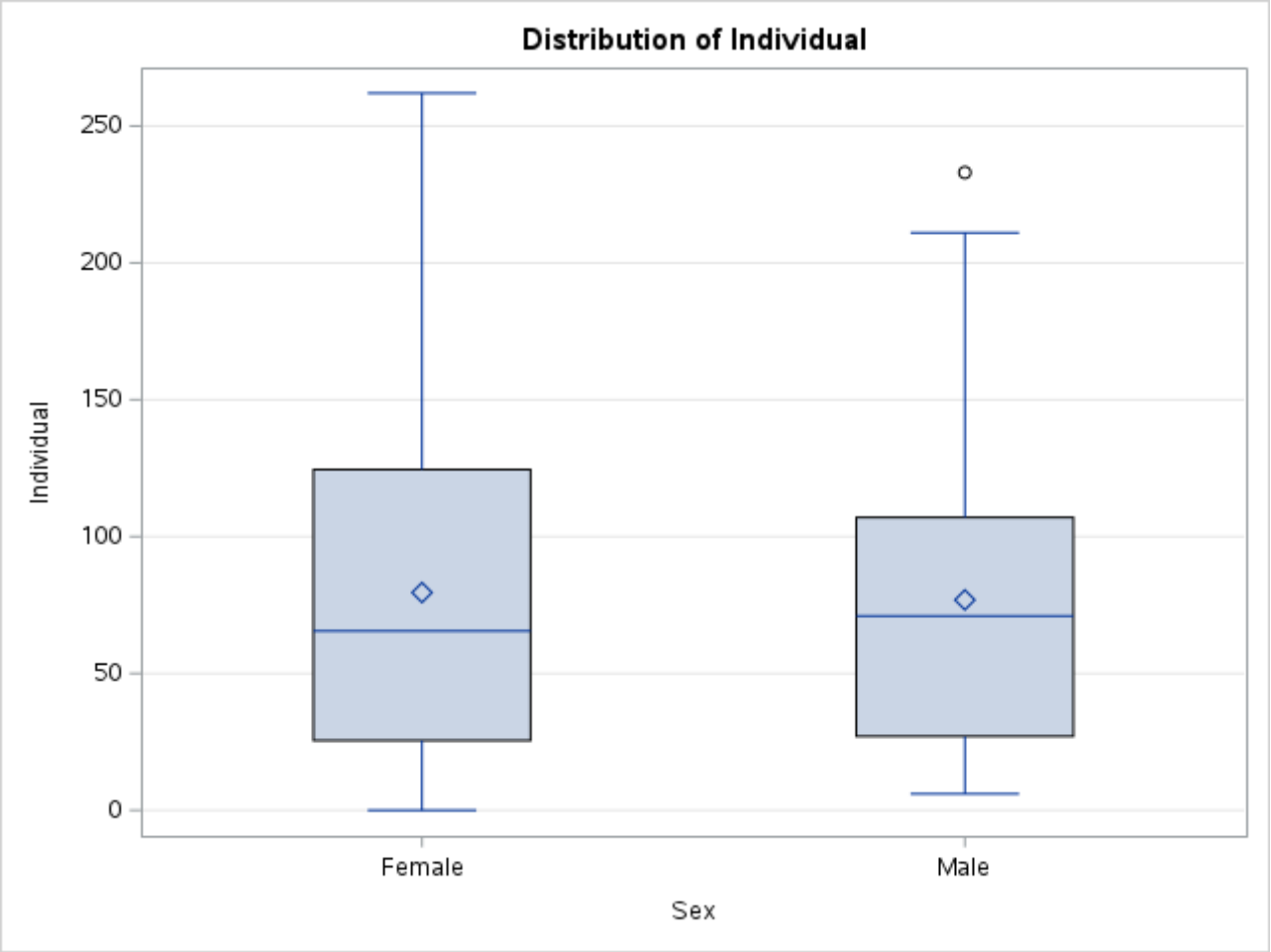
Alpha	0.05
Error Degrees of Freedom	117
Error Mean Square	3565.554
Critical Value of Studentized Range	2.80078
Minimum Significant Difference	21.682
Harmonic Mean of Cell Sizes	59.4958

Note: Cell sizes are not equal.



Fish sex and test effect on time spent

The ANOVA Procedure



Fish sex and test effect on time spent

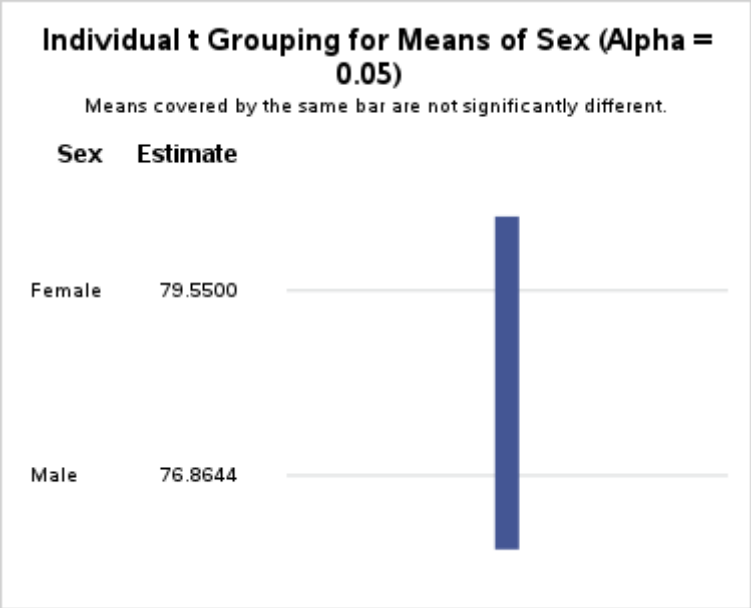
The ANOVA Procedure

t Tests (LSD) for Individual

Note: This test controls the Type I comparisonwise error rate, not the experimentwise error rate.

Alpha	0.05
Error Degrees of Freedom	117
Error Mean Square	3565.554
Critical Value of t	1.98045
Least Significant Difference	21.682
Harmonic Mean of Cell Sizes	59.4958

Note: Cell sizes are not equal.



Fish sex and test effect on line crossed

The ANOVA Procedure

Class Level Information		
Class	Levels	Values
Test	2	1 2
Sex	1	Female

Number of Observations Read	120
Number of Observations Used	120

Fish sex and test effect on line crossed

The ANOVA Procedure

Dependent Variable: Individual

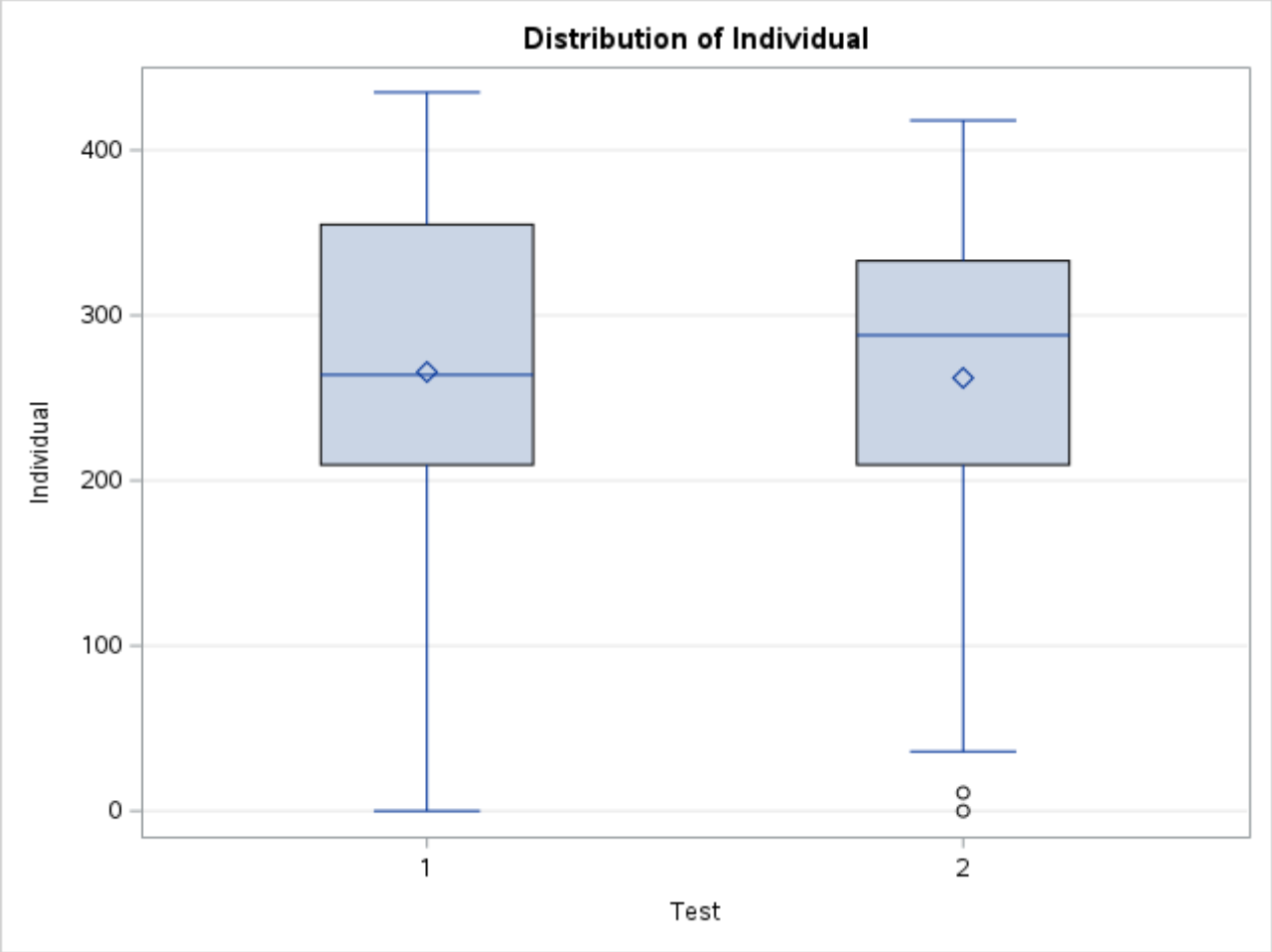
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	385.208	385.208	0.04	0.8497
Error	118	1260133.117	10679.094		
Corrected Total	119	1260518.325			

R-Square	Coeff Var	Root MSE	Individual Mean
0.000306	39.15495	103.3397	263.9250

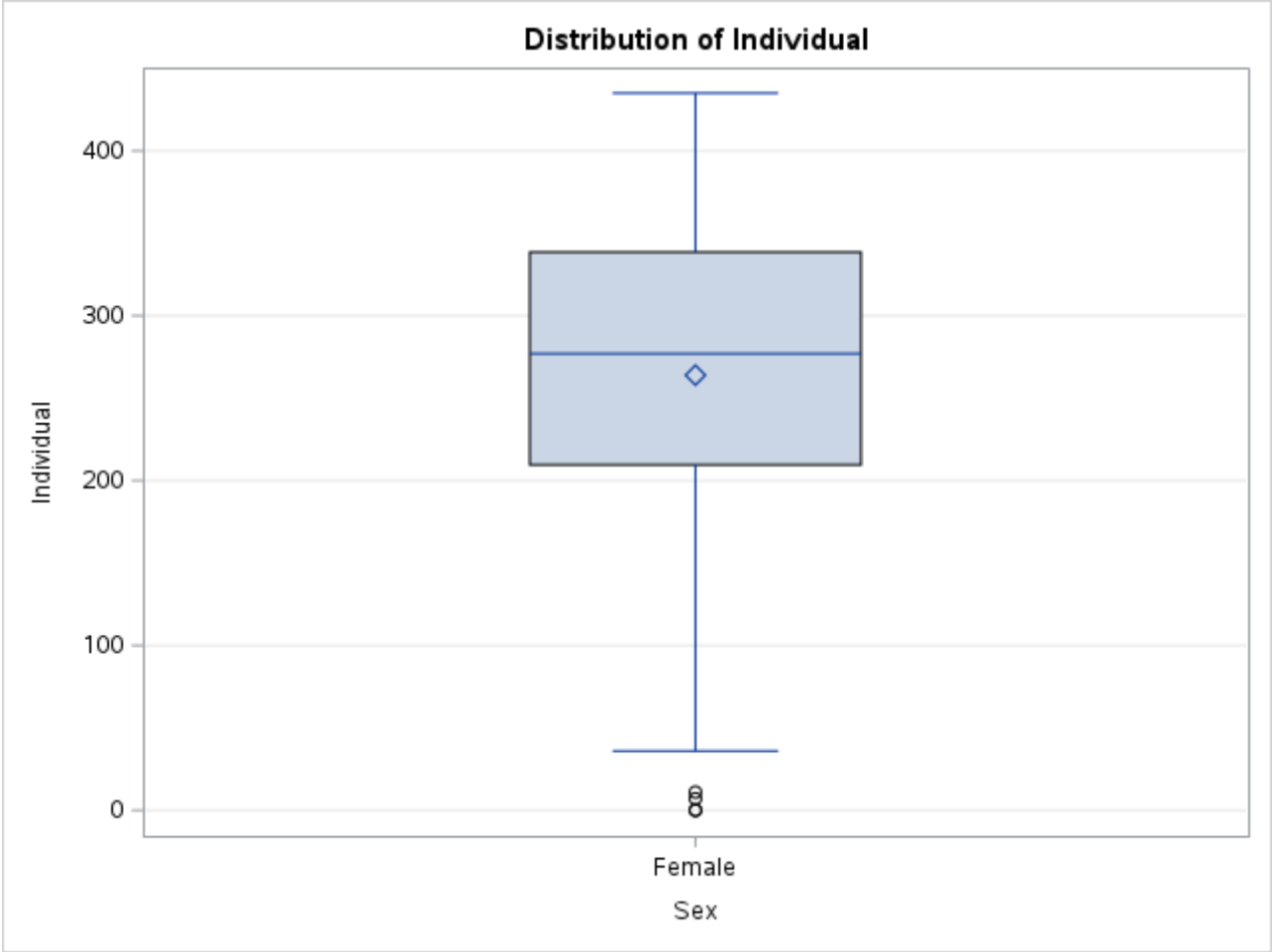
Source	DF	Anova SS	Mean Square	F Value	Pr > F
Test	1	385.2083333	385.2083333	0.04	0.8497
Sex	0	0.0000000	.	.	.
Test*Sex	0	0.0000000	.	.	.

Fish sex and test effect on line crossed

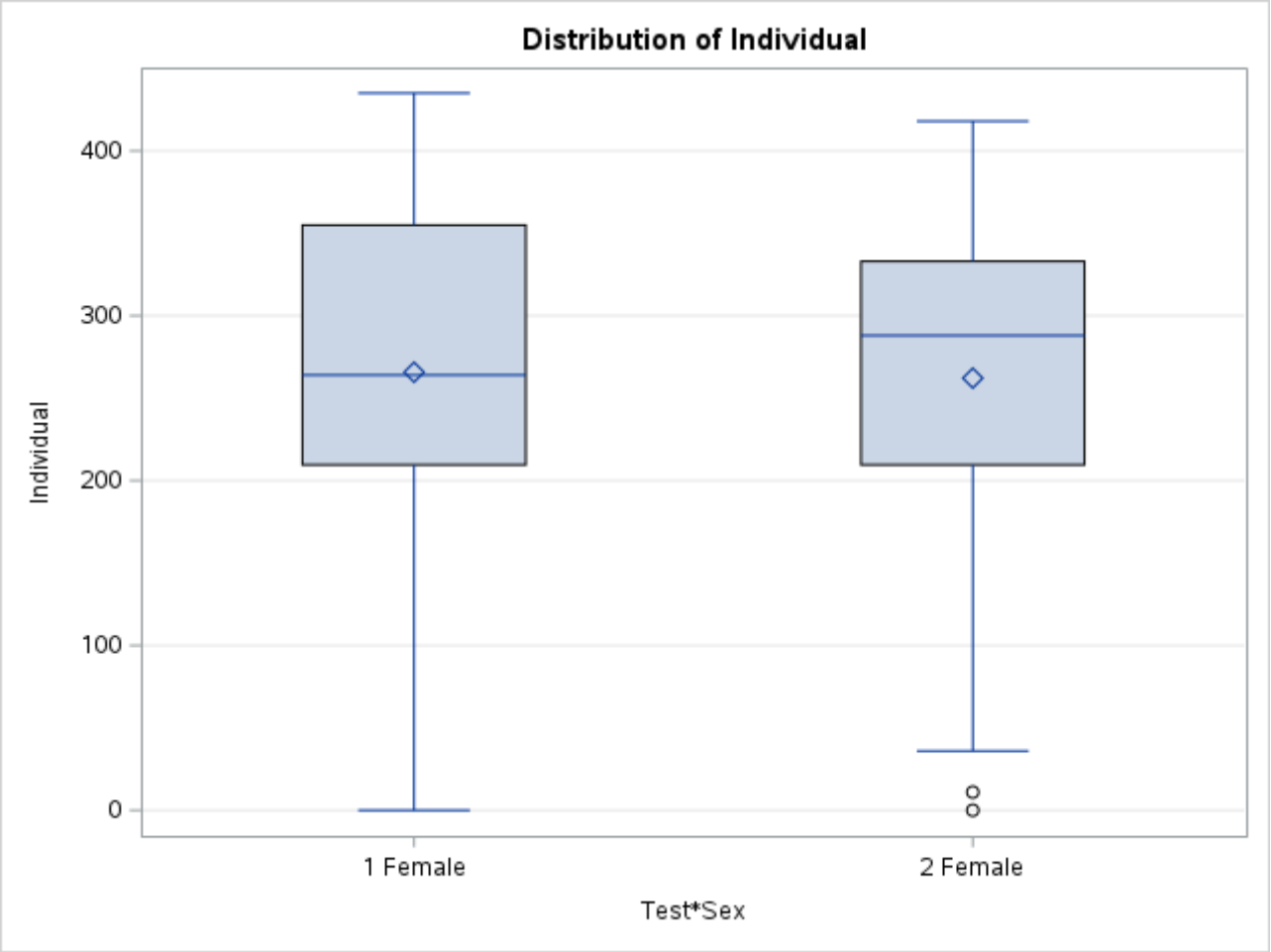
The ANOVA Procedure



Level of Test	N	Individual	
		Mean	Std Dev
1	60	265.716667	106.234804
2	60	262.133333	100.361122



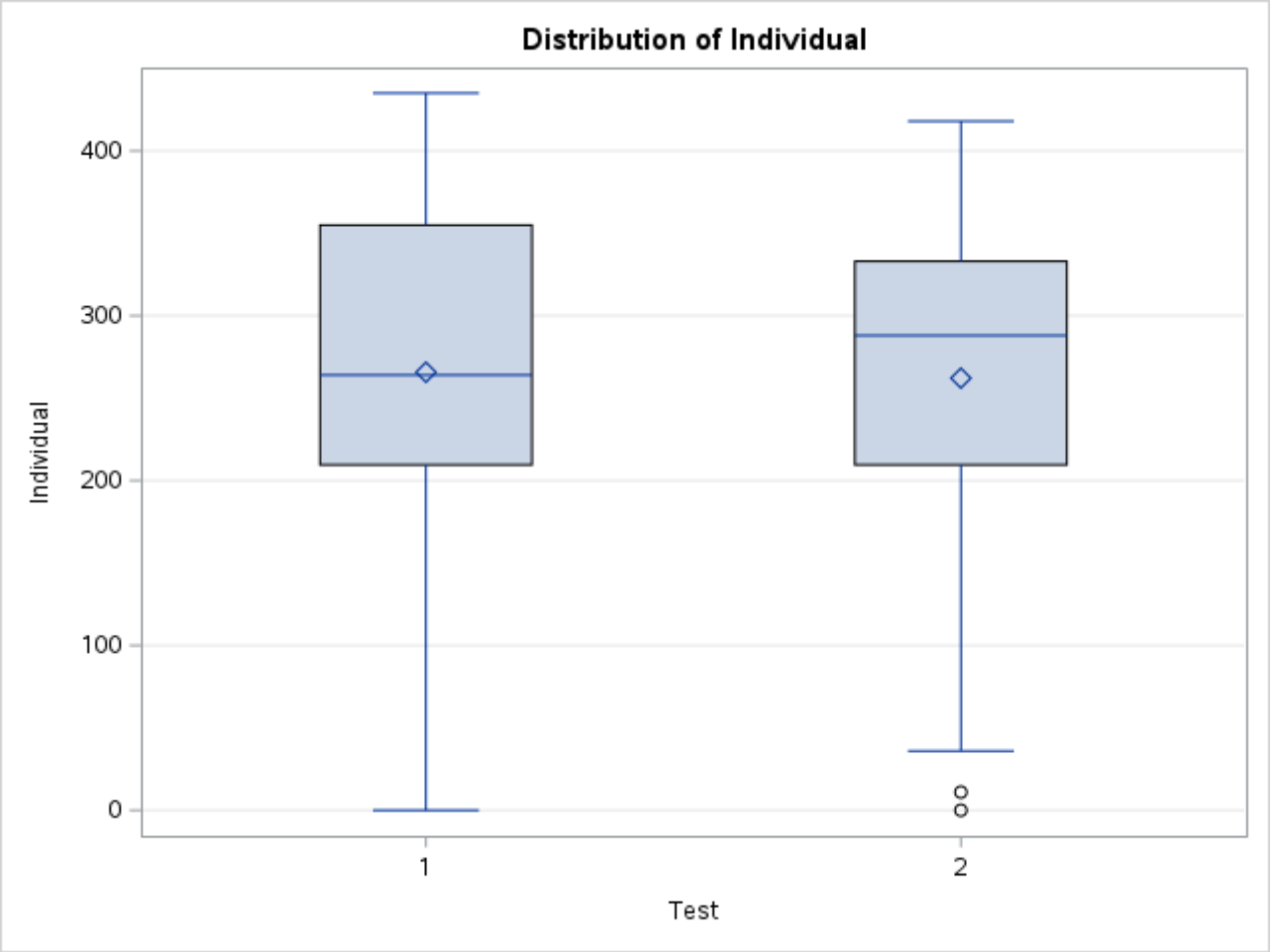
Level of Sex	N	Individual	
		Mean	Std Dev
Female	120	263.925000	102.920314



Level of Test	Level of Sex	N	Individual	
			Mean	Std Dev
1	Female	60	265.716667	106.234804
2	Female	60	262.133333	100.361122

Fish sex and test effect on line crossed

The ANOVA Procedure



Fish sex and test effect on line crossed

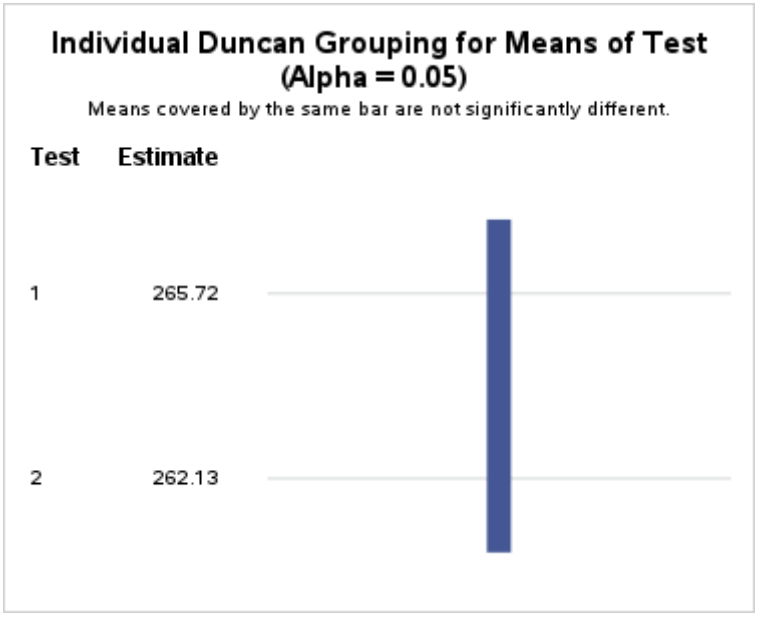
The ANOVA Procedure

Duncan's Multiple Range Test for Individual

Note: This test controls the Type I comparisonwise error rate, not the experimentwise error rate.

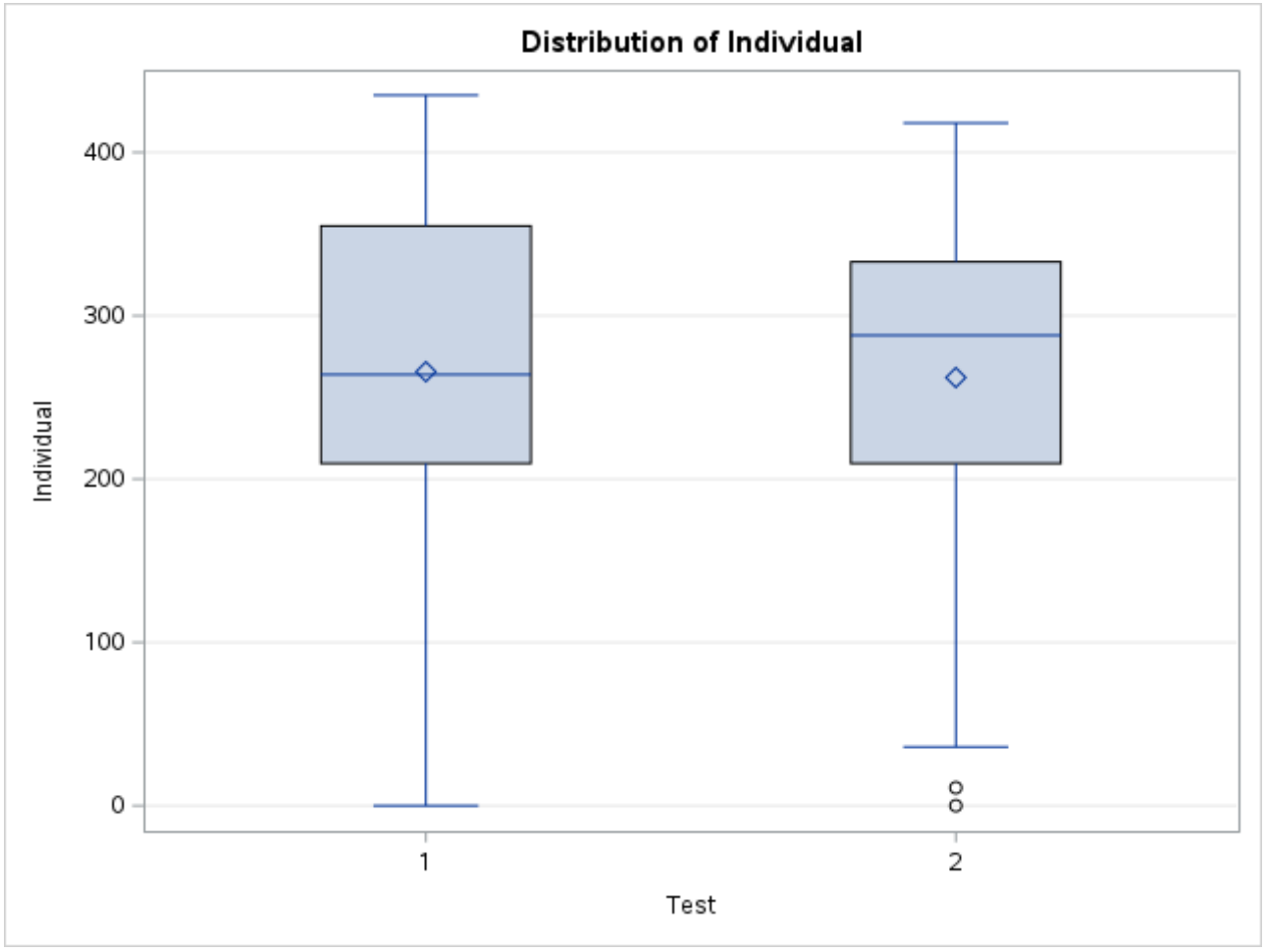
Alpha	0.05
Error Degrees of Freedom	118
Error Mean Square	10679.09

Number of Means	**2**
Critical Range	37.36



Fish sex and test effect on line crossed

The ANOVA Procedure



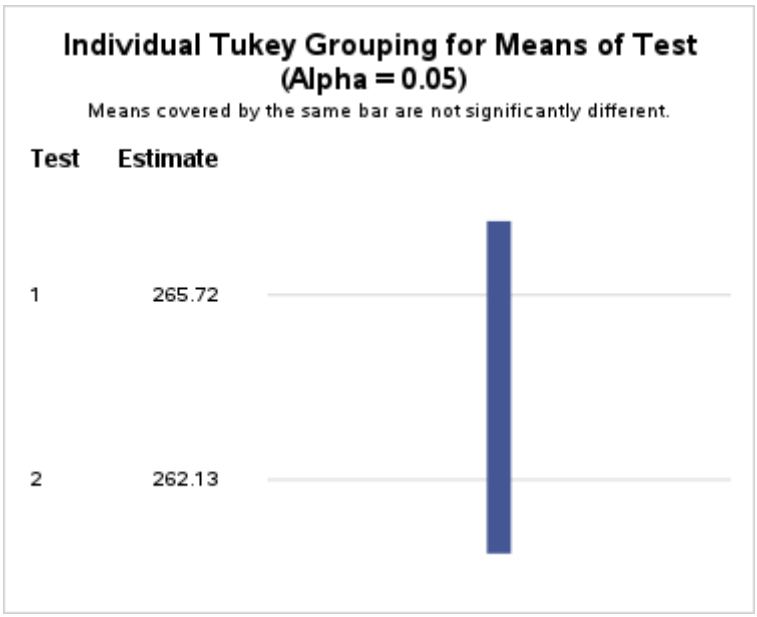
Fish sex and test effect on line crossed

The ANOVA Procedure

Tukey's Studentized Range (HSD) Test for Individual

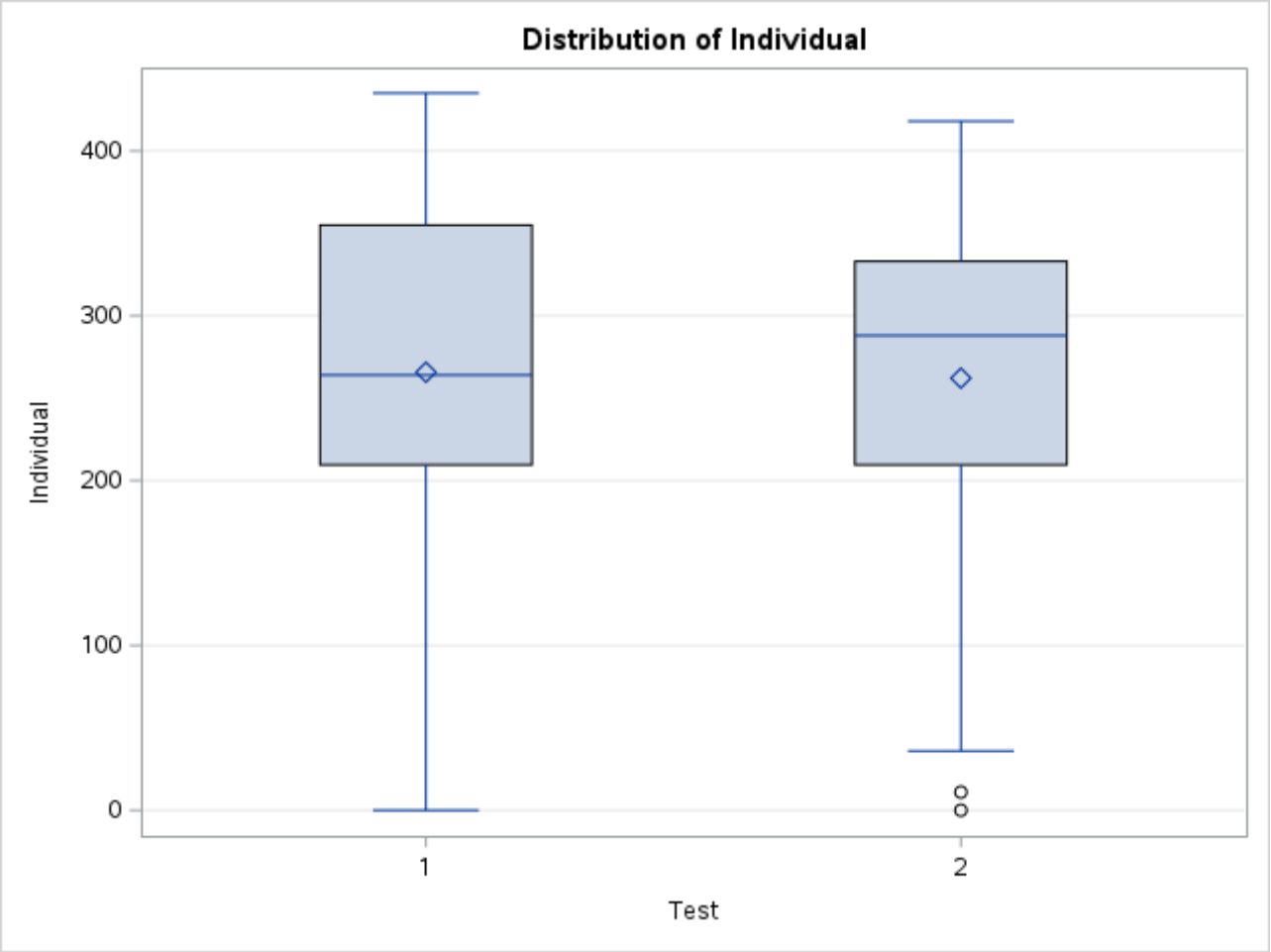
Note: This test controls the Type I experimentwise error rate, but it generally has a higher Type II error rate than REGWQ.

Alpha	0.05
Error Degrees of Freedom	118
Error Mean Square	10679.09
Critical Value of Studentized Range	2.80053
Minimum Significant Difference	37.362



Fish sex and test effect on line crossed

The ANOVA Procedure



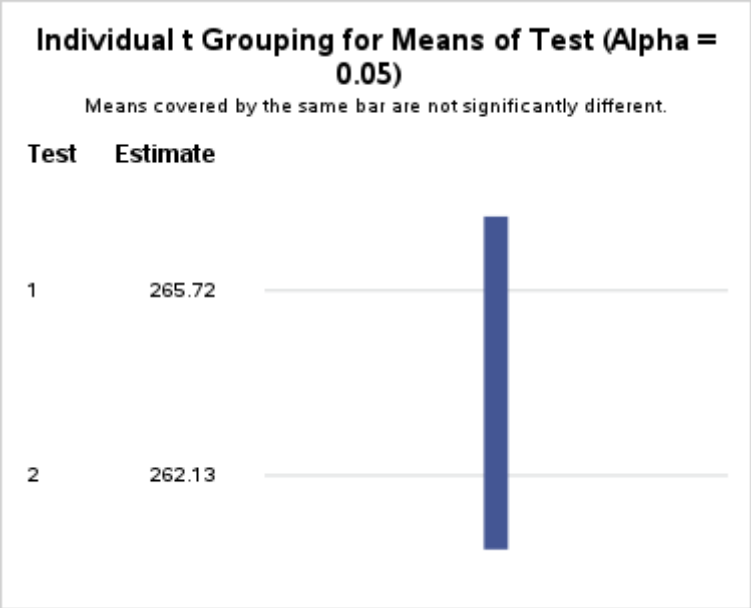
Fish sex and test effect on line crossed

The ANOVA Procedure

t Tests (LSD) for Individual

Note: This test controls the Type I comparisonwise error rate, not the experimentwise error rate.

Alpha	0.05
Error Degrees of Freedom	118
Error Mean Square	10679.09
Critical Value of t	1.98027
Least Significant Difference	37.362



Fish sex and test effect on entries

The ANOVA Procedure

Class Level Information		
Class	Levels	Values
Test	2	1 2
Sex	1	Female

Number of Observations Read	120
Number of Observations Used	120

Fish sex and test effect on entries

The ANOVA Procedure

Dependent Variable: Individual

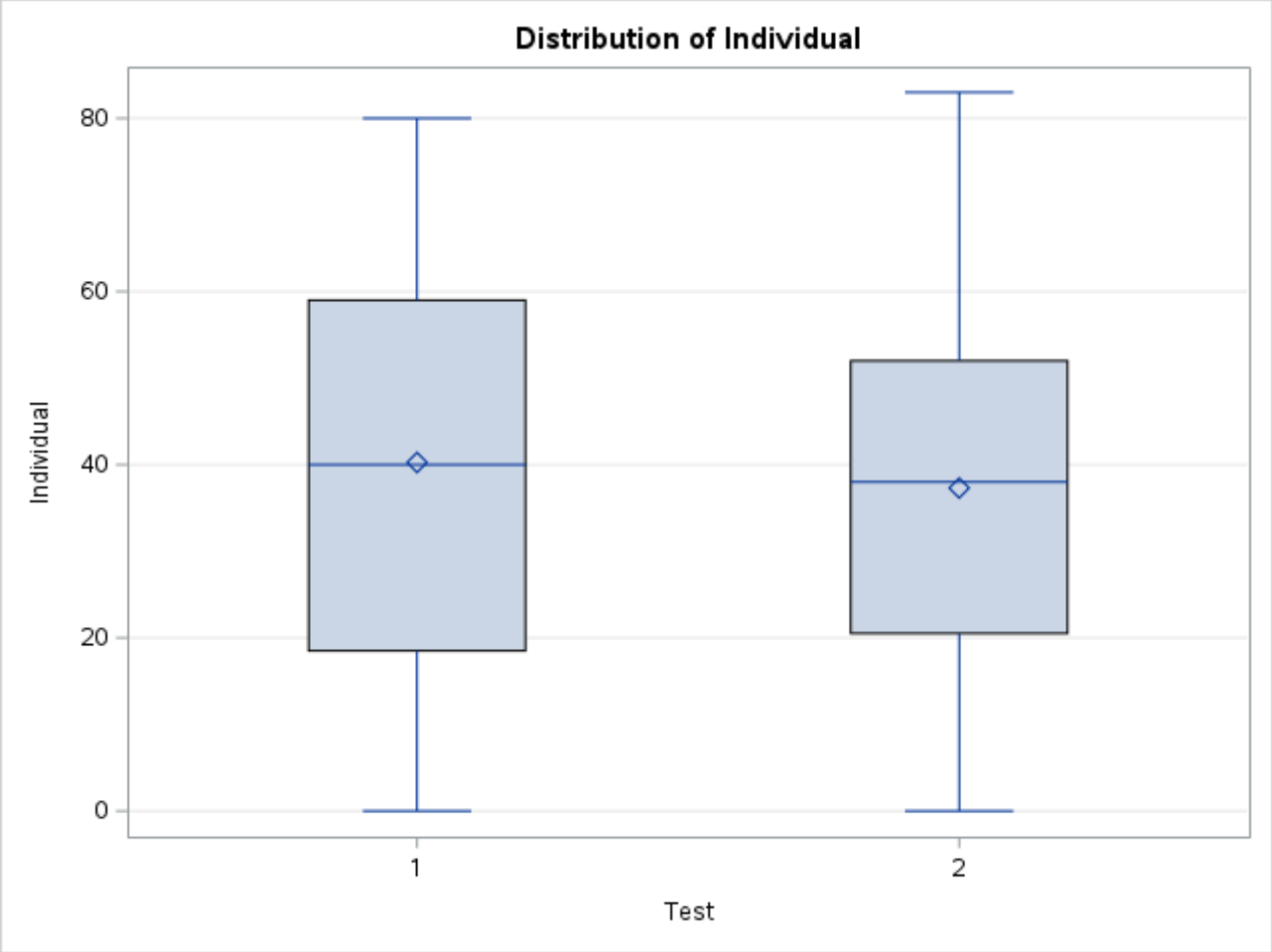
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	261.07500	261.07500	0.54	0.4625
Error	118	56683.85000	480.37161		
Corrected Total	119	56944.92500			

R-Square	Coeff Var	Root MSE	Individual Mean
0.004585	56.52452	21.91738	38.77500

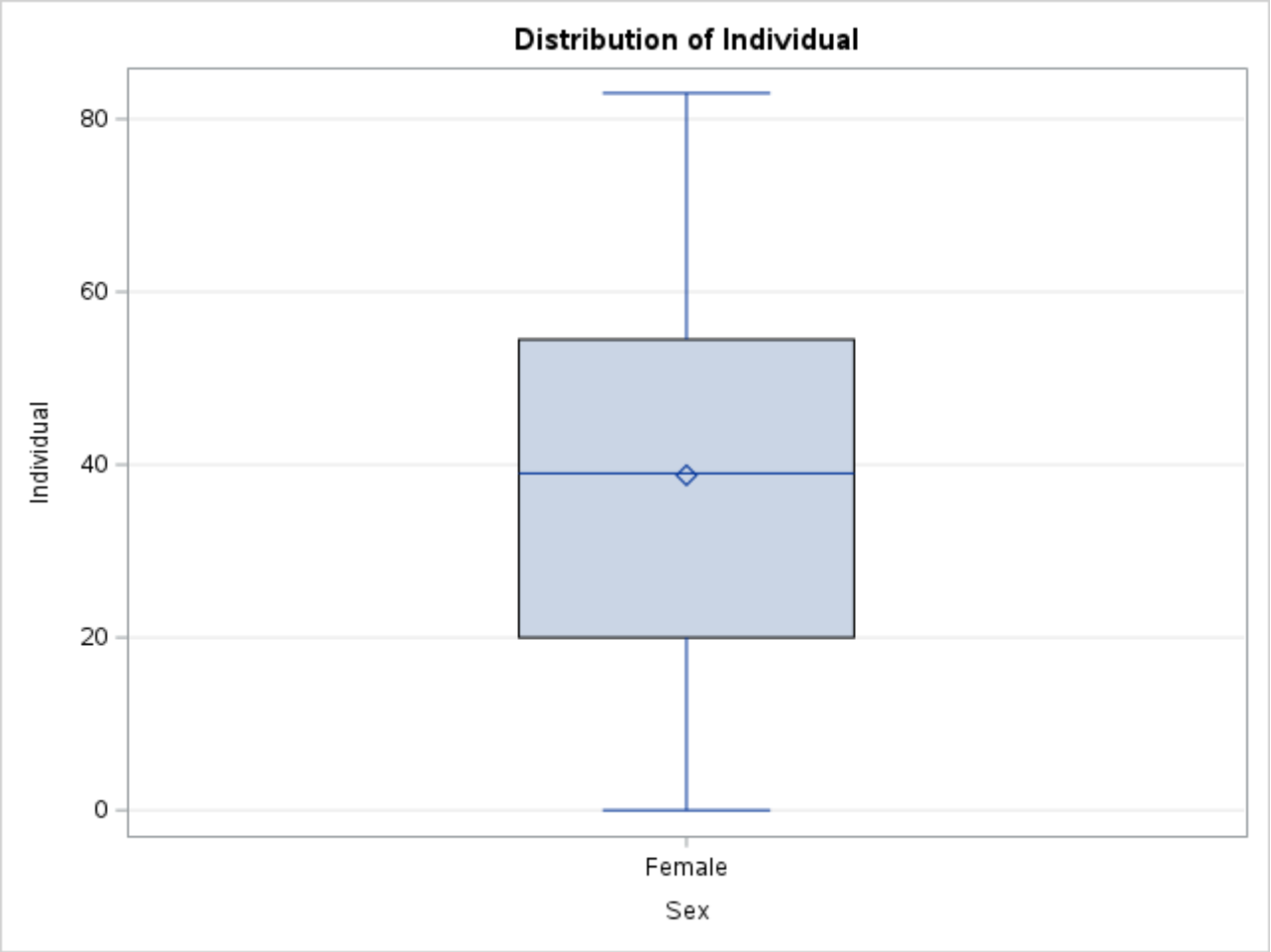
Source	DF	Anova SS	Mean Square	F Value	Pr > F
Test	1	261.0750000	261.0750000	0.54	0.4625
Sex	0	0.0000000	.	.	.
Test*Sex	0	0.0000000	.	.	.

Fish sex and test effect on entries

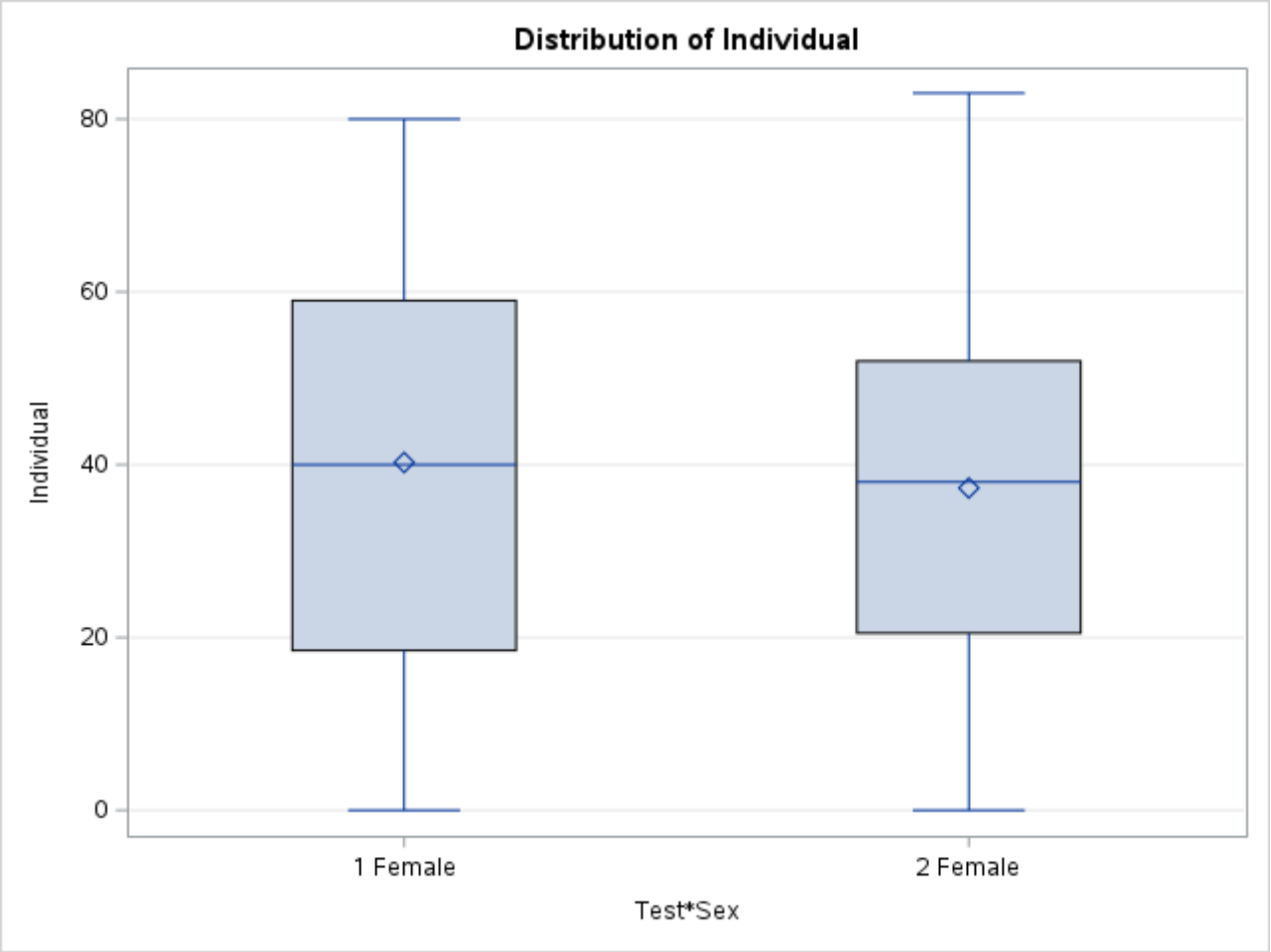
The ANOVA Procedure



Level of Test	N	Individual	
		Mean	Std Dev
1	60	40.2500000	22.8299721
2	60	37.3000000	20.9651042



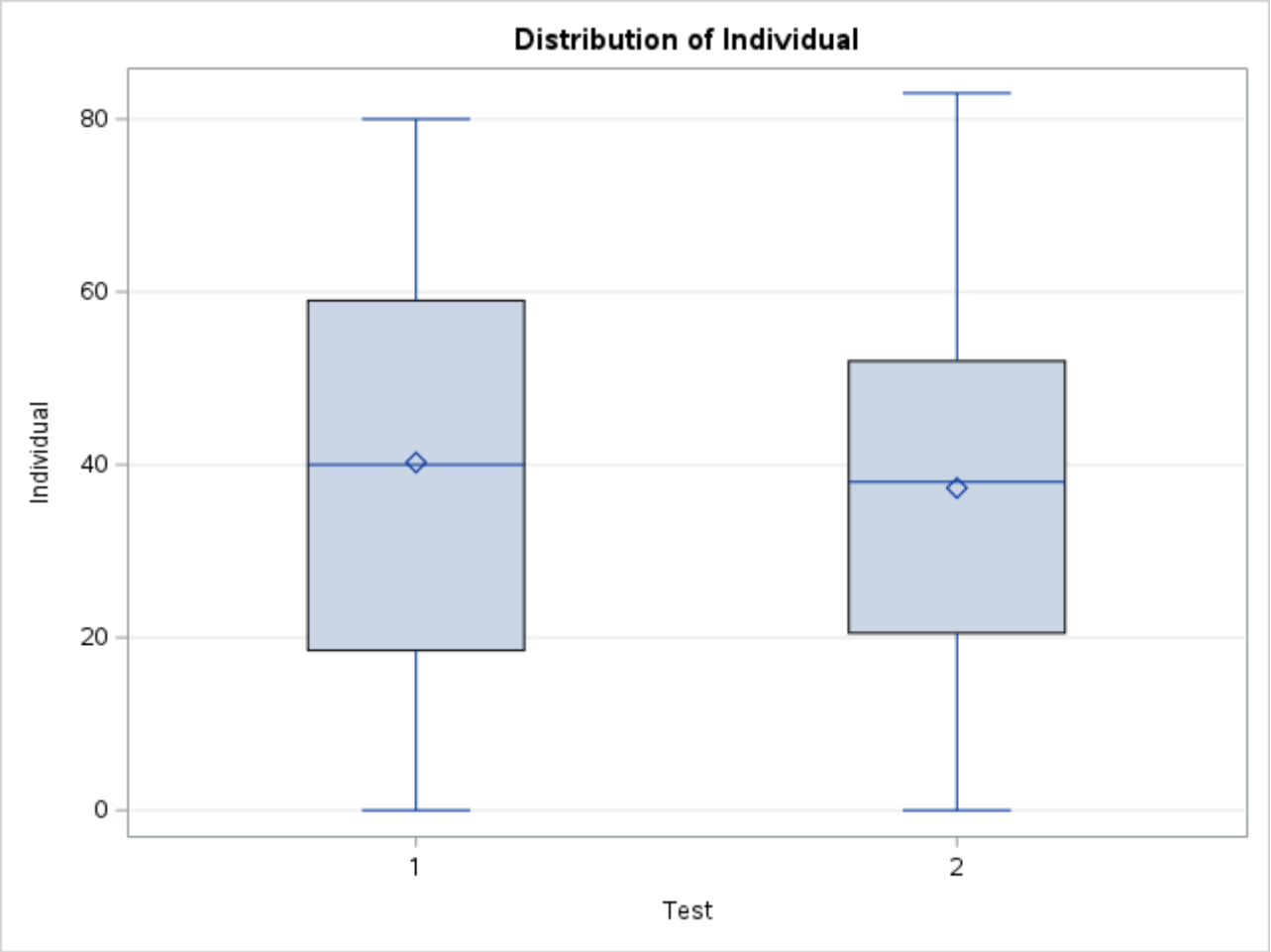
Level of Sex	N	Individual	
		Mean	Std Dev
Female	120	38.7750000	21.8753007



Level of Test	Level of Sex	N	Individual	
			Mean	Std Dev
1	Female	60	40.2500000	22.8299721
2	Female	60	37.3000000	20.9651042

Fish sex and test effect on entries

The ANOVA Procedure



Fish sex and test effect on entries

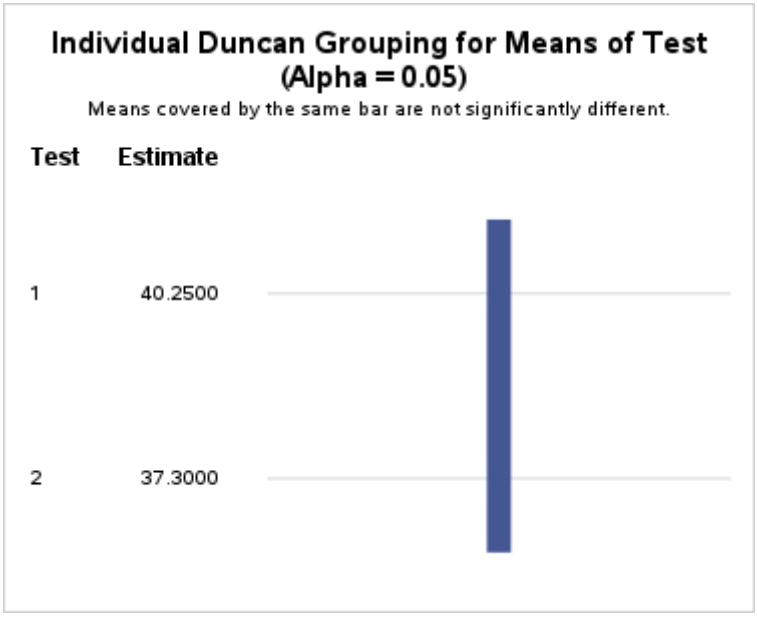
The ANOVA Procedure

Duncan's Multiple Range Test for Individual

Note: This test controls the Type I comparisonwise error rate, not the experimentwise error rate.

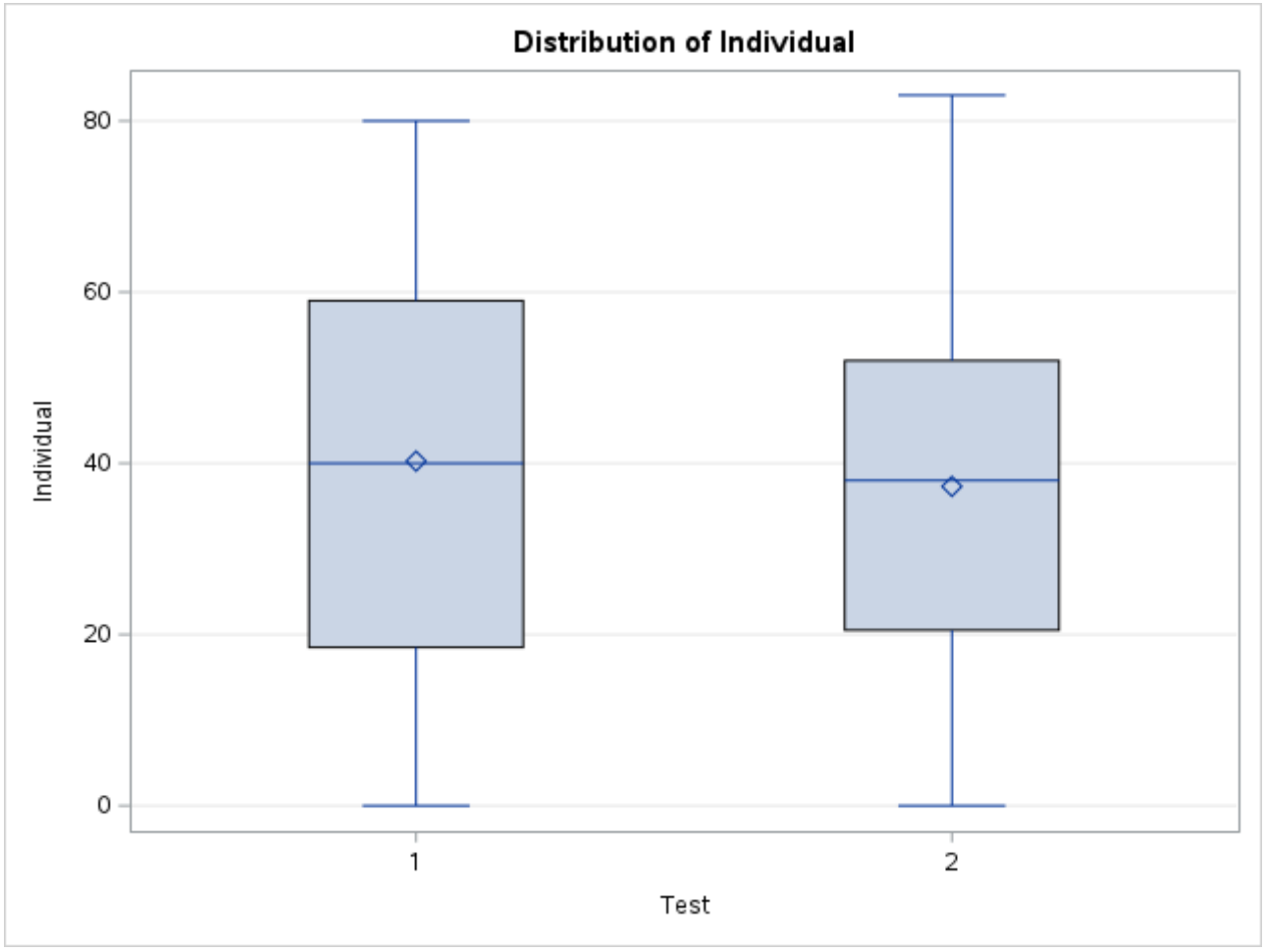
Alpha	0.05
Error Degrees of Freedom	118
Error Mean Square	480.3716

Number of Means	**2**
Critical Range	7.924



Fish sex and test effect on entries

The ANOVA Procedure



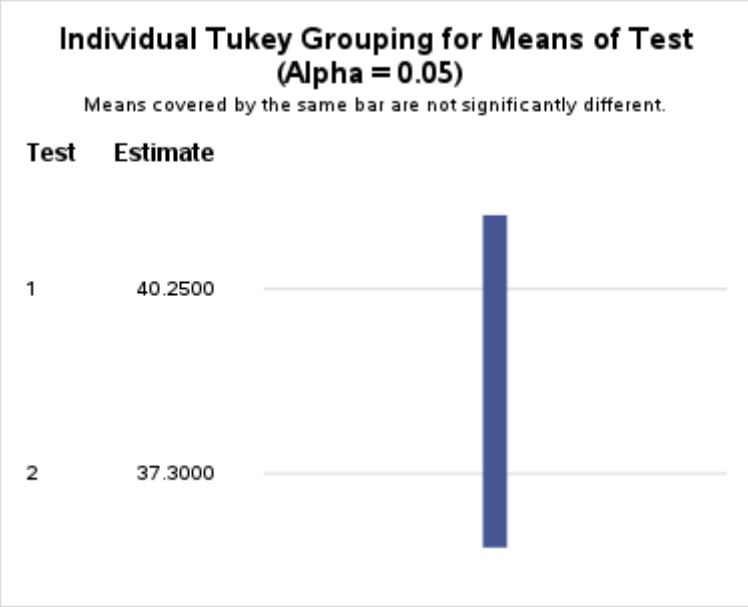
Fish sex and test effect on entries

The ANOVA Procedure

Tukey's Studentized Range (HSD) Test for Individual

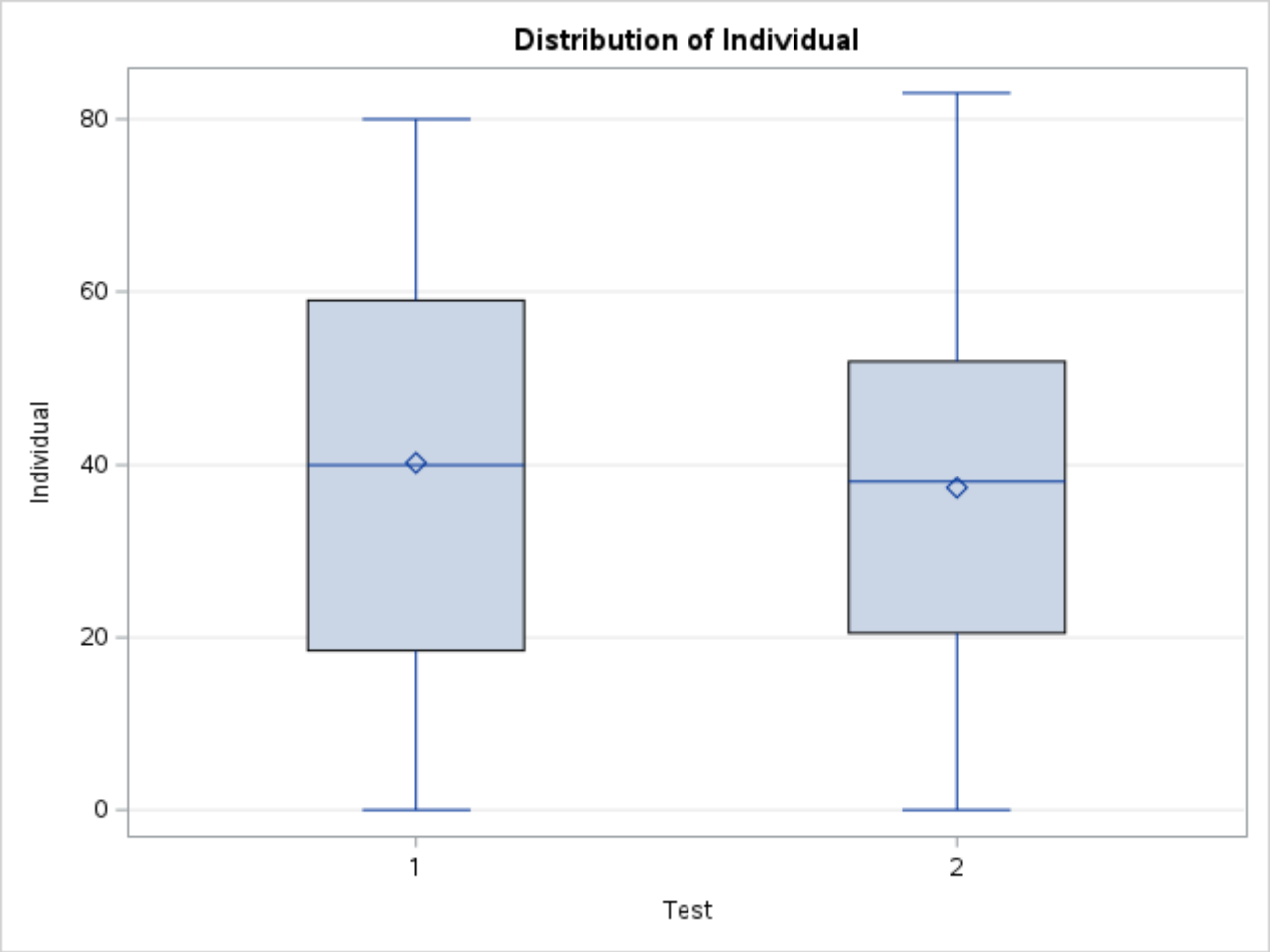
Note: This test controls the Type I experimentwise error rate, but it generally has a higher Type II error rate than REGWQ.

Alpha	0.05
Error Degrees of Freedom	118
Error Mean Square	480.3716
Critical Value of Studentized Range	2.80053
Minimum Significant Difference	7.9242



Fish sex and test effect on entries

The ANOVA Procedure



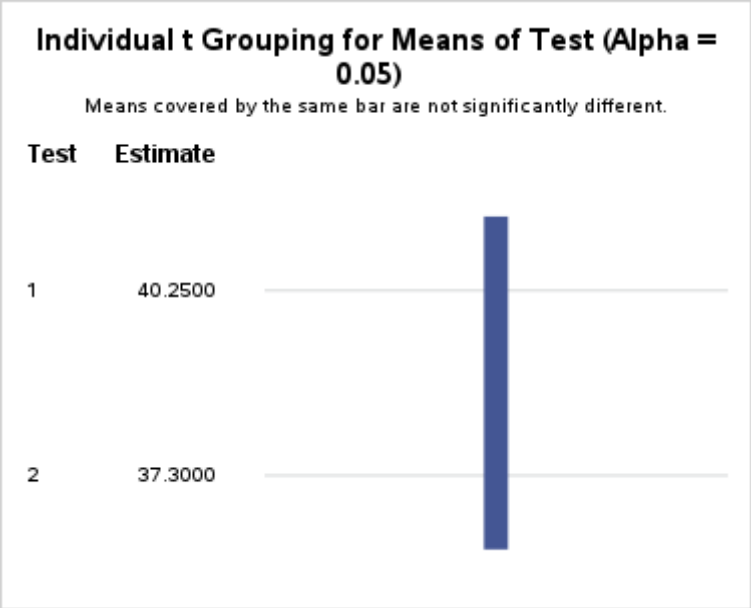
Fish sex and test effect on entries

The ANOVA Procedure

t Tests (LSD) for Individual

Note: This test controls the Type I comparisonwise error rate, not the experimentwise error rate.

Alpha	0.05
Error Degrees of Freedom	118
Error Mean Square	480.3716
Critical Value of t	1.98027
Least Significant Difference	7.9242



Fish sex and test effect on time spent

The ANOVA Procedure

Class Level Information		
Class	Levels	Values
Test	2	1 2
Sex	1	Female

Number of Observations Read	120
Number of Observations Used	120

Fish sex and test effect on time spent

The ANOVA Procedure

Dependent Variable: Individual

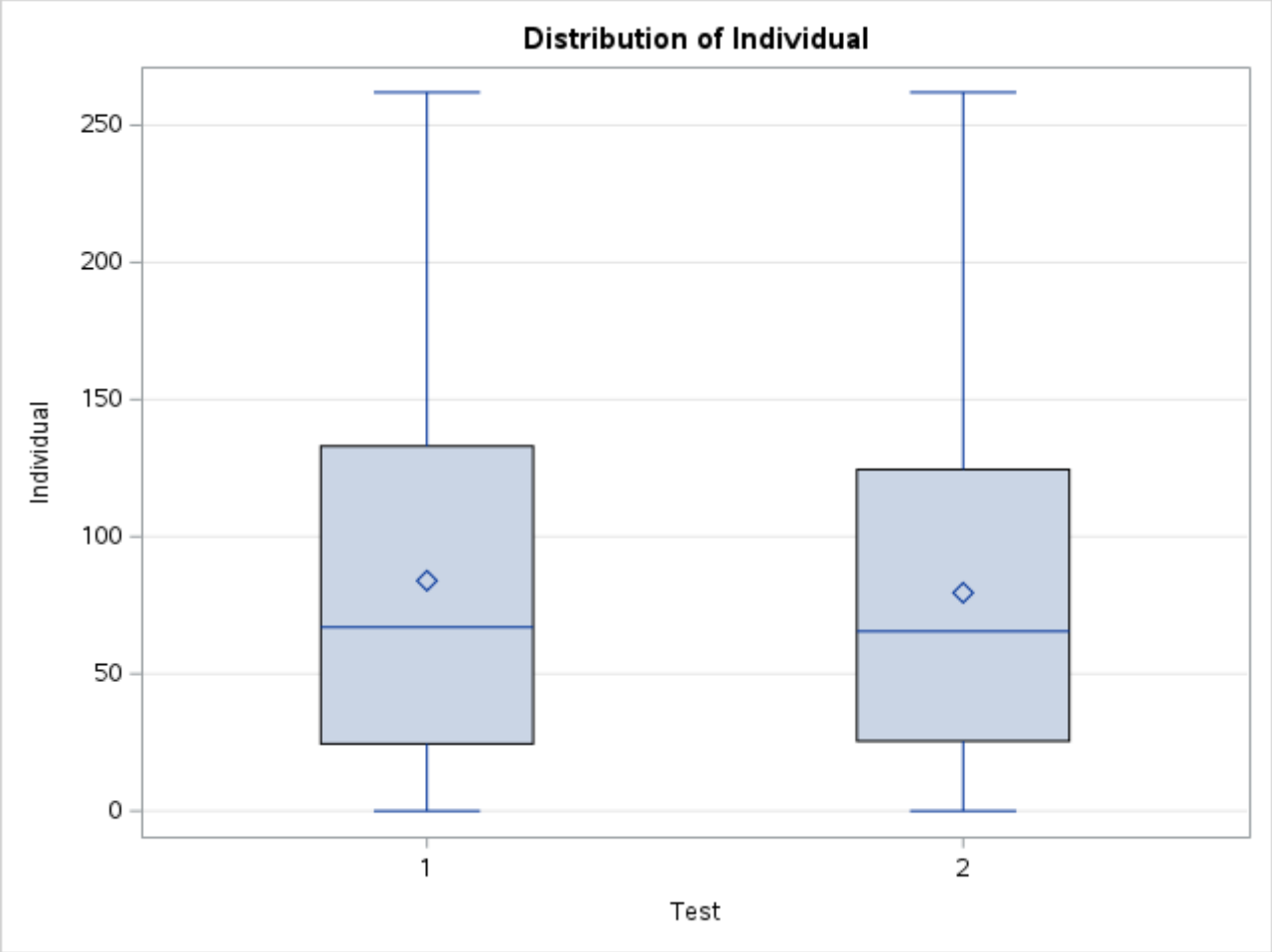
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	580.8000	580.8000	0.13	0.7155
Error	118	513357.7000	4350.4890		
Corrected Total	119	513938.5000			

R-Square	Coeff Var	Root MSE	Individual Mean
0.001130	80.68286	65.95824	81.75000

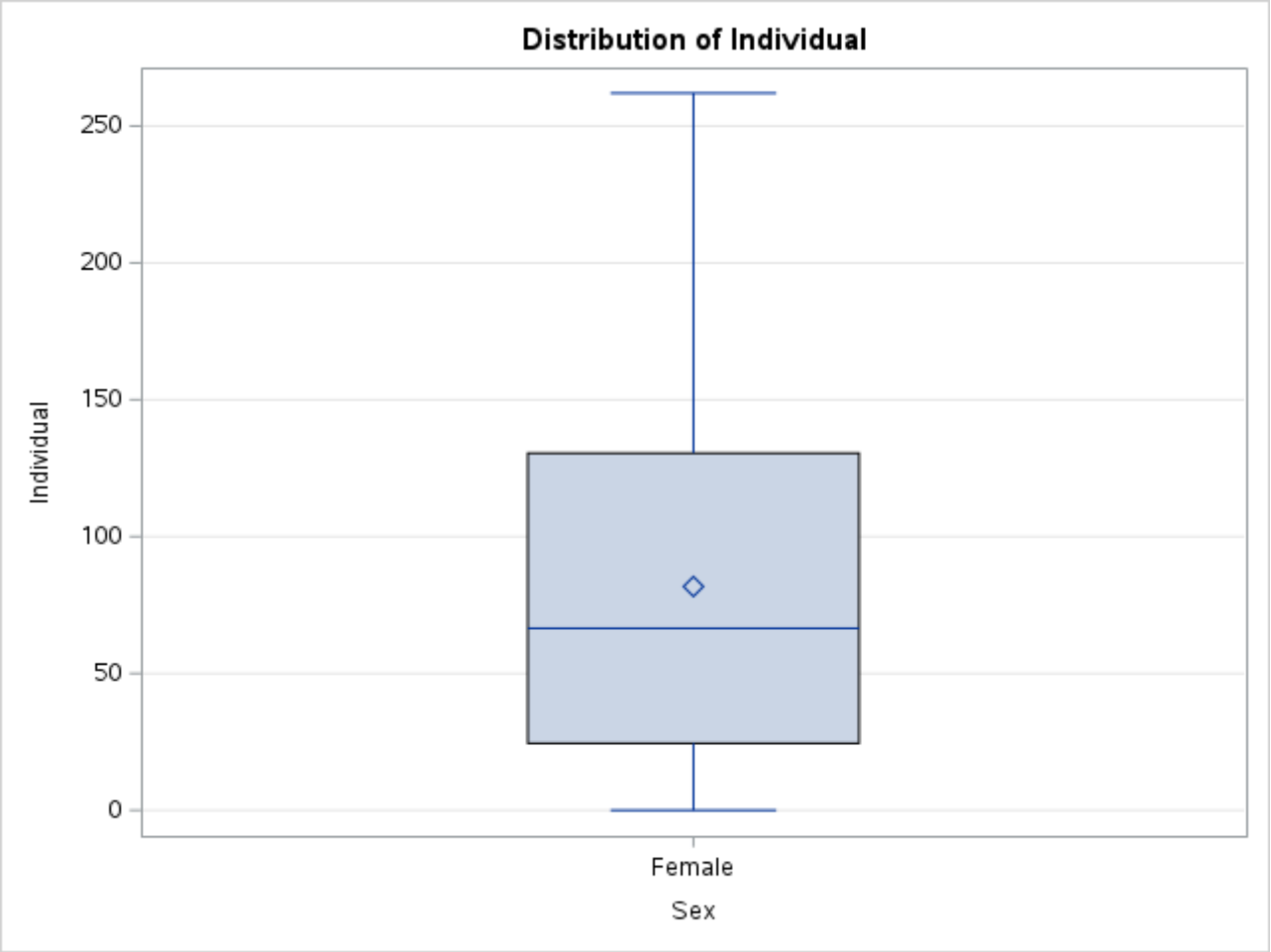
Source	DF	Anova SS	Mean Square	F Value	Pr > F
Test	1	580.8000000	580.8000000	0.13	0.7155
Sex	0	0.0000000	.	.	.
Test*Sex	0	0.0000000	.	.	.

Fish sex and test effect on time spent

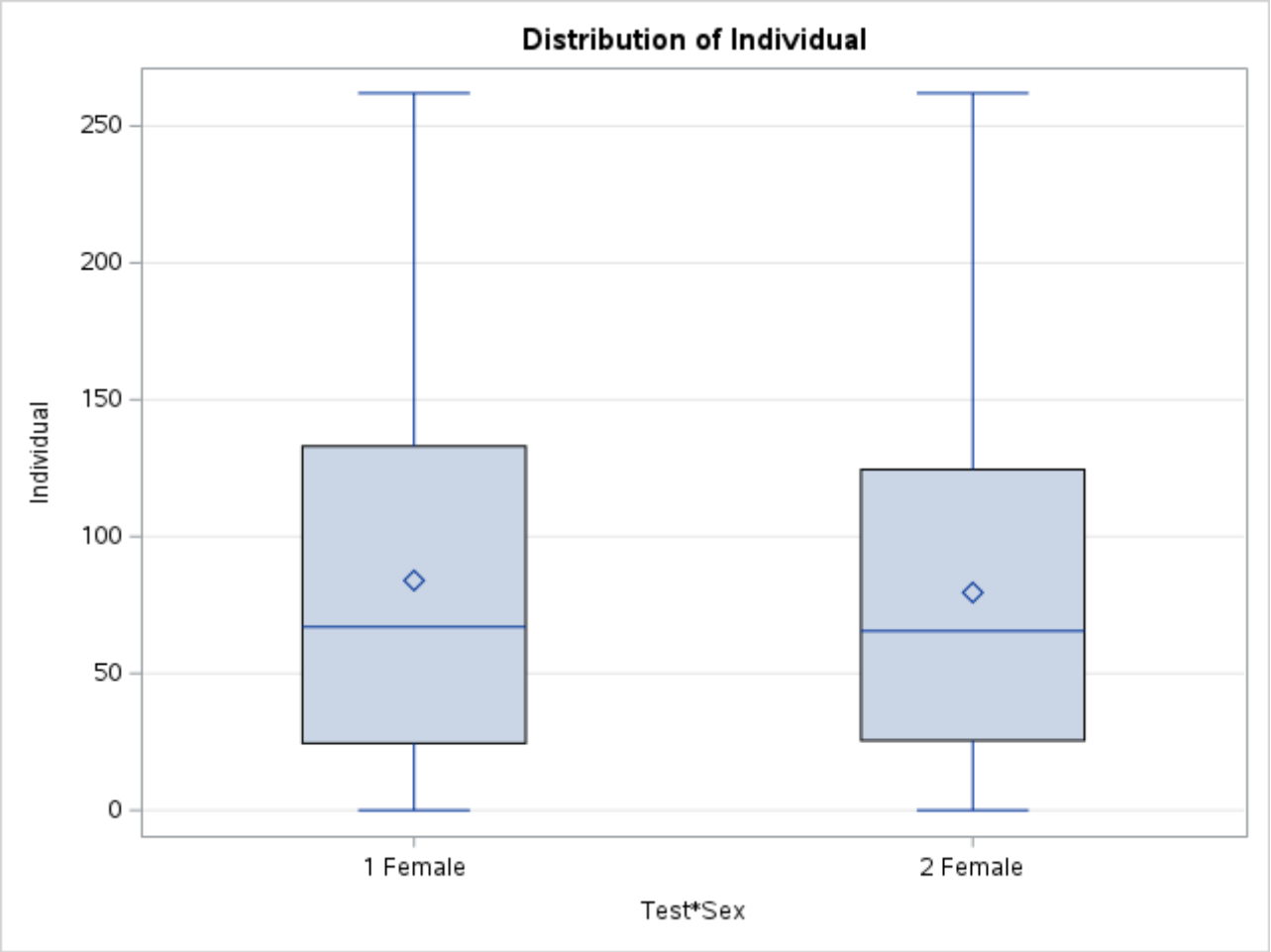
The ANOVA Procedure



Level of Test	N	Individual	
		Mean	Std Dev
1	60	83.9500000	67.3600055
2	60	79.5500000	64.5260229



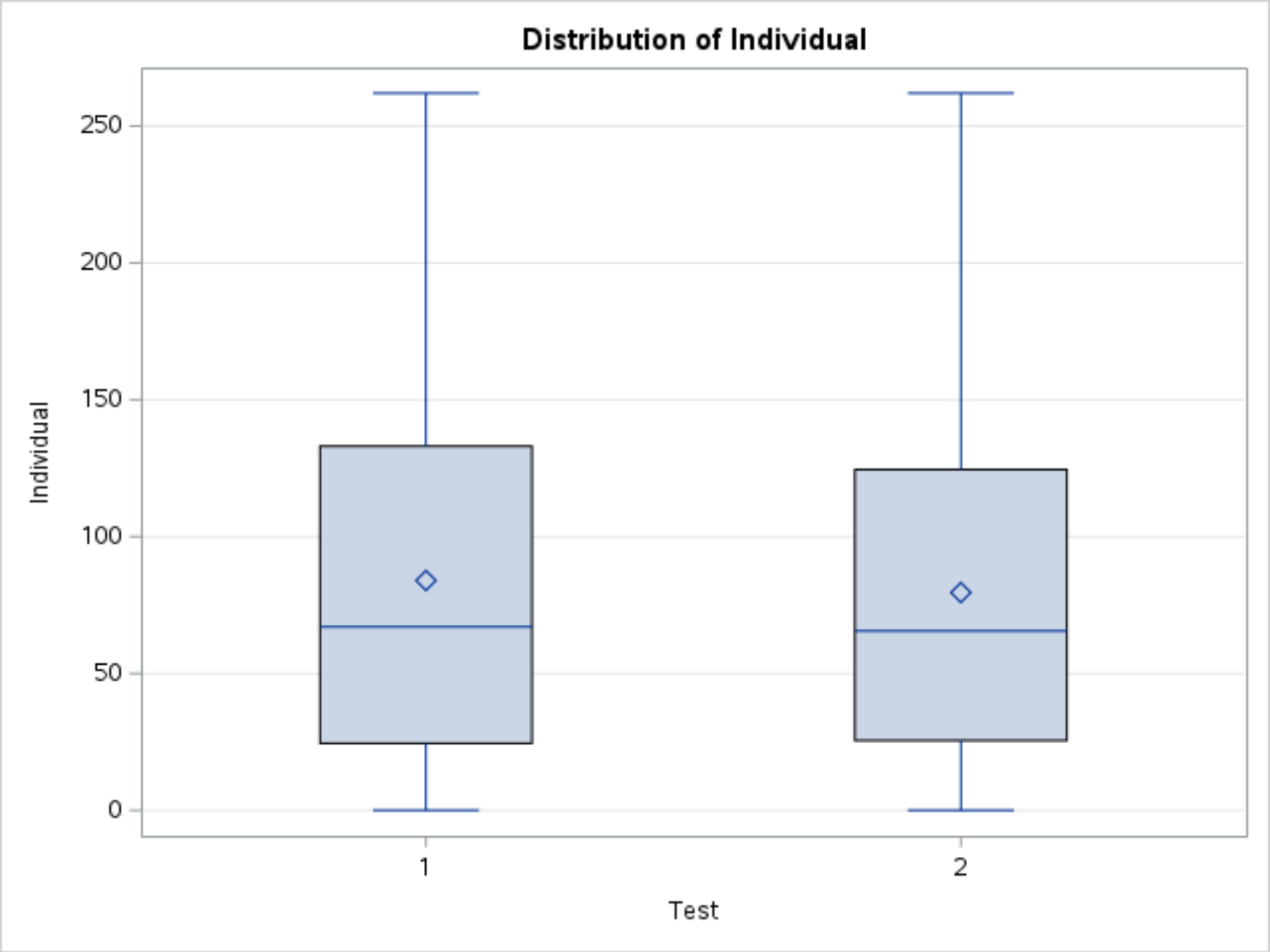
Level of Sex	N	Individual	
		Mean	Std Dev
Female	120	81.7500000	65.7176607



Level of Test	Level of Sex	N	Individual	
			Mean	Std Dev
1	Female	60	83.9500000	67.3600055
2	Female	60	79.5500000	64.5260229

Fish sex and test effect on time spent

The ANOVA Procedure



Fish sex and test effect on time spent

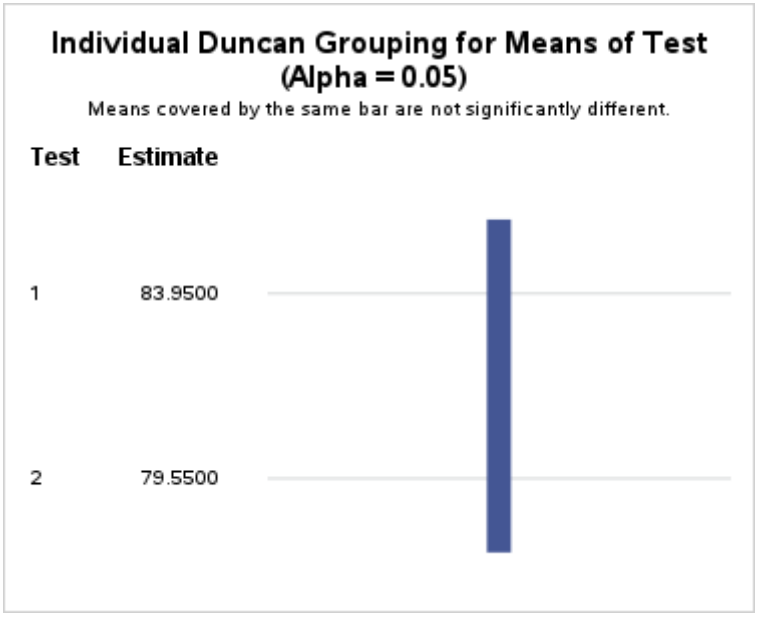
The ANOVA Procedure

Duncan's Multiple Range Test for Individual

Note: This test controls the Type I comparisonwise error rate, not the experimentwise error rate.

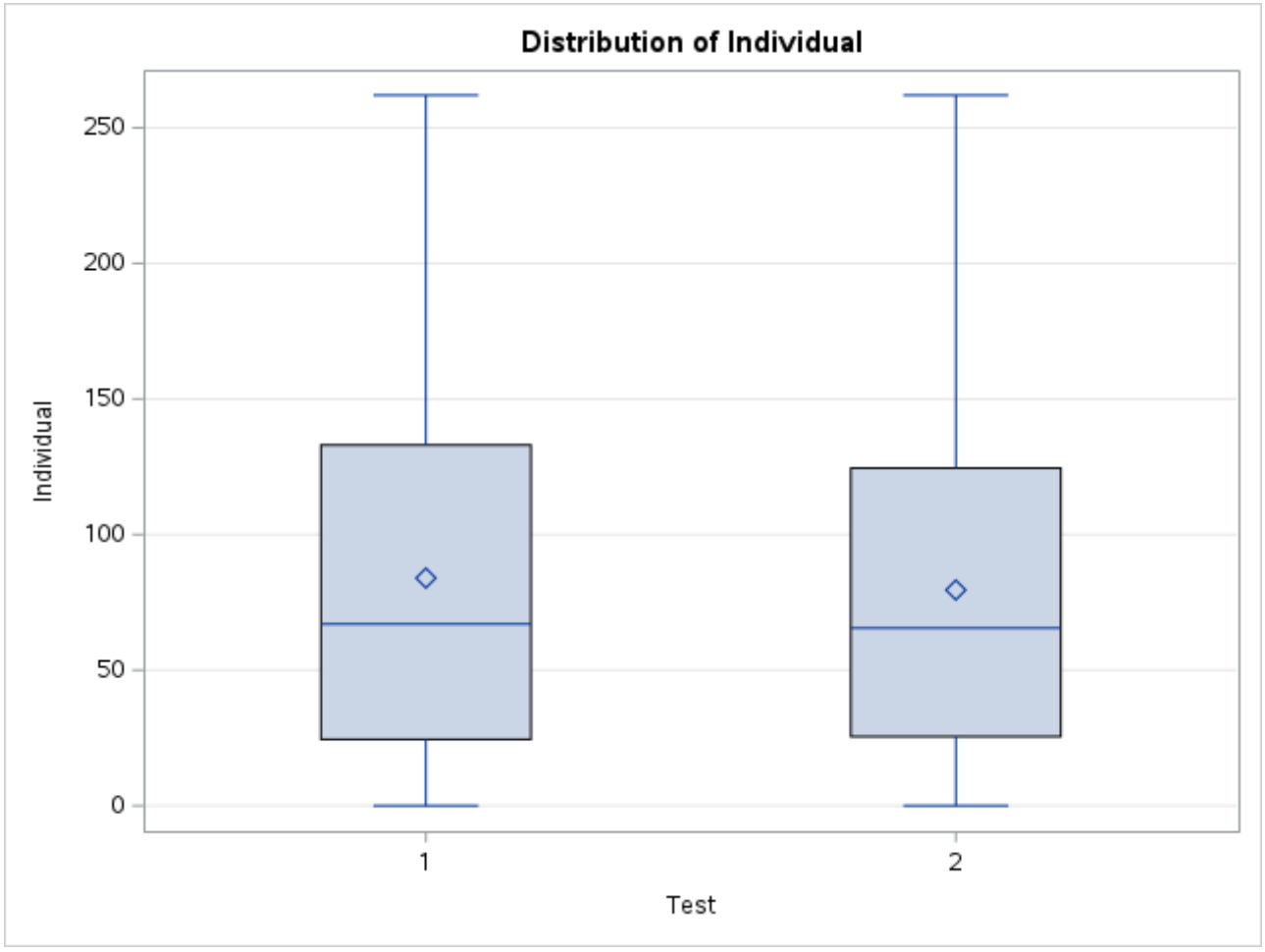
Alpha	0.05
Error Degrees of Freedom	118
Error Mean Square	4350.489

Number of Means	**2**
Critical Range	23.85



Fish sex and test effect on time spent

The ANOVA Procedure



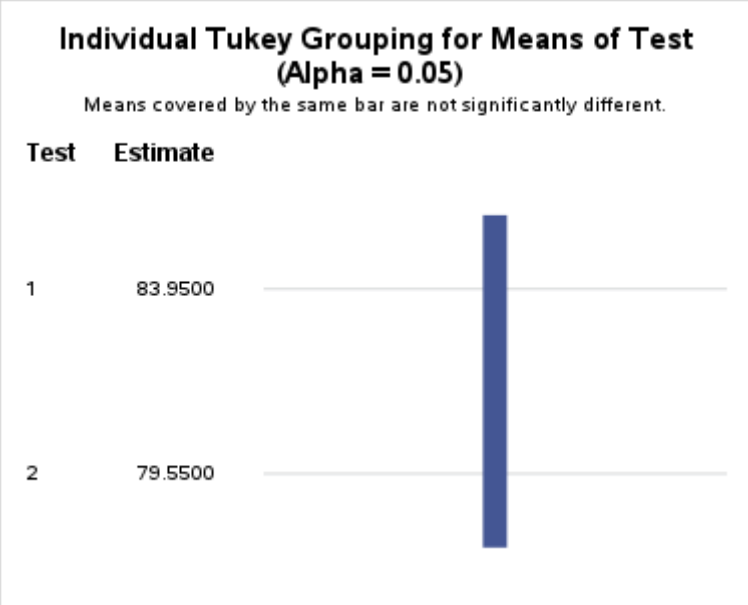
Fish sex and test effect on time spent

The ANOVA Procedure

Tukey's Studentized Range (HSD) Test for Individual

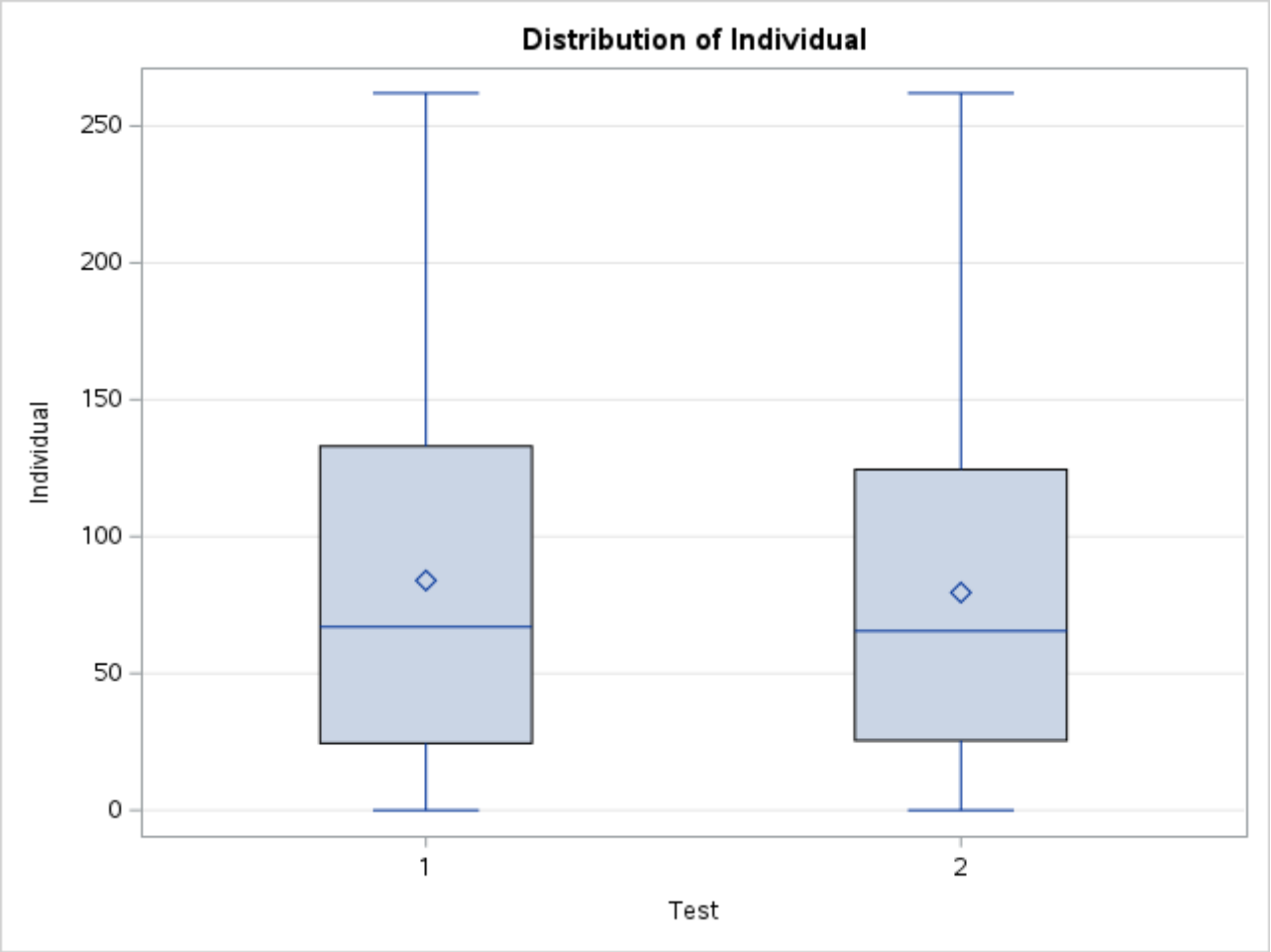
Note: This test controls the Type I experimentwise error rate, but it generally has a higher Type II error rate than REGWQ.

Alpha	0.05
Error Degrees of Freedom	118
Error Mean Square	4350.489
Critical Value of Studentized Range	2.80053
Minimum Significant Difference	23.847



Fish sex and test effect on time spent

The ANOVA Procedure



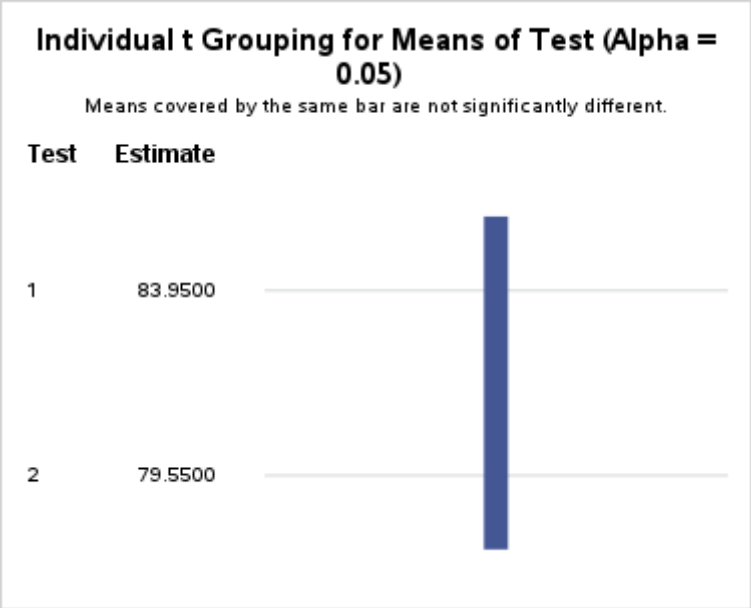
Fish sex and test effect on time spent

The ANOVA Procedure

t Tests (LSD) for Individual

Note: This test controls the Type I comparisonwise error rate, not the experimentwise error rate.

Alpha	0.05
Error Degrees of Freedom	118
Error Mean Square	4350.489
Critical Value of t	1.98027
Least Significant Difference	23.847



Fish sex and test effect on line crossed

The ANOVA Procedure

Class Level Information		
Class	Levels	Values
Test	2	1 2
Sex	1	Male

Number of Observations Read	118
Number of Observations Used	118

Fish sex and test effect on line crossed

The ANOVA Procedure

Dependent Variable: Individual

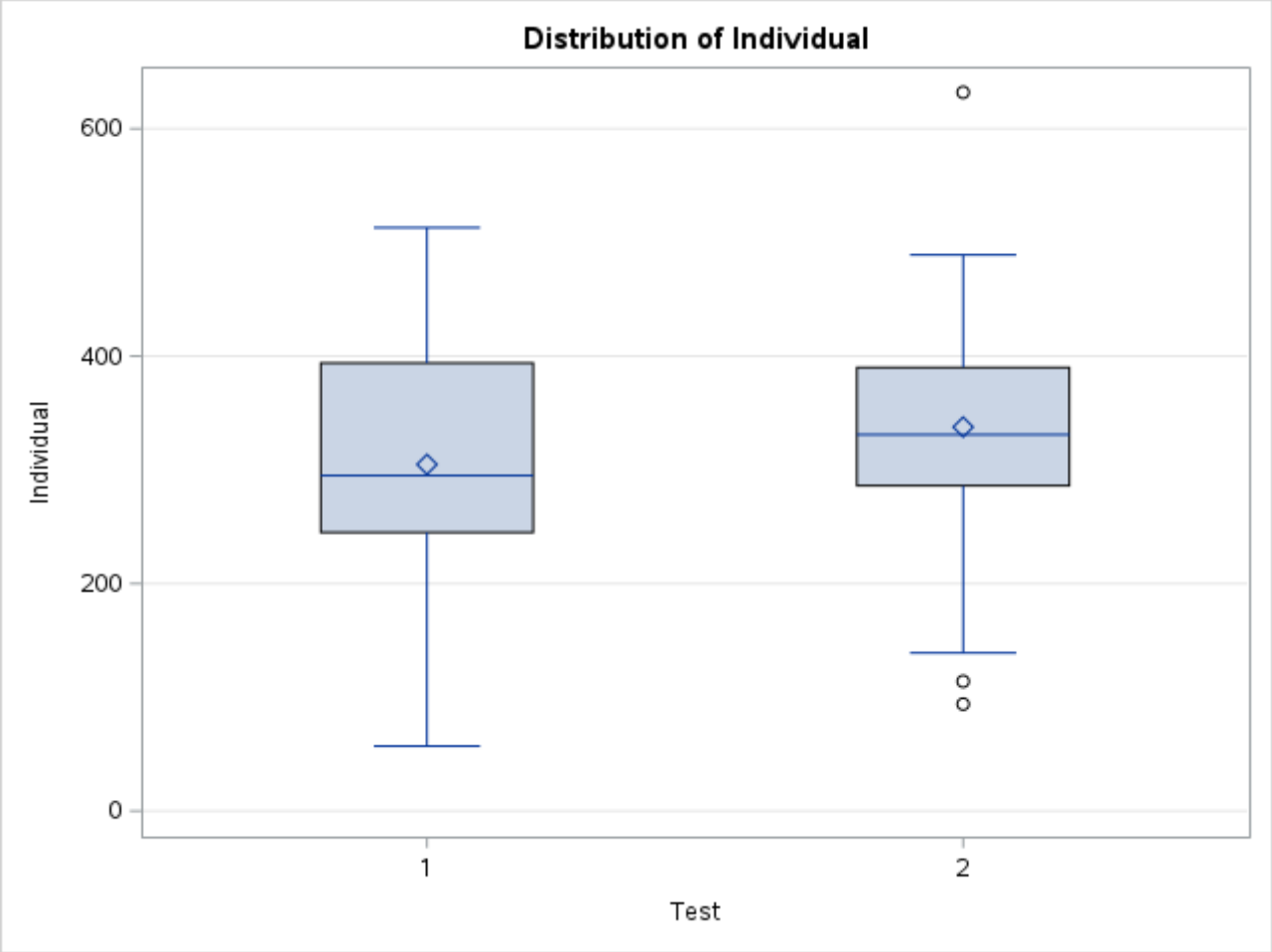
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	31894.915	31894.915	3.32	0.0710
Error	116	1114519.356	9607.925		
Corrected Total	117	1146414.271			

R-Square	Coeff Var	Root MSE	Individual Mean
0.027821	30.51489	98.02003	321.2203

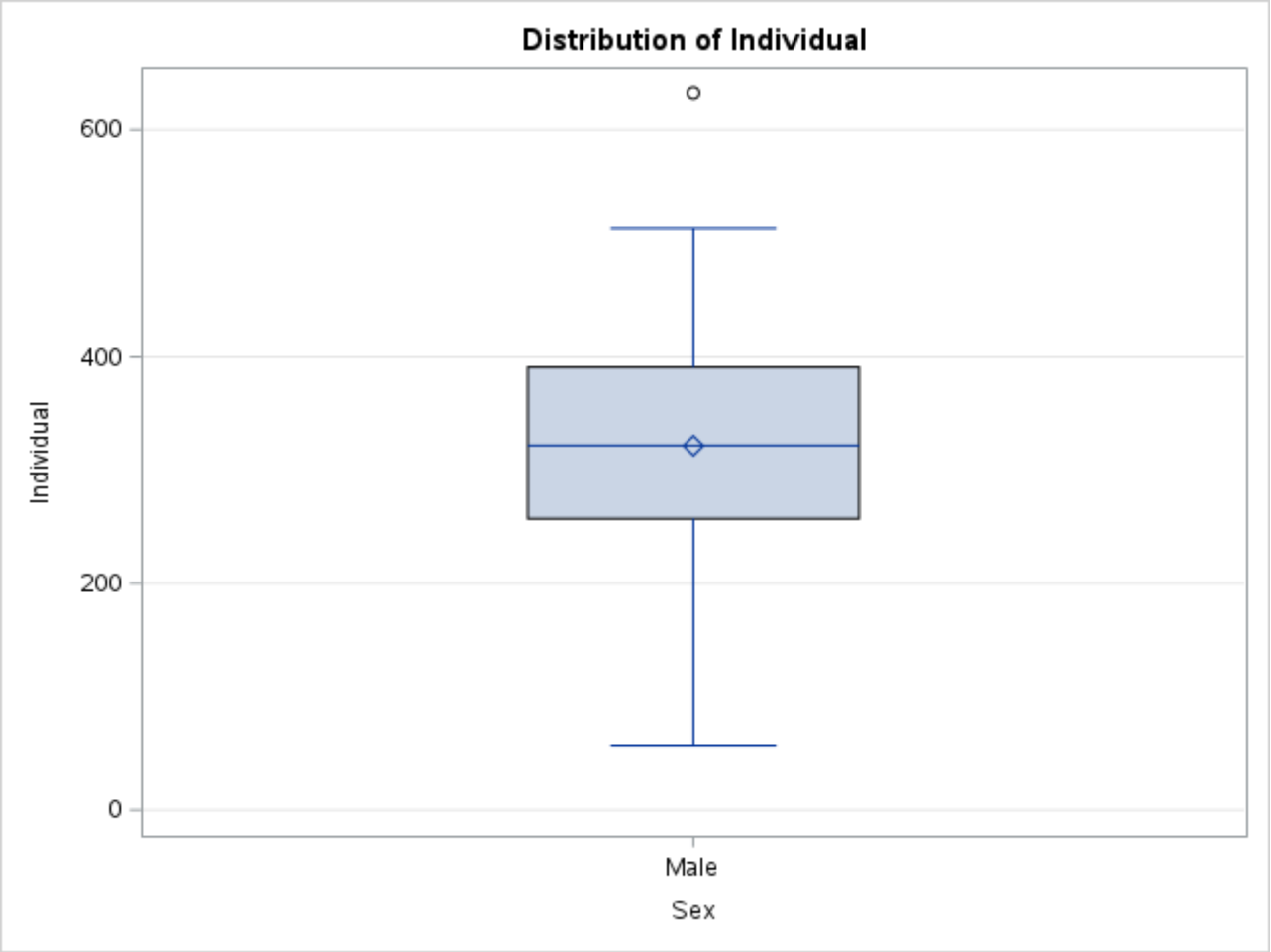
Source	DF	Anova SS	Mean Square	F Value	Pr > F
Test	1	31894.91525	31894.91525	3.32	0.0710
Sex	0	0.00000	.	.	.
Test*Sex	0	0.00000	.	.	.

Fish sex and test effect on line crossed

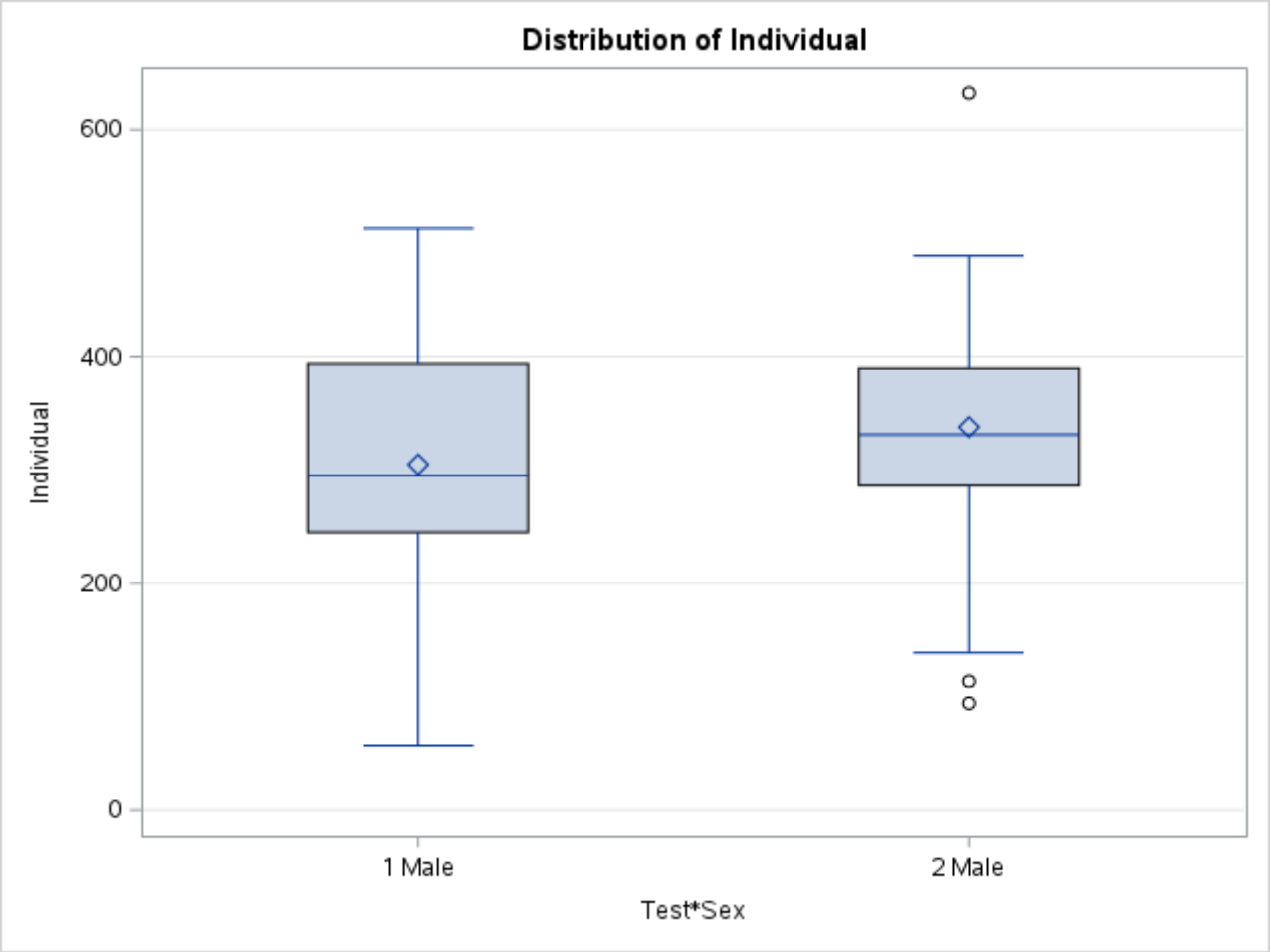
The ANOVA Procedure



Level of Test	N	Individual	
		Mean	Std Dev
1	59	304.779661	99.4432896
2	59	337.661017	96.5757895



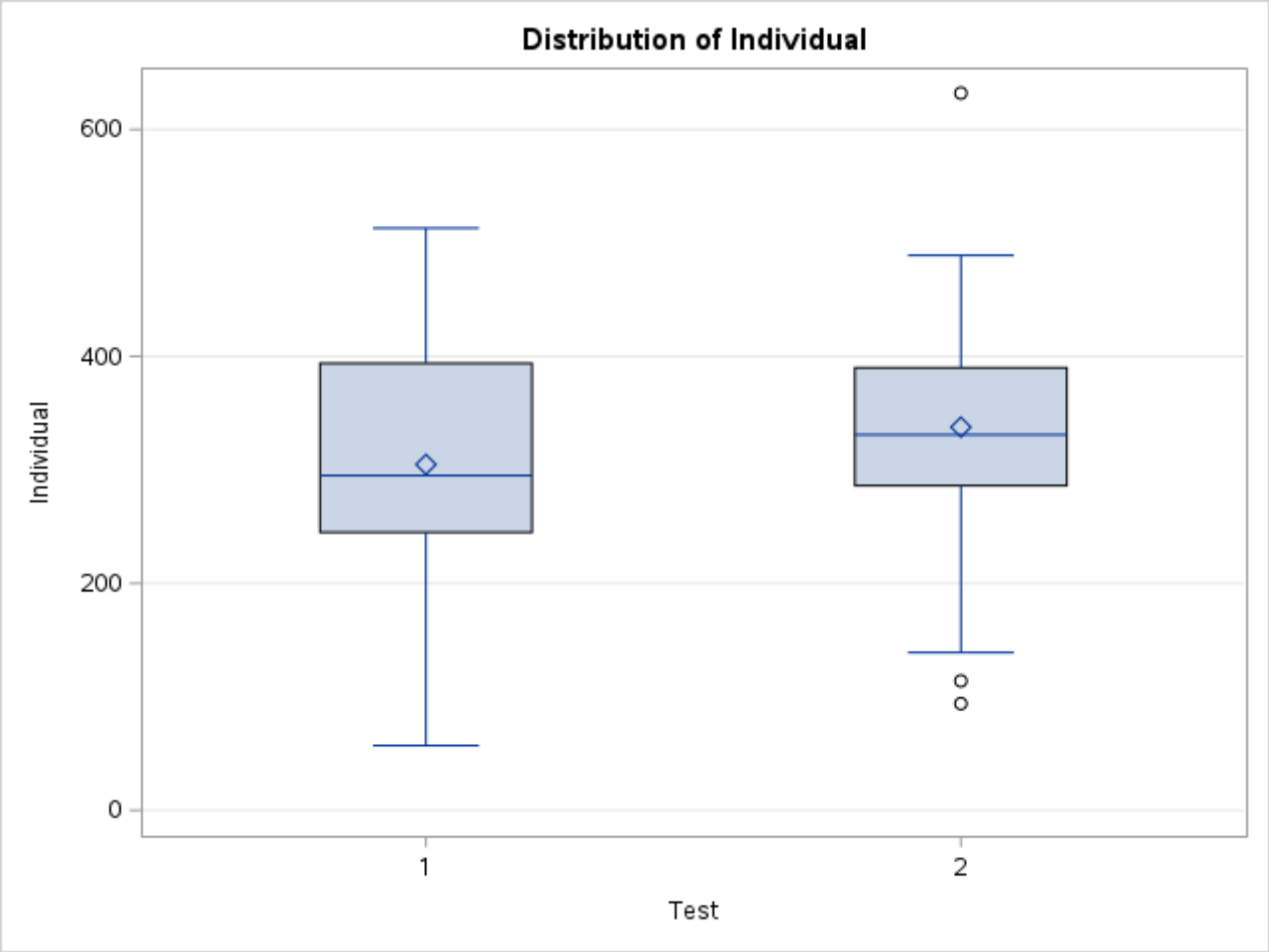
Level of Sex	N	Individual	
		Mean	Std Dev
Male	118	321.220339	98.9869313



Level of Test	Level of Sex	N	Individual	
			Mean	Std Dev
1	Male	59	304.779661	99.4432896
2	Male	59	337.661017	96.5757895

Fish sex and test effect on line crossed

The ANOVA Procedure



Fish sex and test effect on line crossed

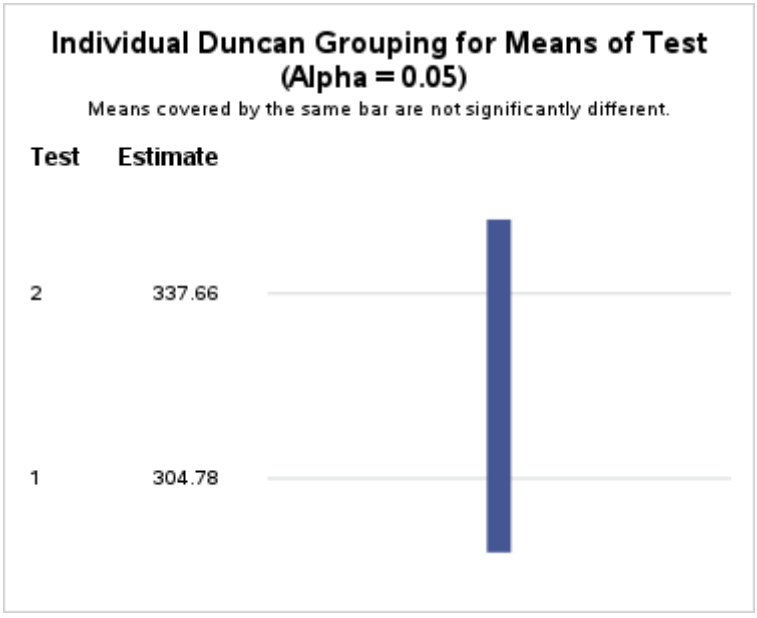
The ANOVA Procedure

Duncan's Multiple Range Test for Individual

Note: This test controls the Type I comparisonwise error rate, not the experimentwise error rate.

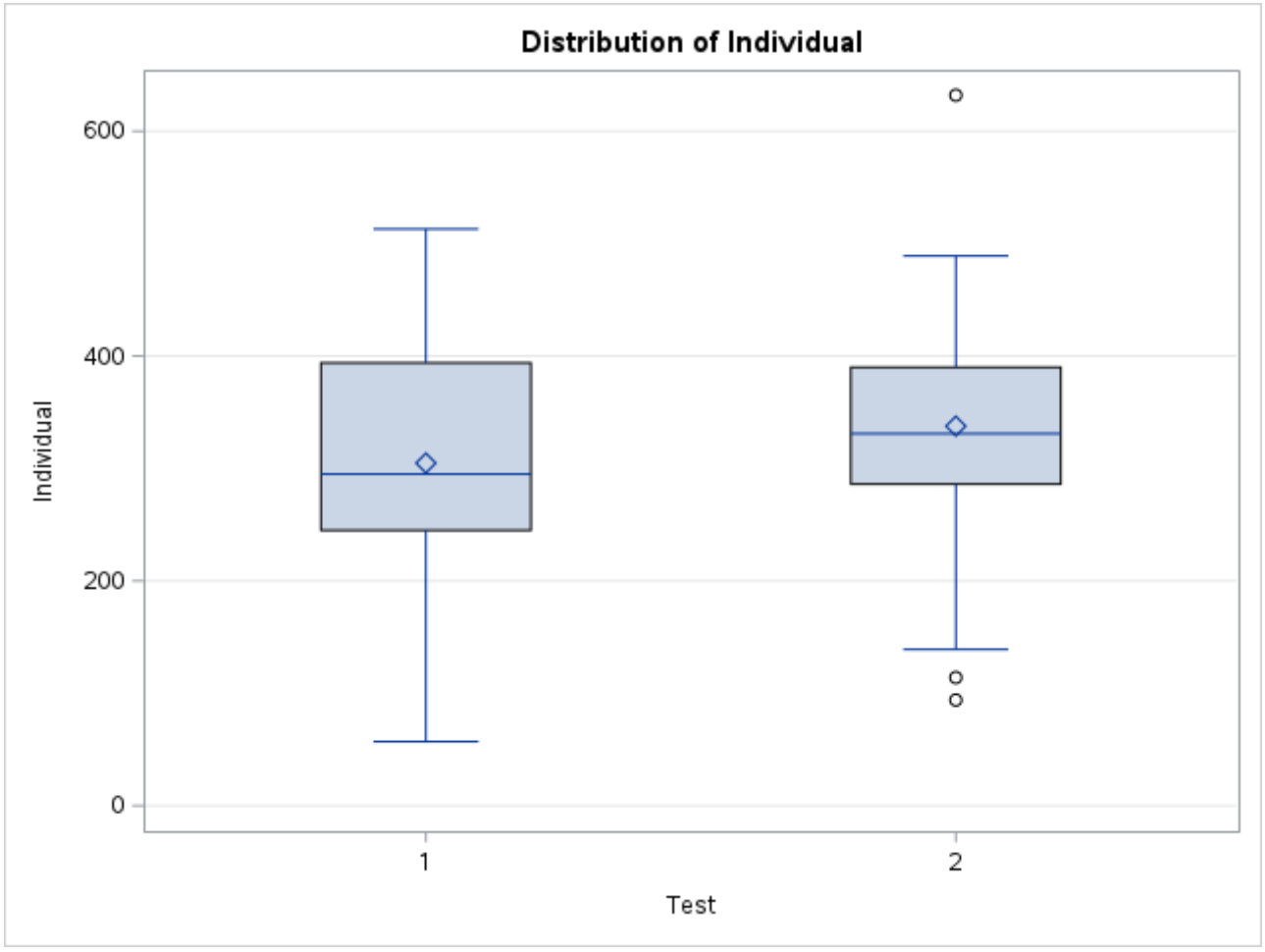
Alpha	0.05
Error Degrees of Freedom	116
Error Mean Square	9607.925

Number of Means	**2**
Critical Range	35.74



Fish sex and test effect on line crossed

The ANOVA Procedure



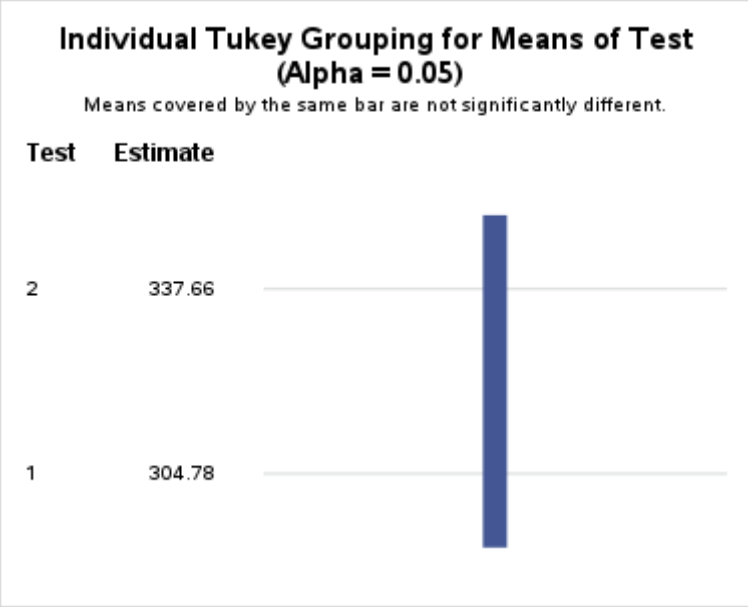
Fish sex and test effect on line crossed

The ANOVA Procedure

Tukey's Studentized Range (HSD) Test for Individual

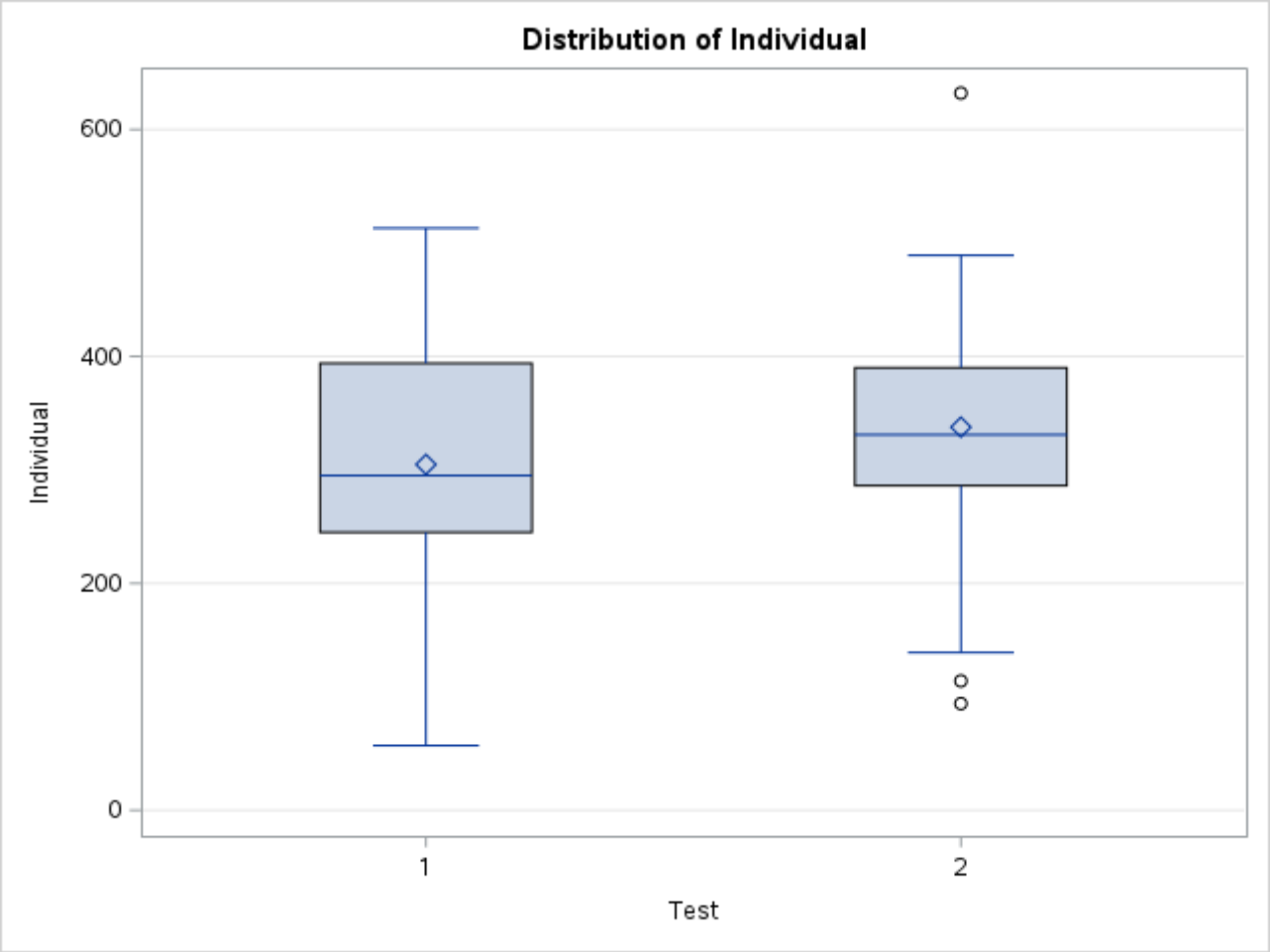
Note: This test controls the Type I experimentwise error rate, but it generally has a higher Type II error rate than REGWQ.

Alpha	0.05
Error Degrees of Freedom	116
Error Mean Square	9607.925
Critical Value of Studentized Range	2.80103
Minimum Significant Difference	35.744



Fish sex and test effect on line crossed

The ANOVA Procedure



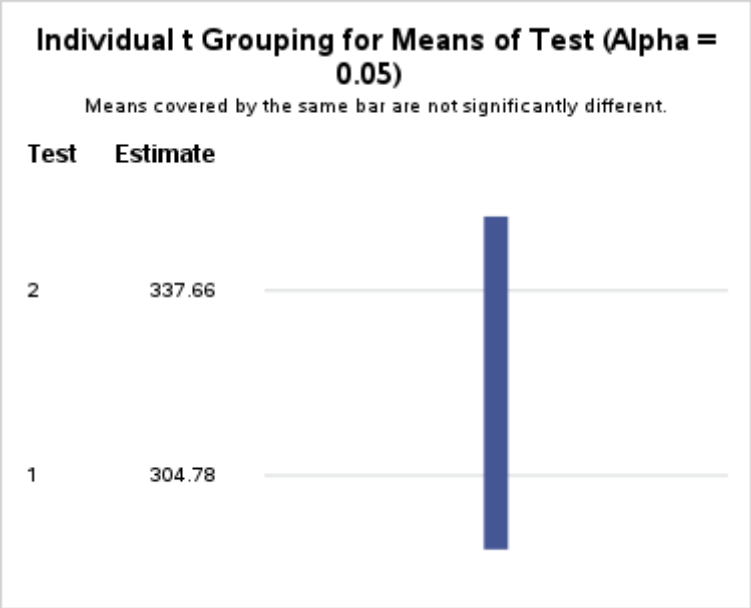
Fish sex and test effect on line crossed

The ANOVA Procedure

t Tests (LSD) for Individual

Note: This test controls the Type I comparisonwise error rate, not the experimentwise error rate.

Alpha	0.05
Error Degrees of Freedom	116
Error Mean Square	9607.925
Critical Value of t	1.98063
Least Significant Difference	35.744



Fish sex and test effect on entries

The ANOVA Procedure

Class Level Information		
Class	Levels	Values
Test	2	1 2
Sex	1	Male

Number of Observations Read	118
Number of Observations Used	118

Fish sex and test effect on entries

The ANOVA Procedure

Dependent Variable: Individual

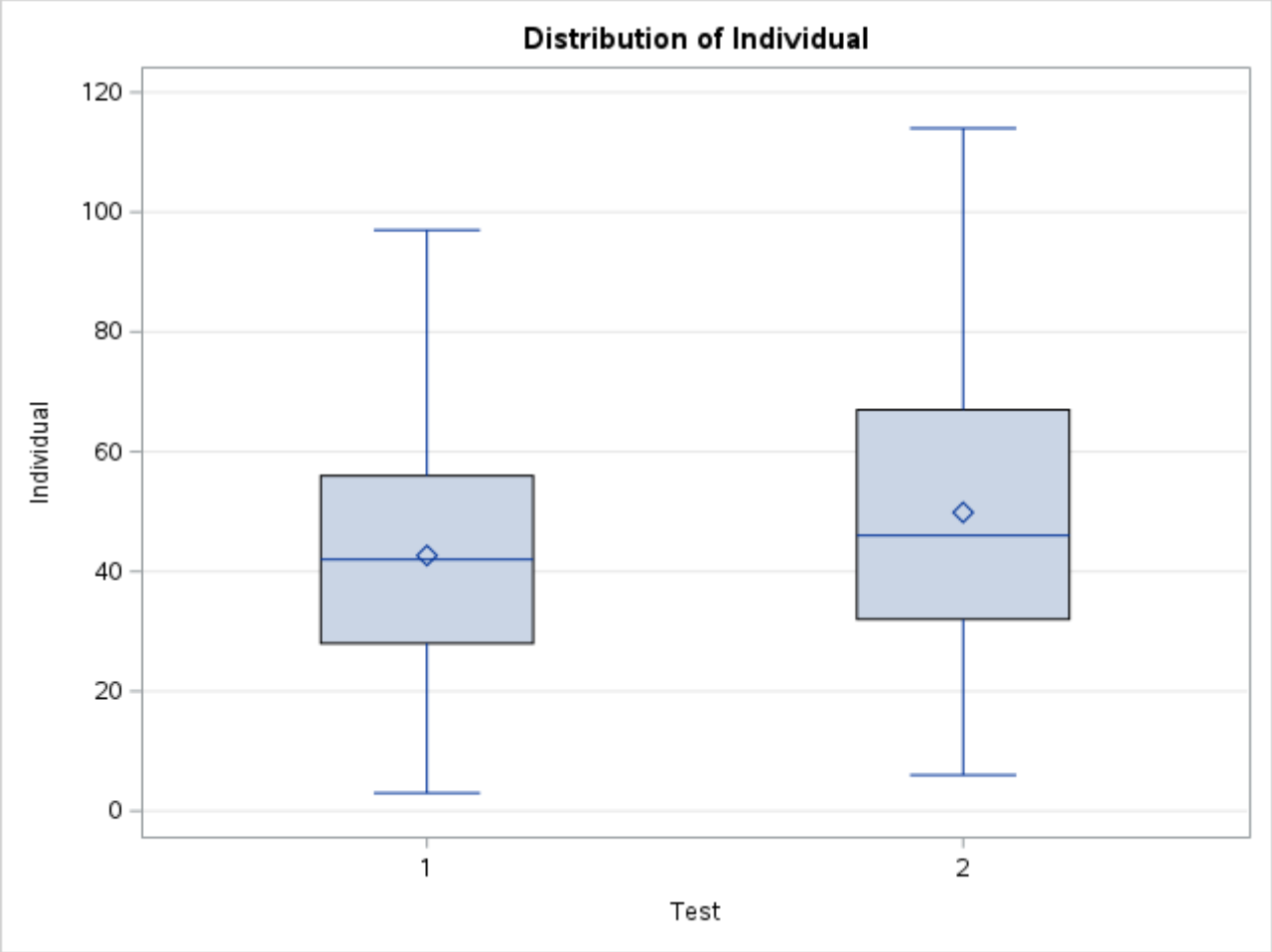
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	1523.52542	1523.52542	2.84	0.0948
Error	116	62298.84746	537.05903		
Corrected Total	117	63822.37288			

R-Square	Coeff Var	Root MSE	Individual Mean
0.023871	50.10251	23.17453	46.25424

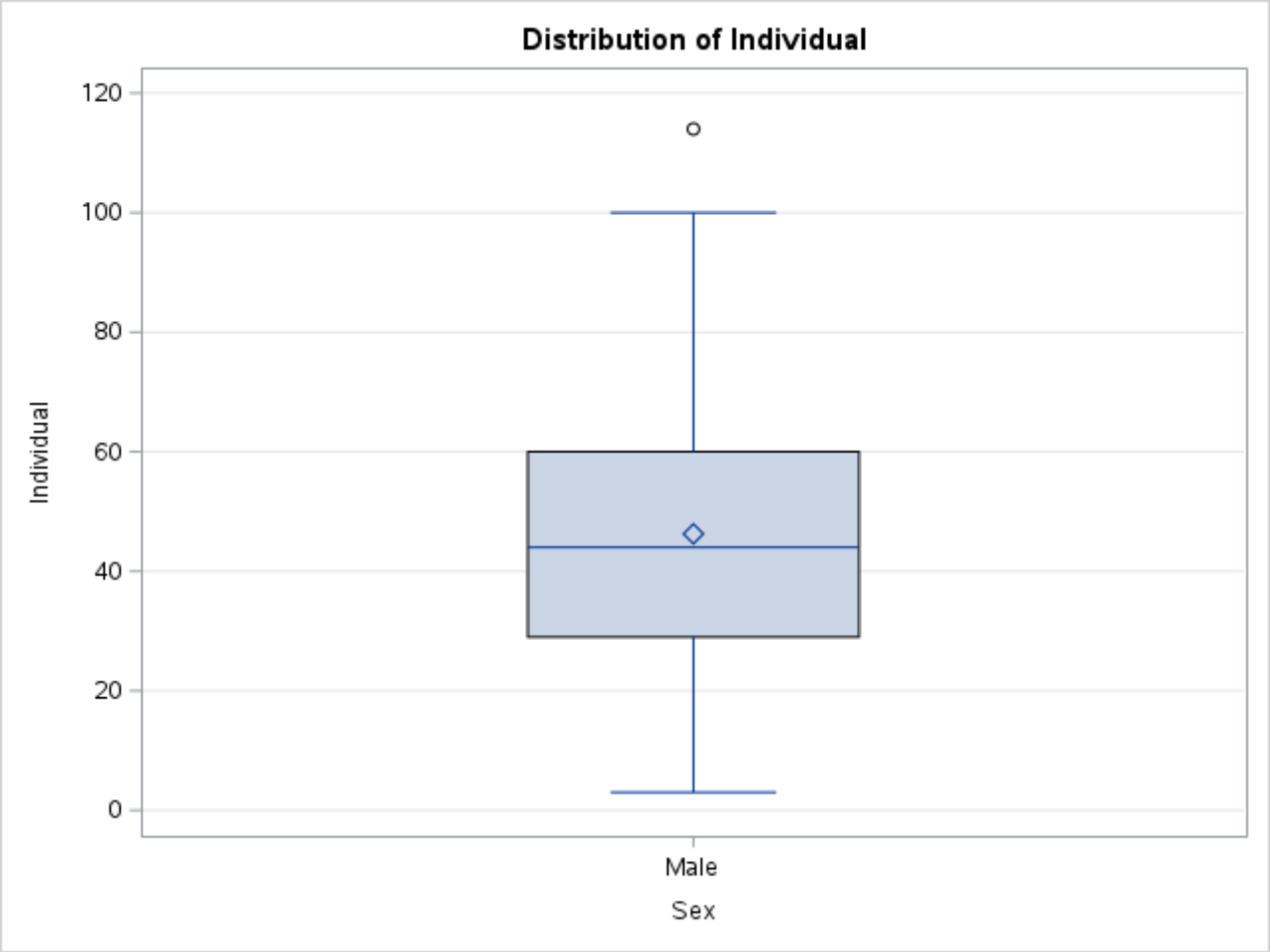
Source	DF	Anova SS	Mean Square	F Value	Pr > F
Test	1	1523.525424	1523.525424	2.84	0.0948
Sex	0	0.000000	.	.	.
Test*Sex	0	0.000000	.	.	.

Fish sex and test effect on entries

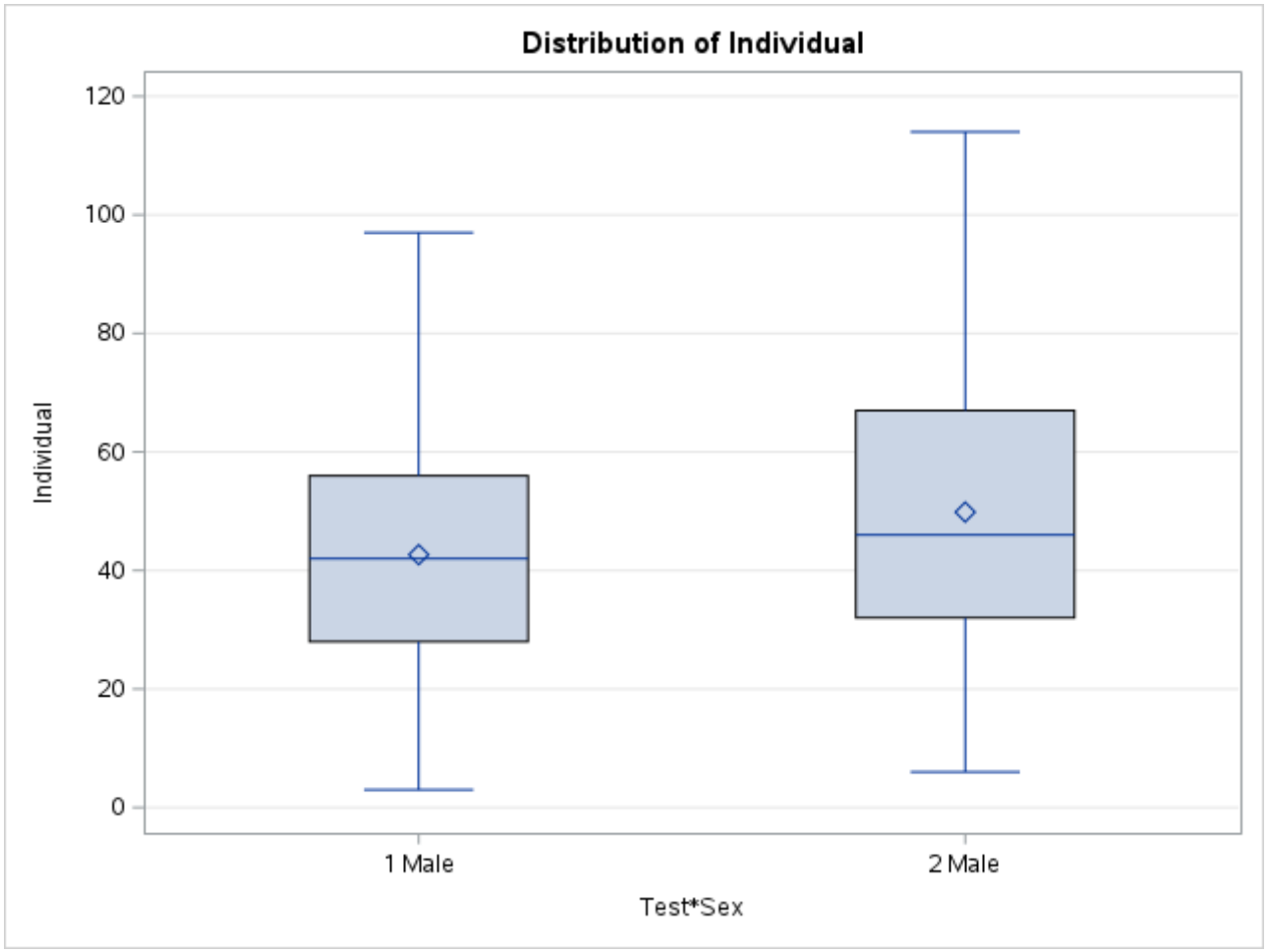
The ANOVA Procedure



Level of Test	N	Individual	
		Mean	Std Dev
1	59	42.6610169	21.2039441
2	59	49.8474576	24.9902143



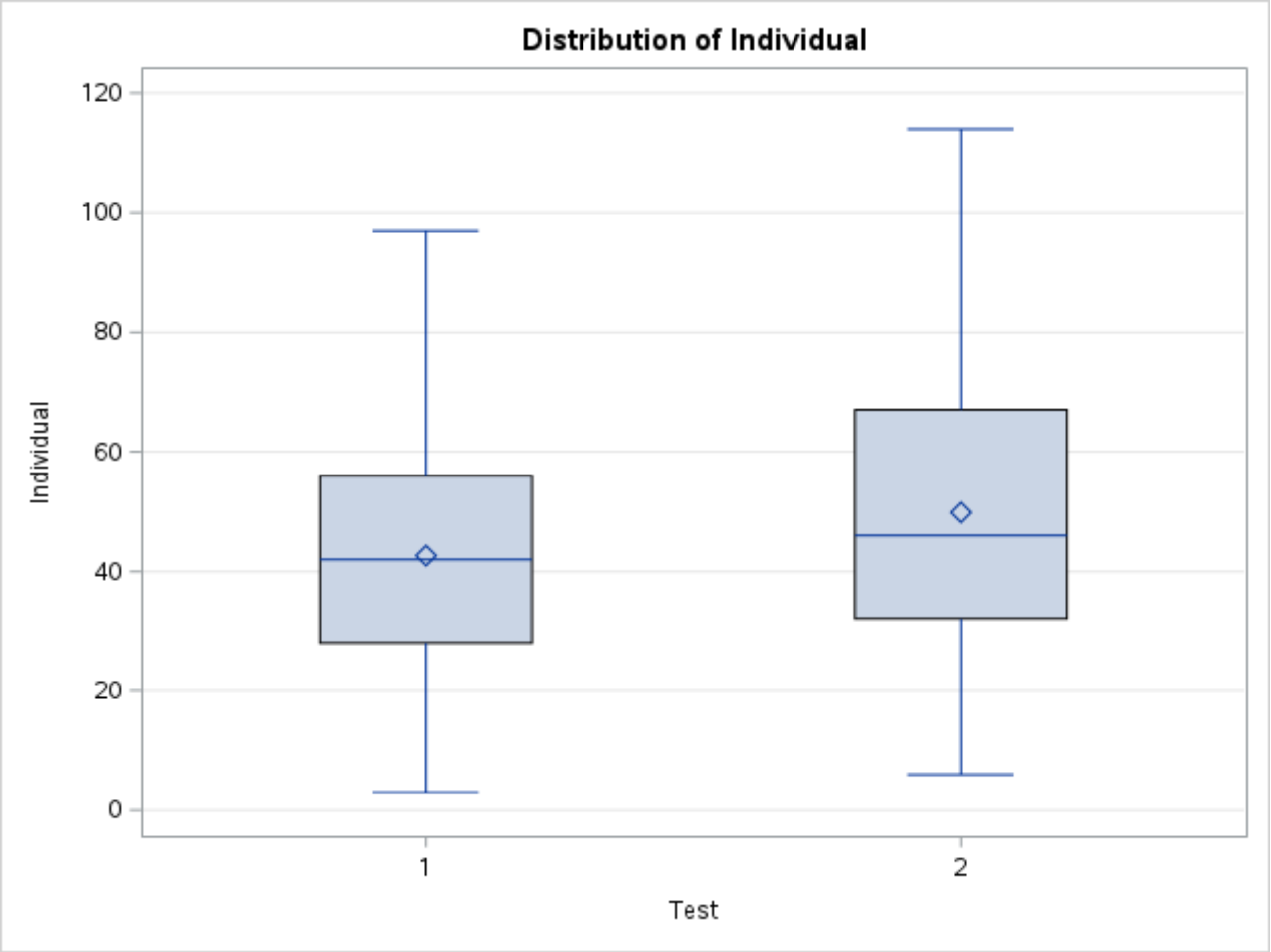
Level of Sex	N	Individual	
		Mean	Std Dev
Male	118	46.2542373	23.3557352



Level of Test	Level of Sex	N	Individual	
			Mean	Std Dev
1	Male	59	42.6610169	21.2039441
2	Male	59	49.8474576	24.9902143

Fish sex and test effect on entries

The ANOVA Procedure



Fish sex and test effect on entries

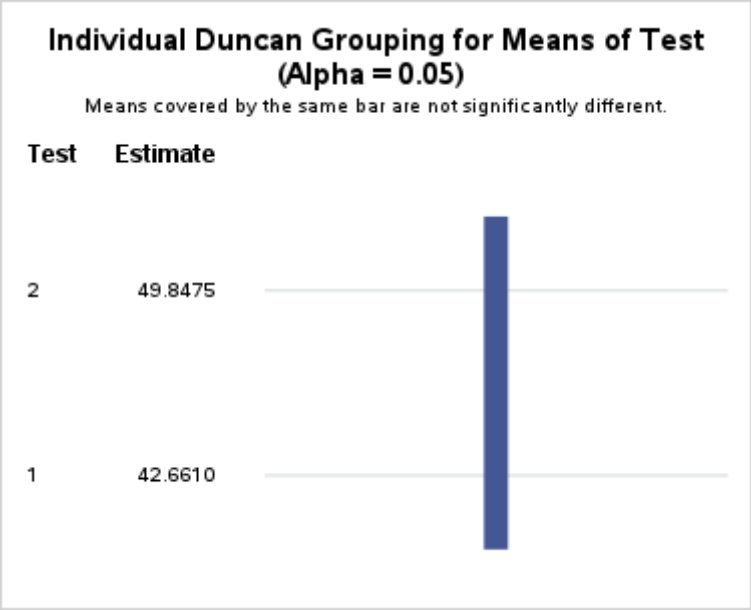
The ANOVA Procedure

Duncan's Multiple Range Test for Individual

Note: This test controls the Type I comparisonwise error rate, not the experimentwise error rate.

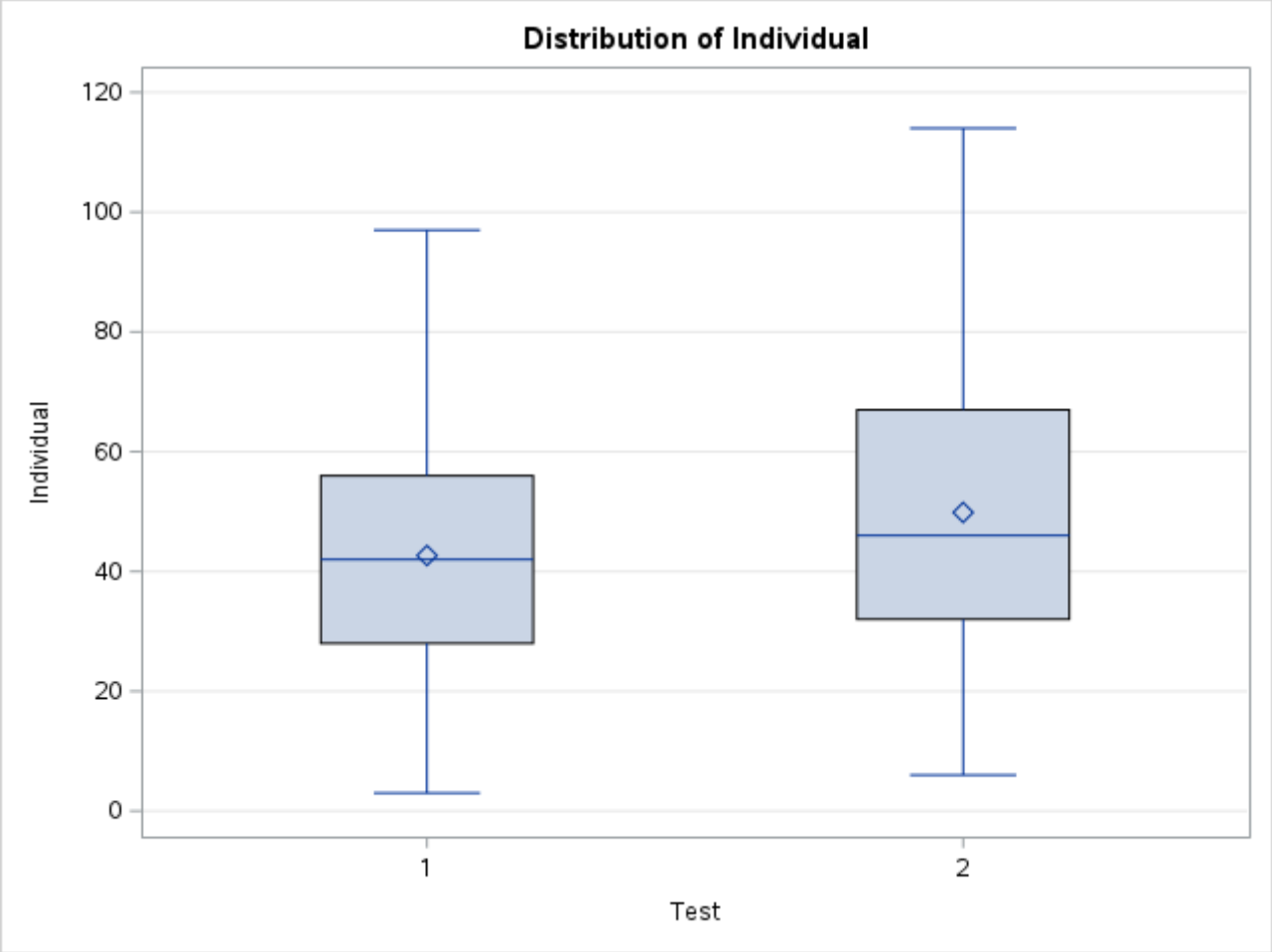
Alpha	0.05
Error Degrees of Freedom	116
Error Mean Square	537.059

Number of Means	**2**
Critical Range	8.451



Fish sex and test effect on entries

The ANOVA Procedure



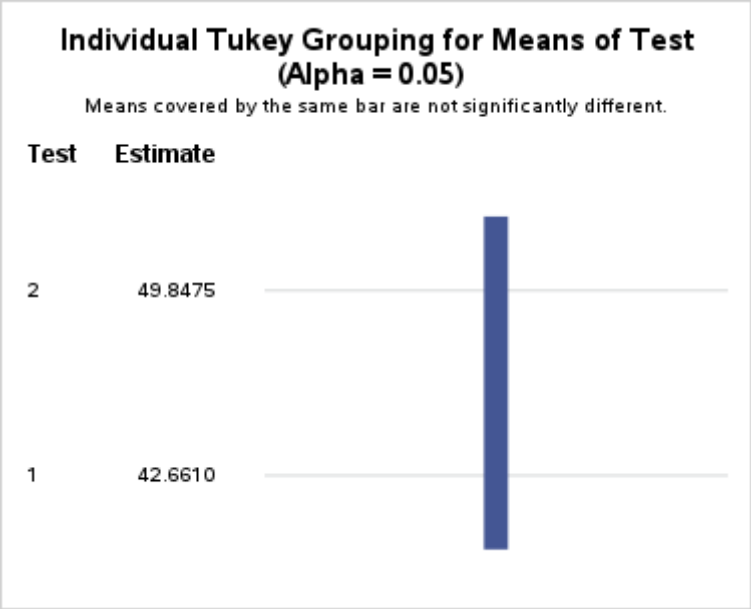
Fish sex and test effect on entries

The ANOVA Procedure

Tukey's Studentized Range (HSD) Test for Individual

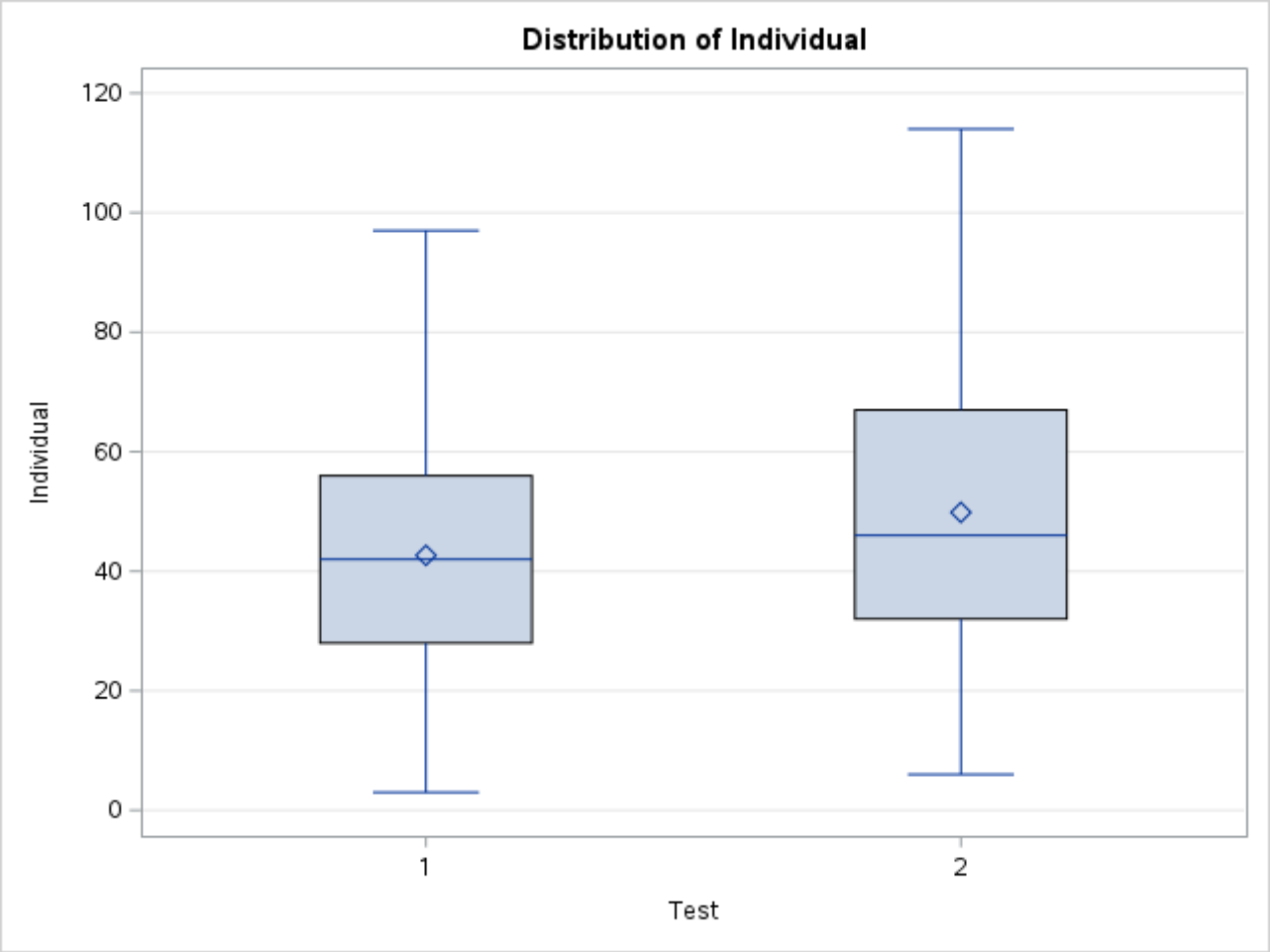
Note: This test controls the Type I experimentwise error rate, but it generally has a higher Type II error rate than REGWQ.

Alpha	0.05
Error Degrees of Freedom	116
Error Mean Square	537.059
Critical Value of Studentized Range	2.80103
Minimum Significant Difference	8.4509



Fish sex and test effect on entries

The ANOVA Procedure



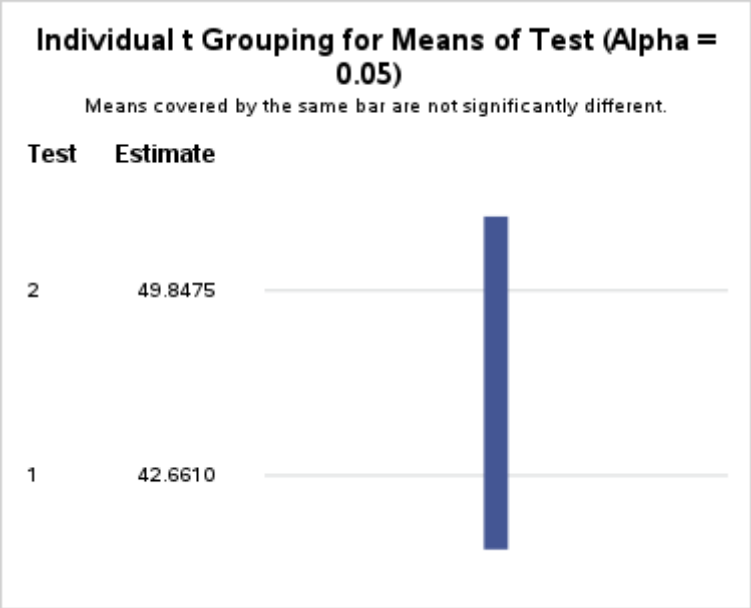
Fish sex and test effect on entries

The ANOVA Procedure

t Tests (LSD) for Individual

Note: This test controls the Type I comparisonwise error rate, not the experimentwise error rate.

Alpha	0.05
Error Degrees of Freedom	116
Error Mean Square	537.059
Critical Value of t	1.98063
Least Significant Difference	8.4509



Fish sex and test effect on time spent

The ANOVA Procedure

Class Level Information		
Class	Levels	Values
Test	2	1 2
Sex	1	Male

Number of Observations Read	118
Number of Observations Used	118

Fish sex and test effect on time spent

The ANOVA Procedure

Dependent Variable: Individual

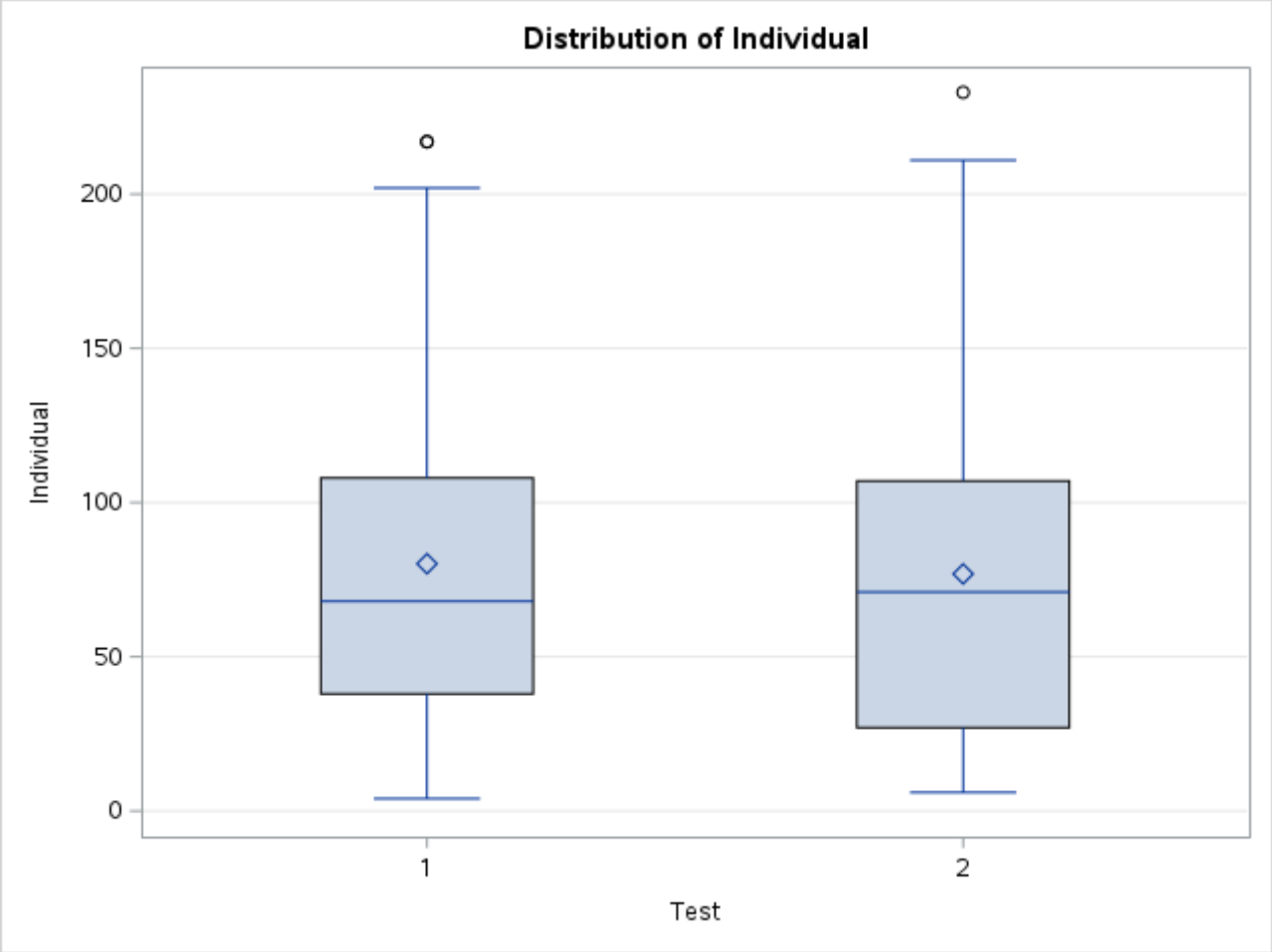
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	322.2458	322.2458	0.11	0.7423
Error	116	344089.2203	2966.2864		
Corrected Total	117	344411.4661			

R-Square	Coeff Var	Root MSE	Individual Mean
0.000936	69.36544	54.46362	78.51695

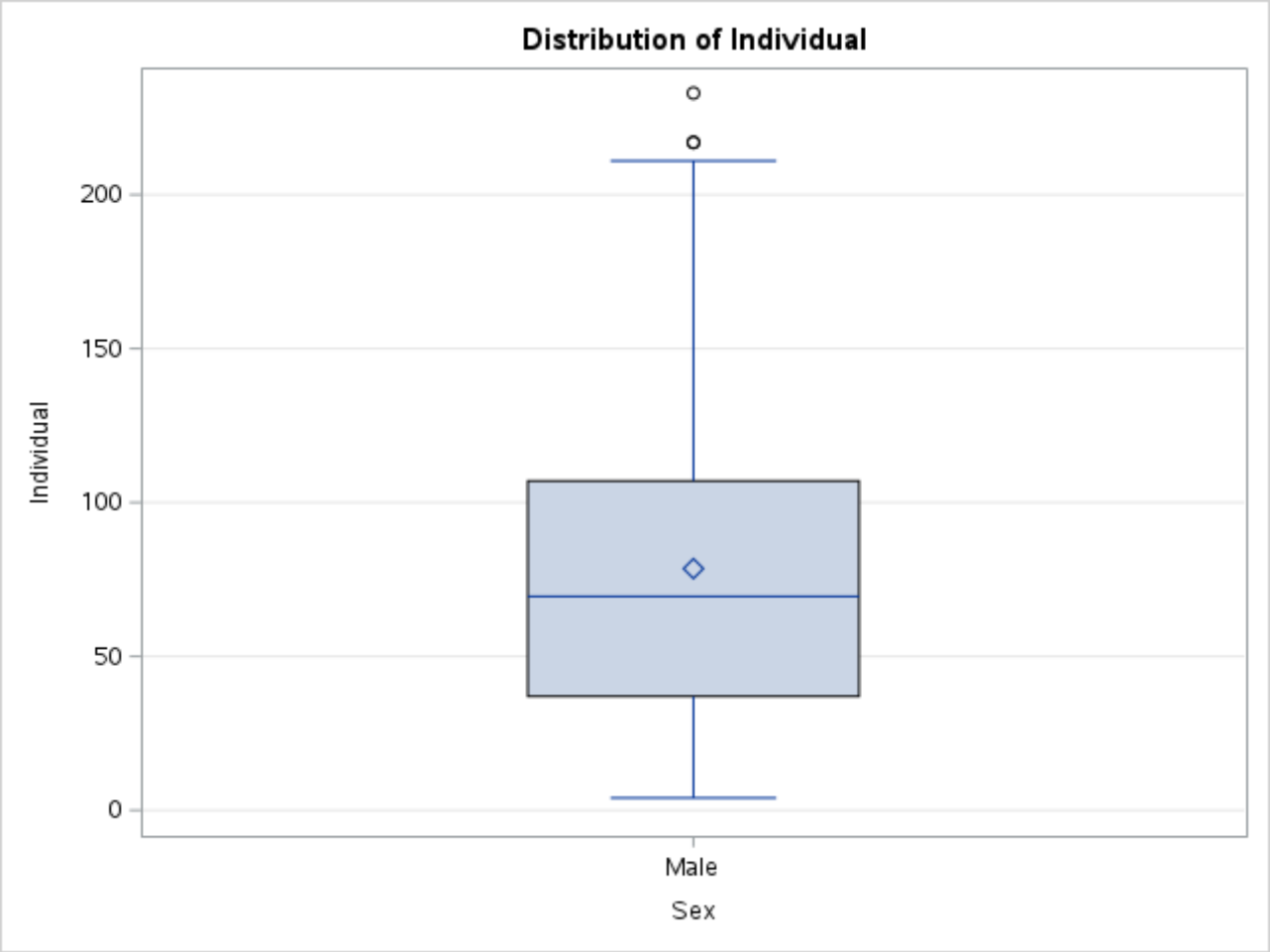
Source	DF	Anova SS	Mean Square	F Value	Pr > F
Test	1	322.2457627	322.2457627	0.11	0.7423
Sex	0	0.0000000	.	.	.
Test*Sex	0	0.0000000	.	.	.

Fish sex and test effect on time spent

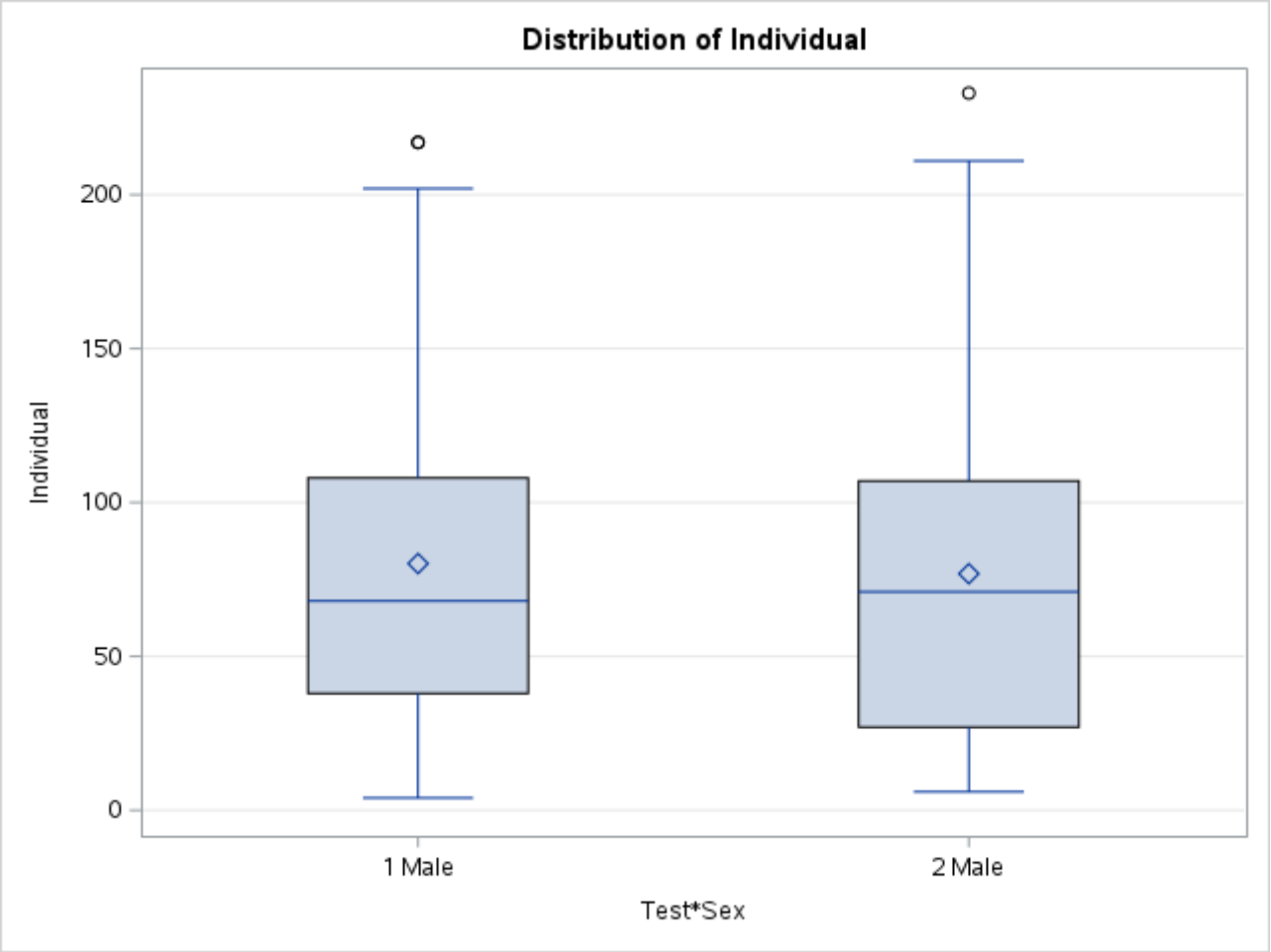
The ANOVA Procedure



Level of Test	N	Individual	
		Mean	Std Dev
1	59	80.1694915	54.5470858
2	59	76.8644068	54.3800349



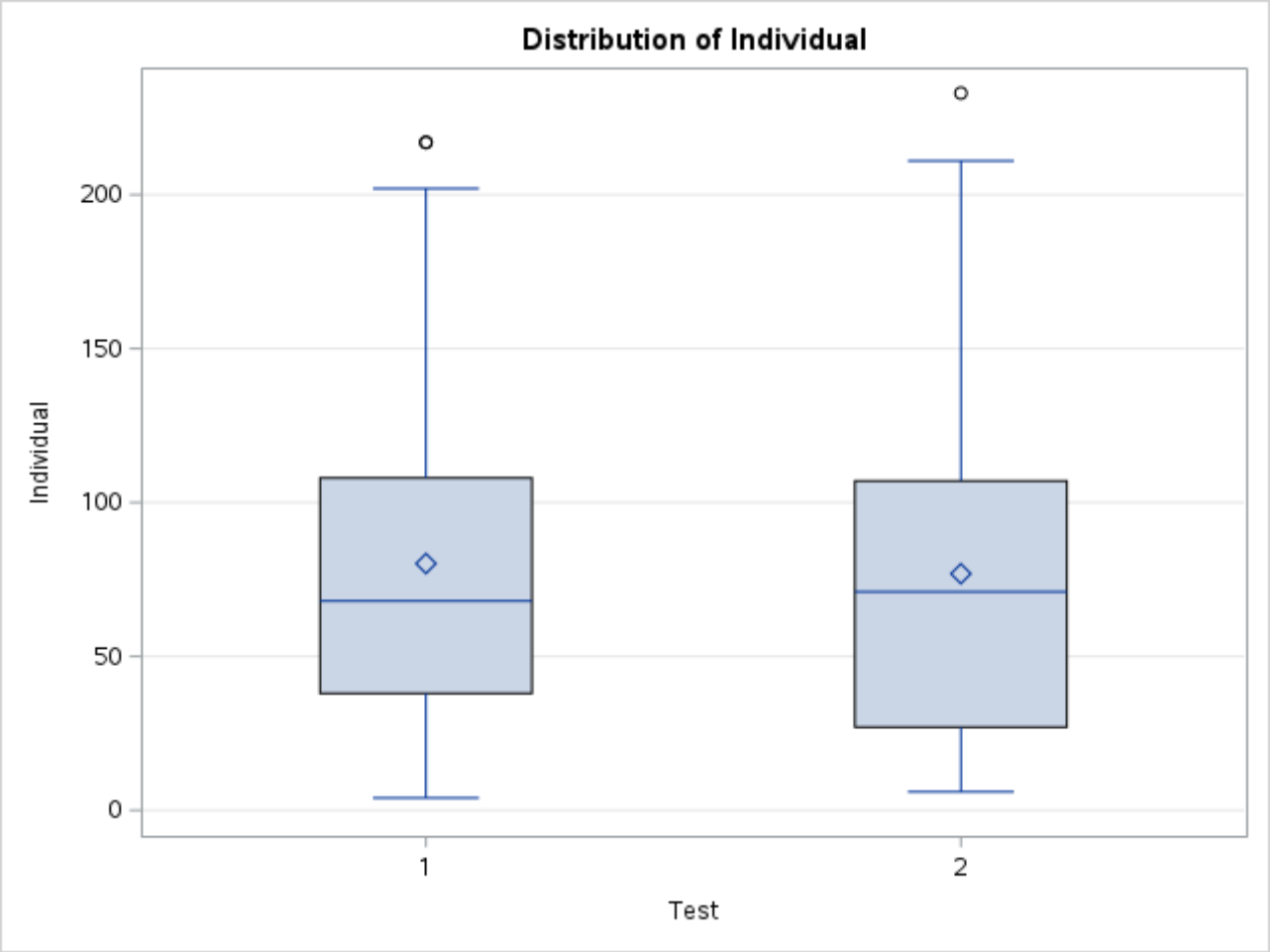
Level of Sex	N	Individual	
		Mean	Std Dev
Male	118	78.5169492	54.2557623



Level of Test	Level of Sex	N	Individual	
			Mean	Std Dev
1	Male	59	80.1694915	54.5470858
2	Male	59	76.8644068	54.3800349

Fish sex and test effect on time spent

The ANOVA Procedure



Fish sex and test effect on time spent

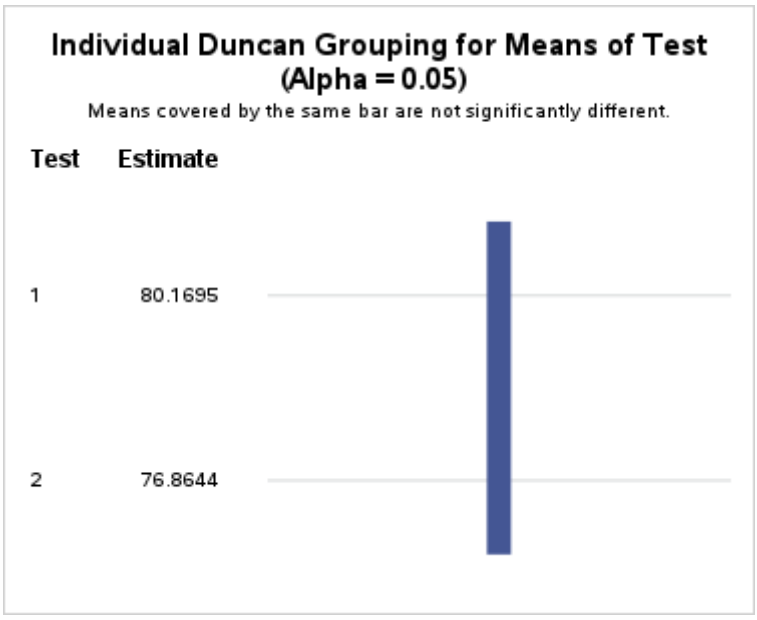
The ANOVA Procedure

Duncan's Multiple Range Test for Individual

Note: This test controls the Type I comparisonwise error rate, not the experimentwise error rate.

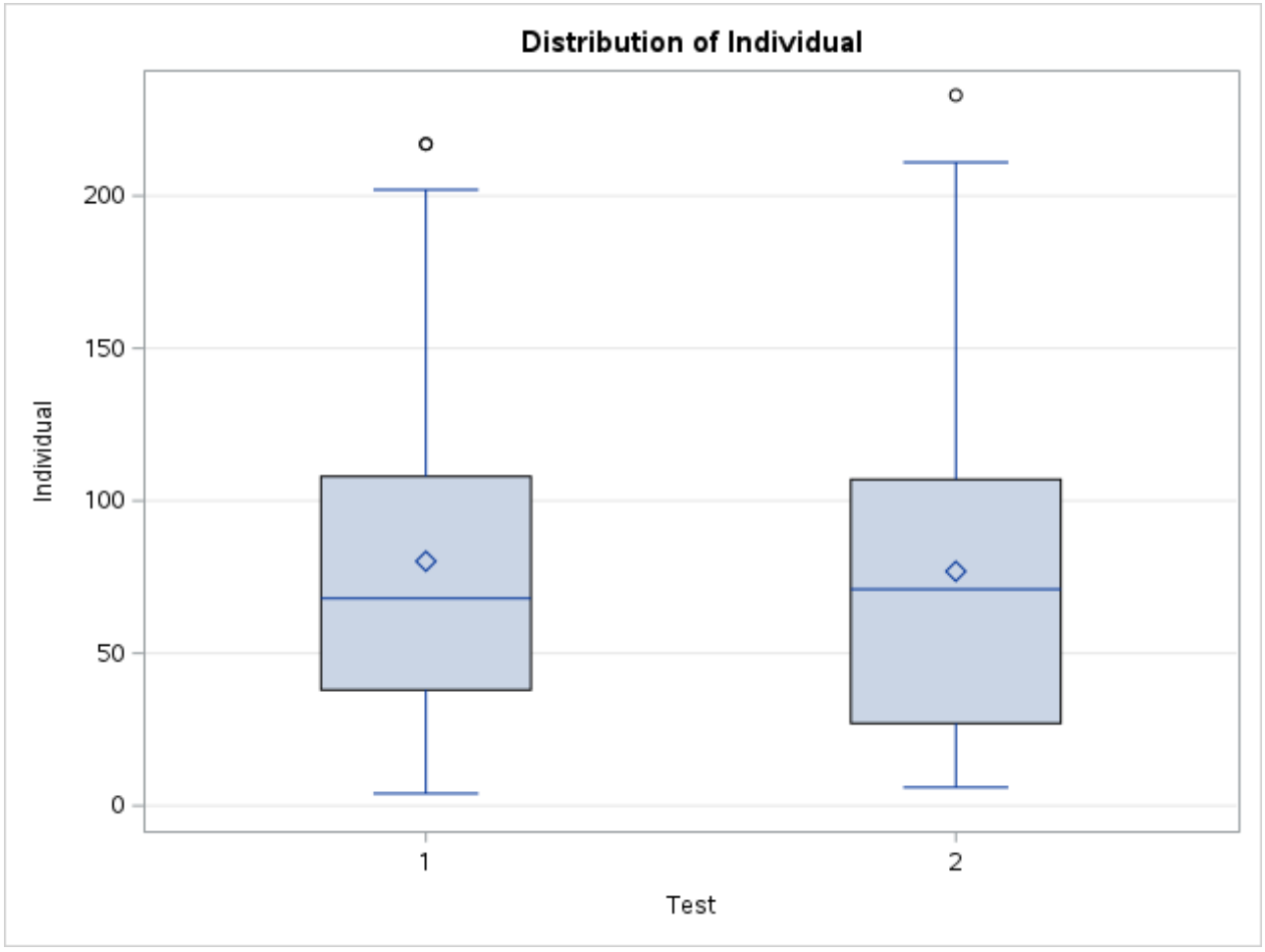
Alpha	0.05
Error Degrees of Freedom	116
Error Mean Square	2966.286

Number of Means	**2**
Critical Range	19.86



Fish sex and test effect on time spent

The ANOVA Procedure



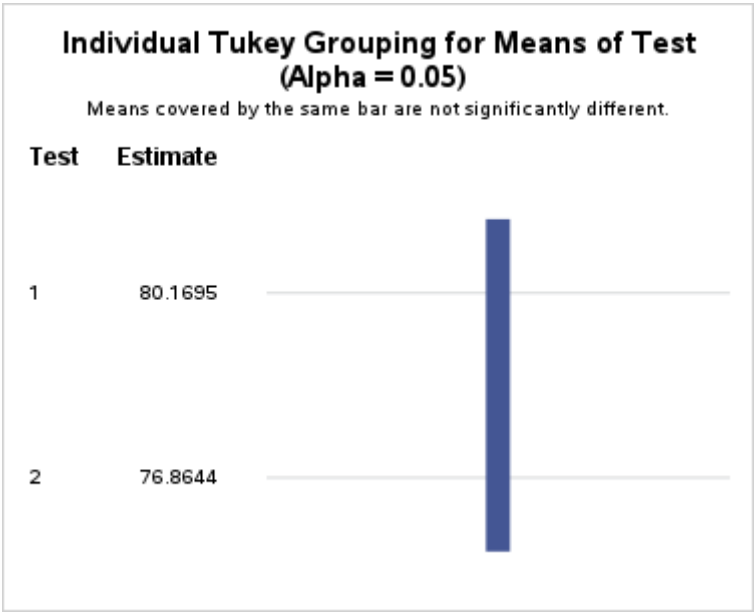
Fish sex and test effect on time spent

The ANOVA Procedure

Tukey's Studentized Range (HSD) Test for Individual

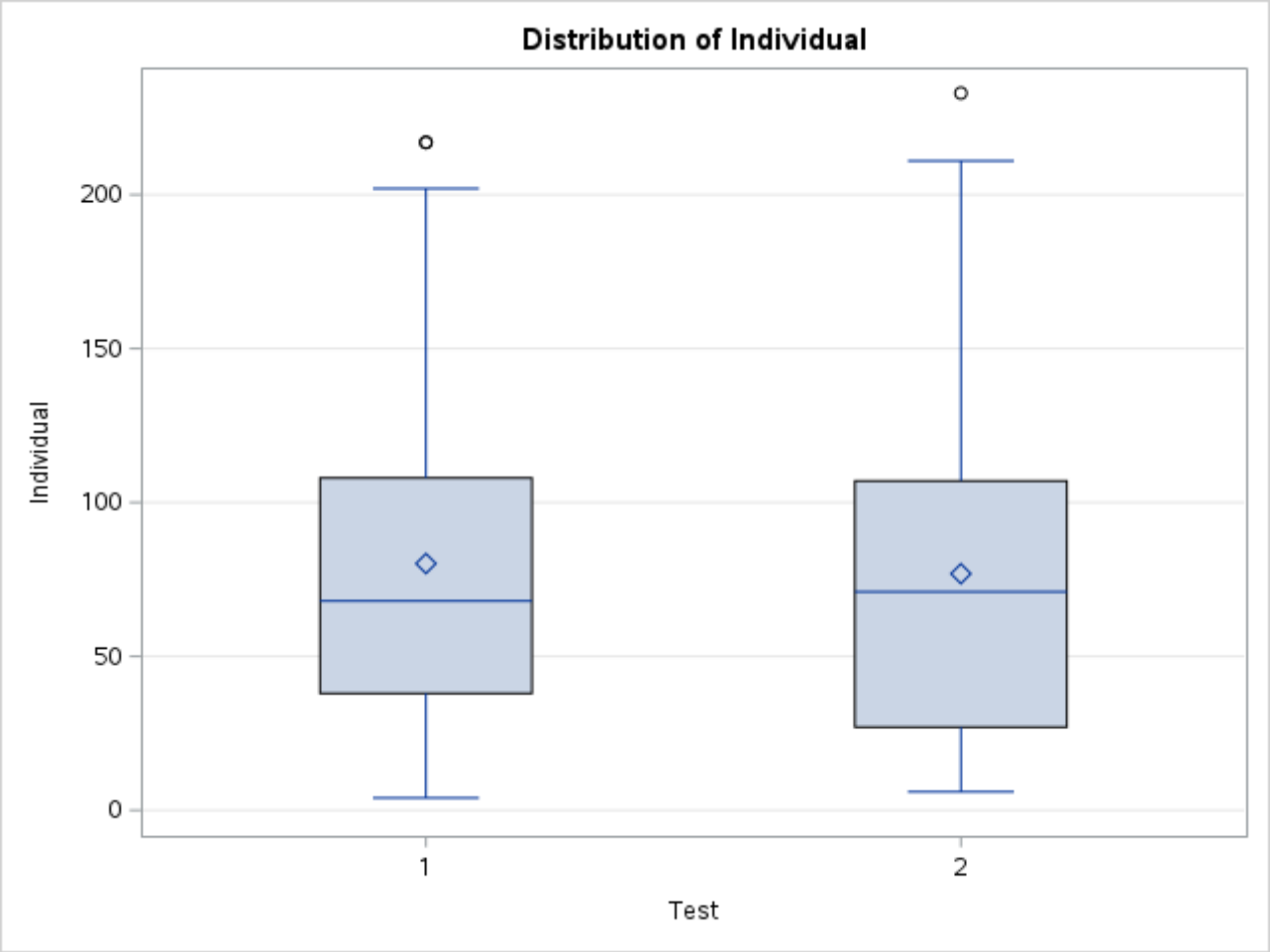
Note: This test controls the Type I experimentwise error rate, but it generally has a higher Type II error rate than REGWQ.

Alpha	0.05
Error Degrees of Freedom	116
Error Mean Square	2966.286
Critical Value of Studentized Range	2.80103
Minimum Significant Difference	19.861



Fish sex and test effect on time spent

The ANOVA Procedure



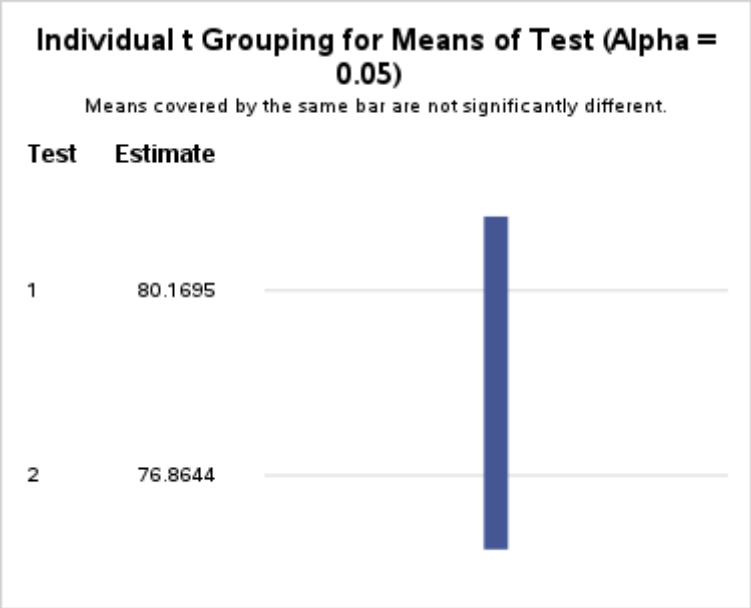
Fish sex and test effect on time spent

The ANOVA Procedure

t Tests (LSD) for Individual

Note: This test controls the Type I comparisonwise error rate, not the experimentwise error rate.

Alpha	0.05
Error Degrees of Freedom	116
Error Mean Square	2966.286
Critical Value of t	1.98063
Least Significant Difference	19.861



GLM procedures: Fish sex and test effect on line crossed

The GLM Procedure

Class Level Information		
Class	**Levels**	**Values**
Test	2	1 2
Sex	2	Female Male

Number of Observations Read	238
Number of Observations Used	238

GLM procedures: Fish sex and test effect on line crossed

The GLM Procedure

Dependent Variable: Individual

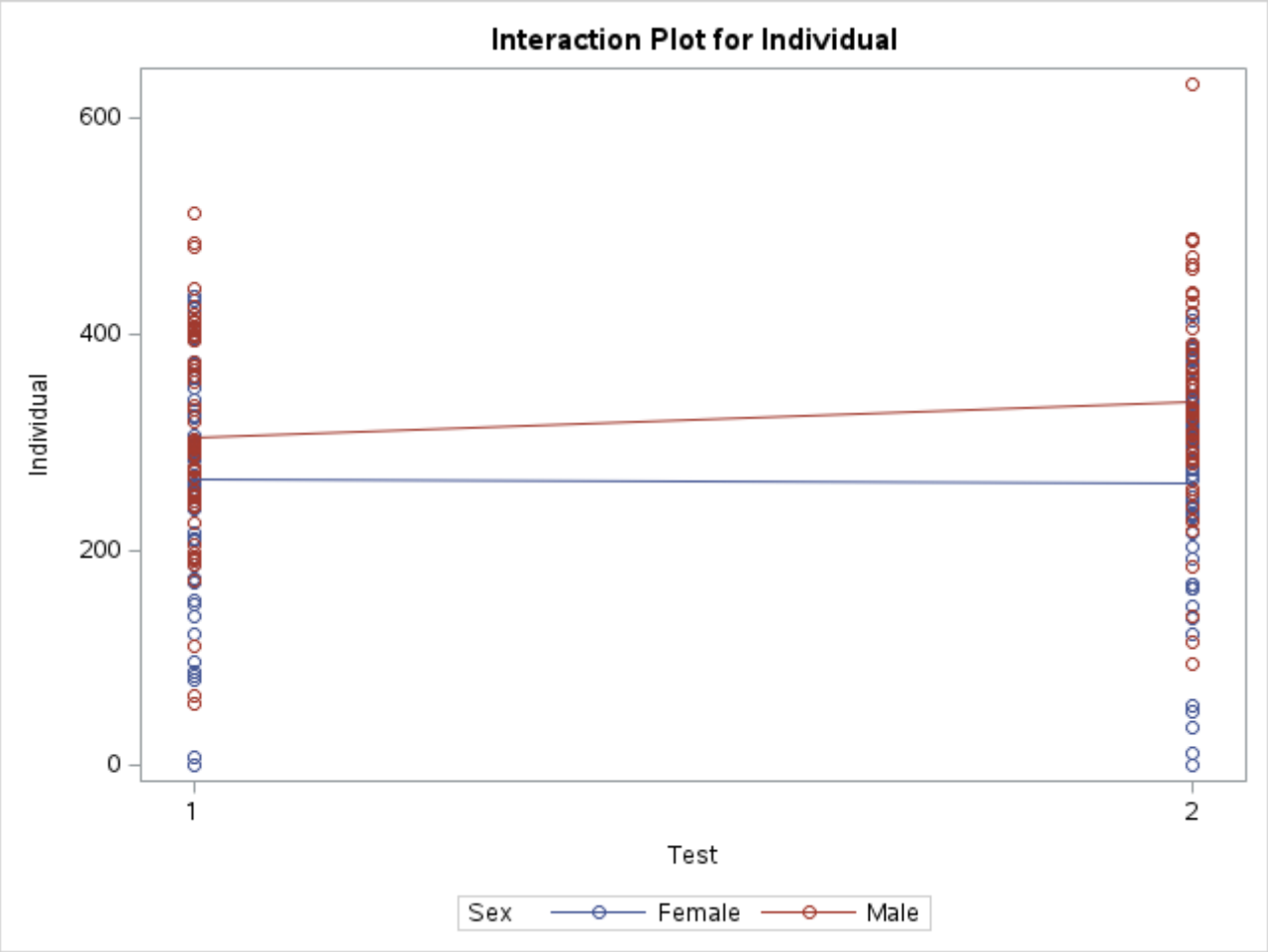
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	227590.305	75863.435	7.48	<.0001
Error	234	2374652.473	10148.087		
Corrected Total	237	2602242.777			

R-Square	Coeff Var	Root MSE	Individual Mean
0.087459	34.46005	100.7377	292.3319

Source	DF	Type I SS	Mean Square	F Value	Pr > F
Test	1	12502.6261	12502.6261	1.23	0.2682
Sex	1	195310.1811	195310.1811	19.25	<.0001
Test*Sex	1	19777.4975	19777.4975	1.95	0.1640

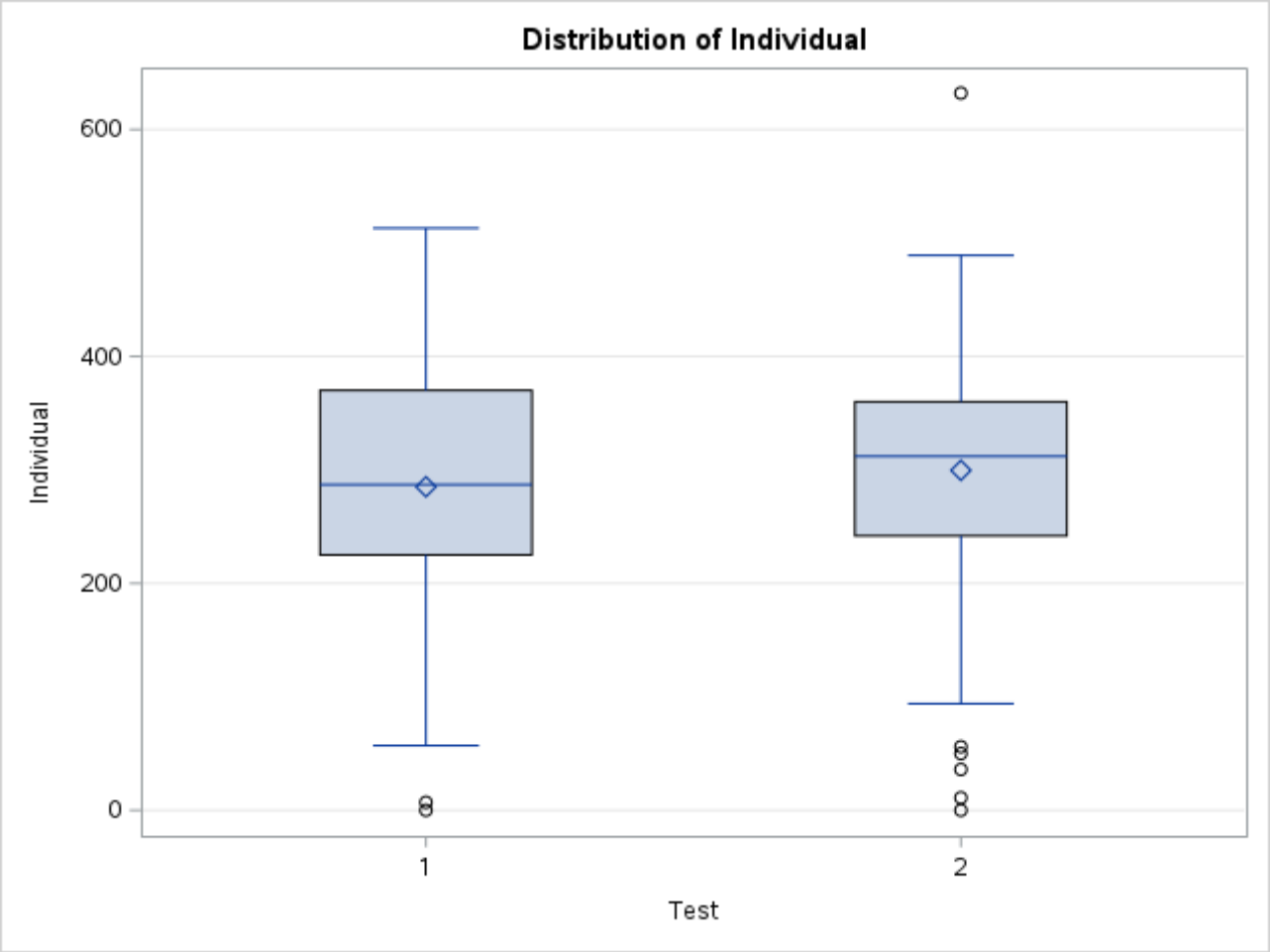
Source	DF	Type III SS	Mean Square	F Value	Pr > F

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Test	1	12767.4135	12767.4135	1.26	0.2632
Sex	1	195310.1811	195310.1811	19.25	<.0001
Test*Sex	1	19777.4975	19777.4975	1.95	0.1640

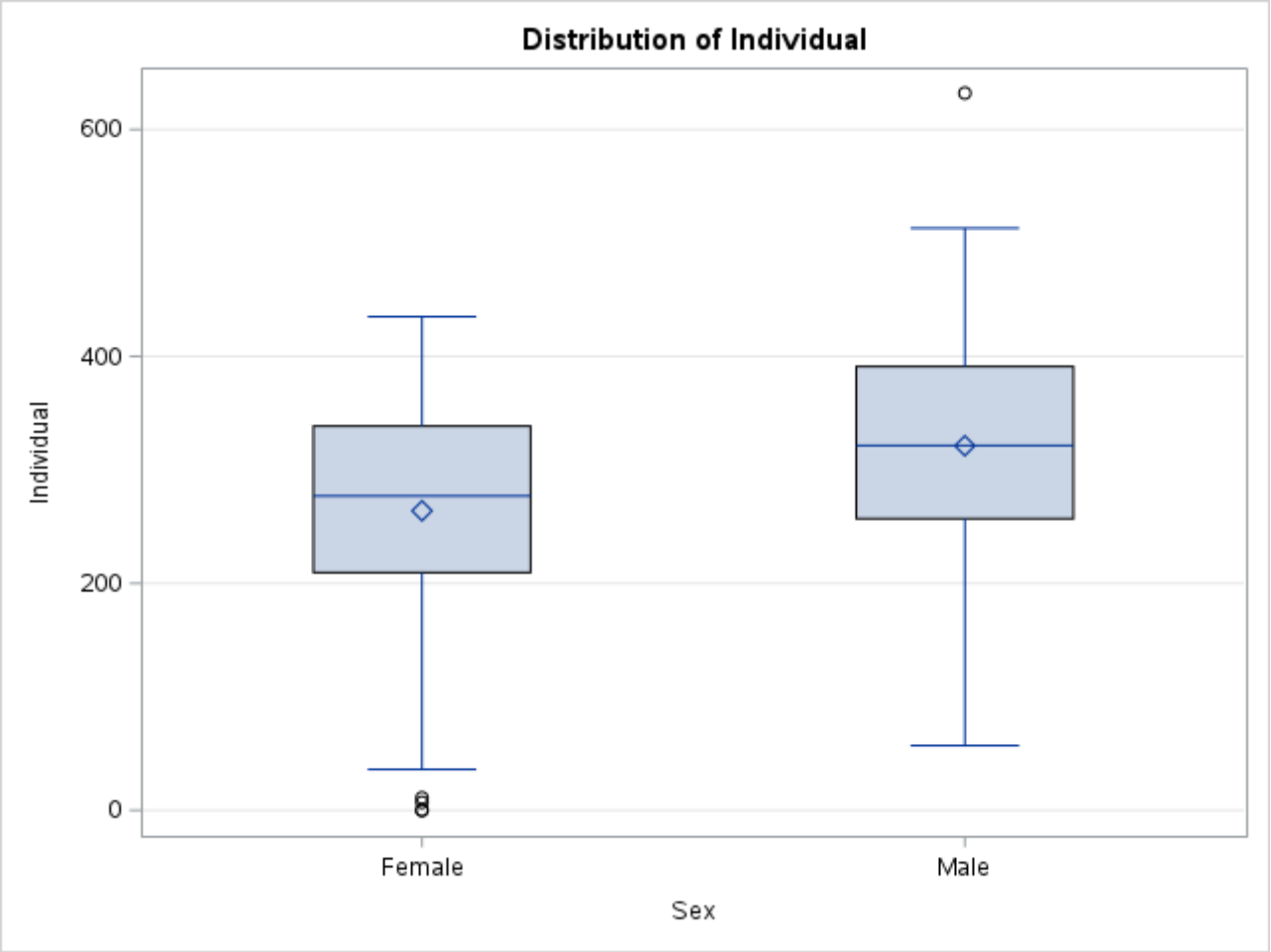


GLM procedures: Fish sex and test effect on line crossed

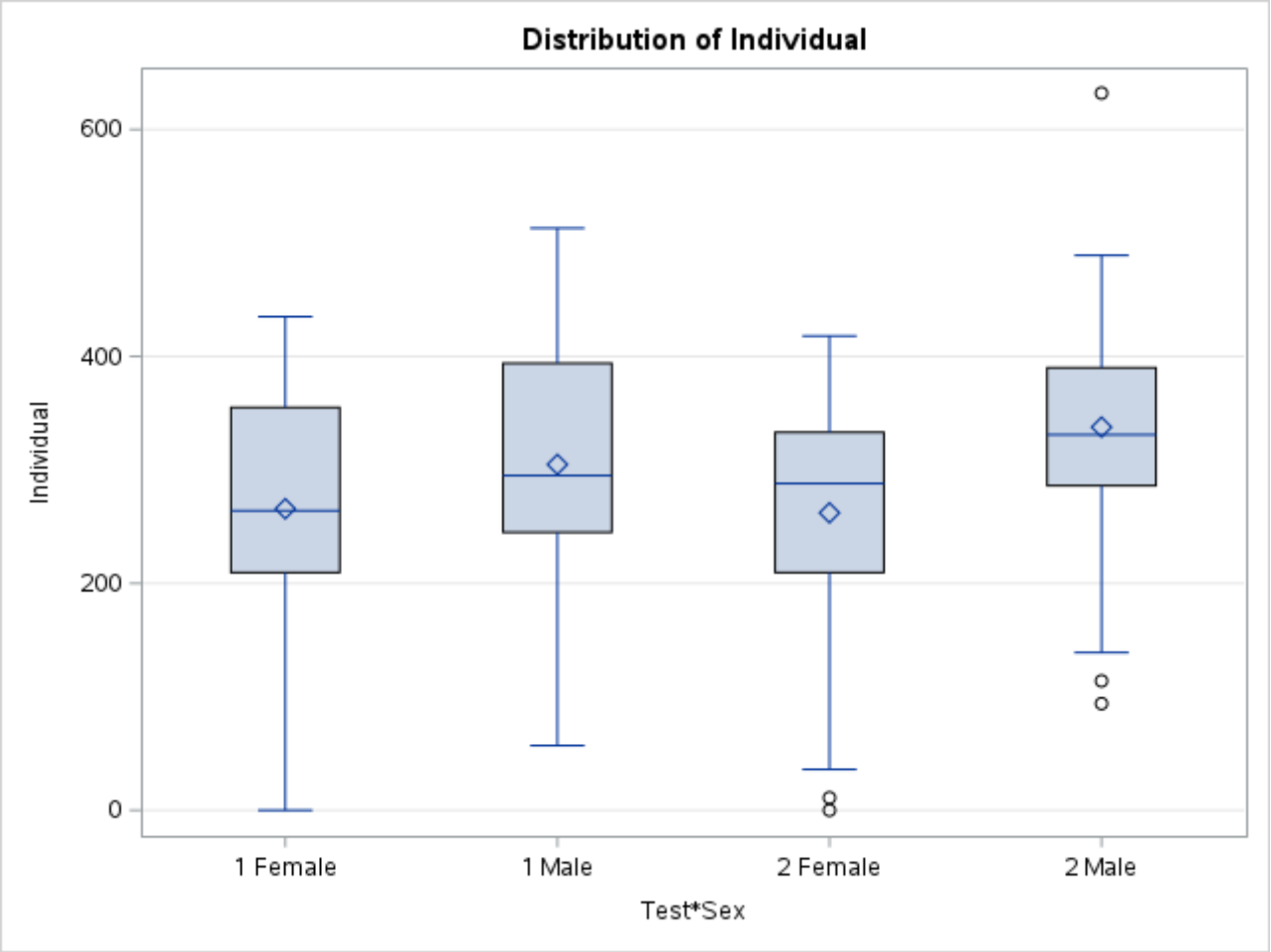
The GLM Procedure



Level of Test	N	Individual	
		Mean	Std Dev
1	119	285.084034	104.346926
2	119	299.579832	105.160208



Level of Sex	N	Individual	
		Mean	Std Dev
Female	120	263.925000	102.920314
Male	118	321.220339	98.986931



Level of Test	Level of Sex	N	Individual	
			Mean	Std Dev
1	Female	60	265.716667	106.234804
1	Male	59	304.779661	99.443290
2	Female	60	262.133333	100.361122
2	Male	59	337.661017	96.575789

GLM procedures: Fish sex and test effect on entries

The GLM Procedure

Class Level Information		
Class	Levels	Values
Test	2	1 2
Sex	2	Female Male

Number of Observations Read	238
Number of Observations Used	238

GLM procedures: Fish sex and test effect on entries

The GLM Procedure

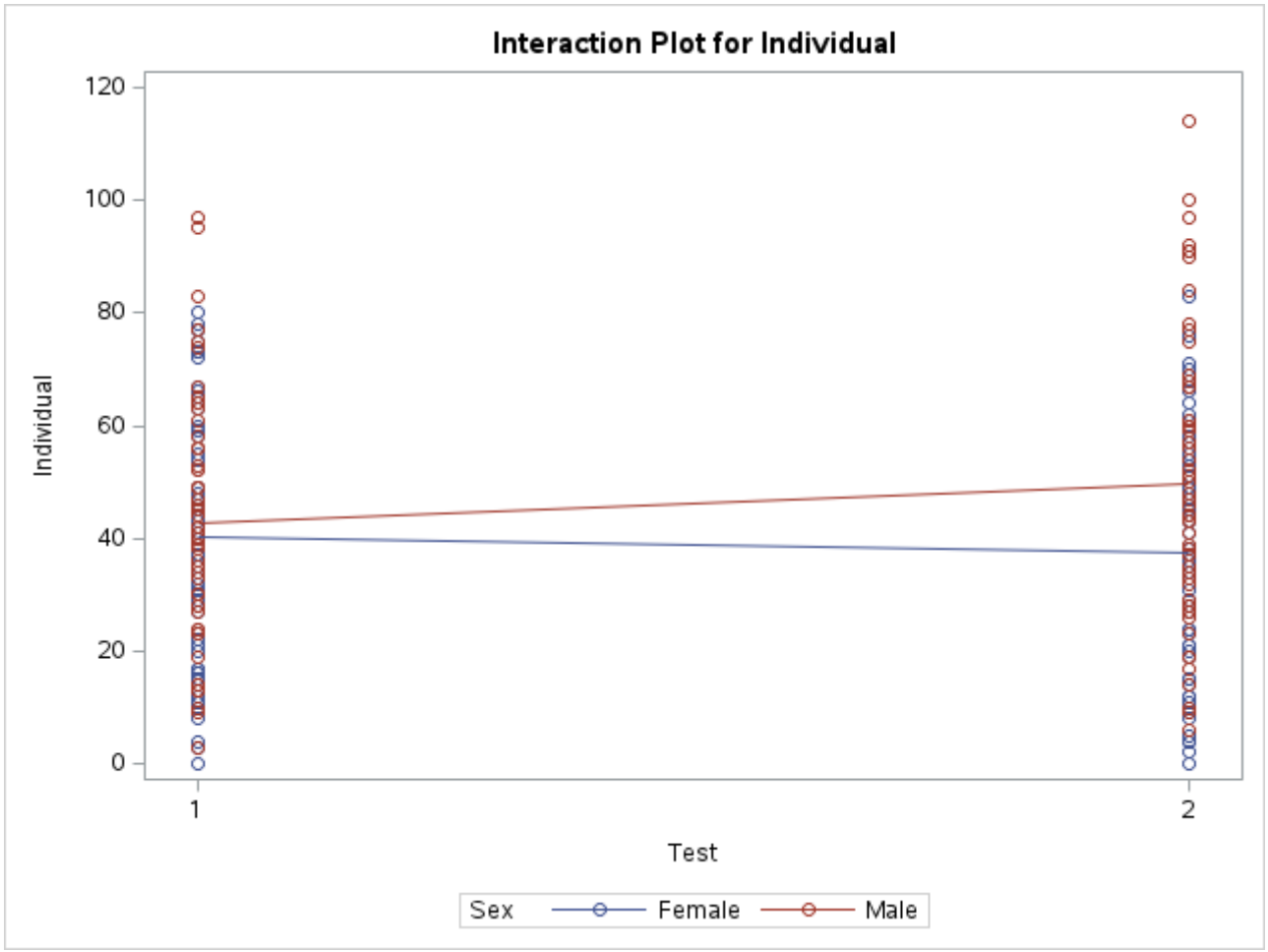
Dependent Variable: Individual

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	5112.7353	1704.2451	3.35	0.0197
Error	234	118982.6975	508.4731		
Corrected Total	237	124095.4328			

R-Square	Coeff Var	Root MSE	Individual Mean
0.041200	53.07828	22.54935	42.48319

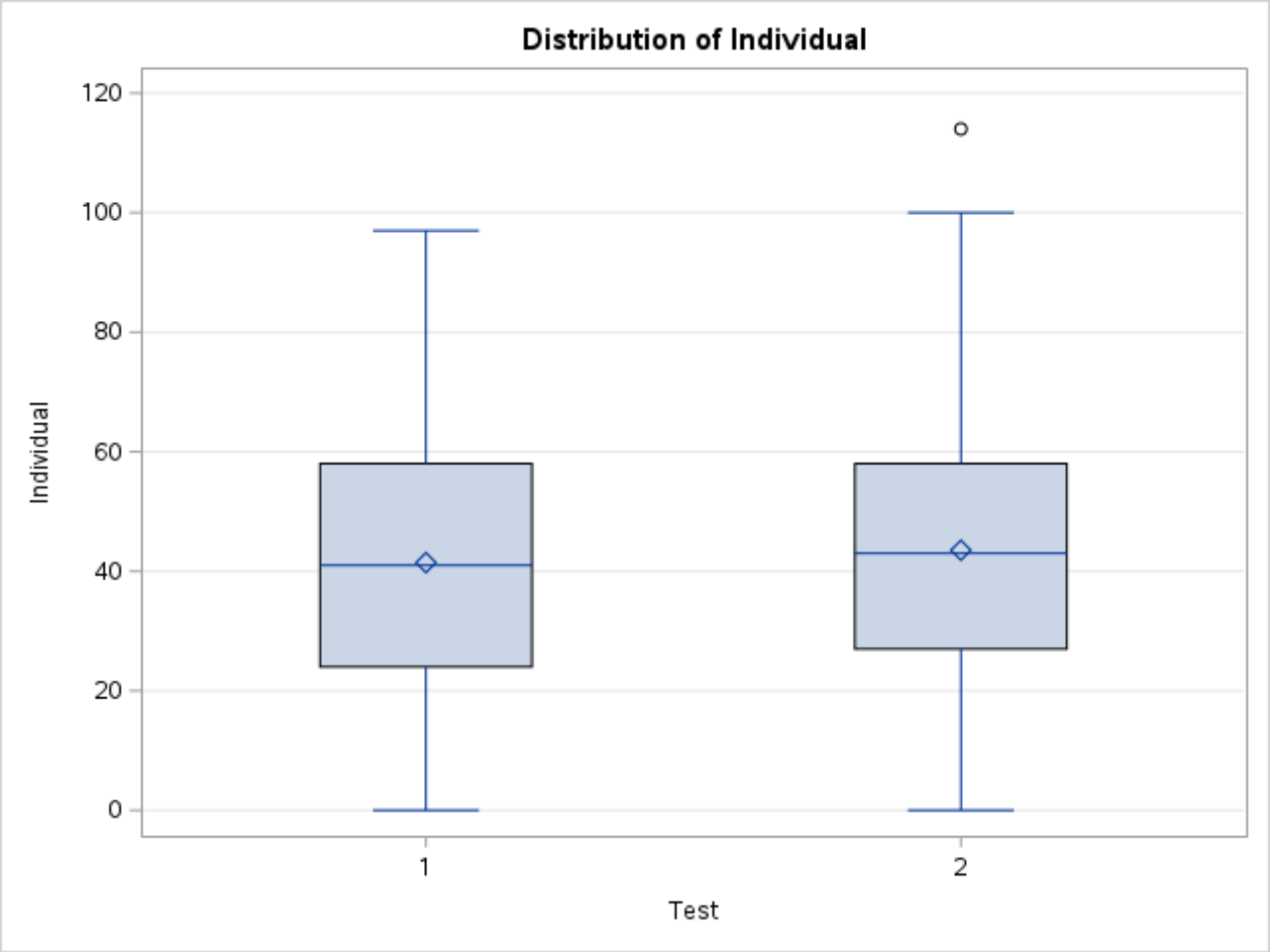
Source	DF	Type I SS	Mean Square	F Value	Pr > F
Test	1	256.340336	256.340336	0.50	0.4784
Sex	1	3328.134892	3328.134892	6.55	0.0111
Test*Sex	1	1528.260088	1528.260088	3.01	0.0843

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Test	1	266.949163	266.949163	0.53	0.4694
Sex	1	3328.134892	3328.134892	6.55	0.0111
Test*Sex	1	1528.260088	1528.260088	3.01	0.0843

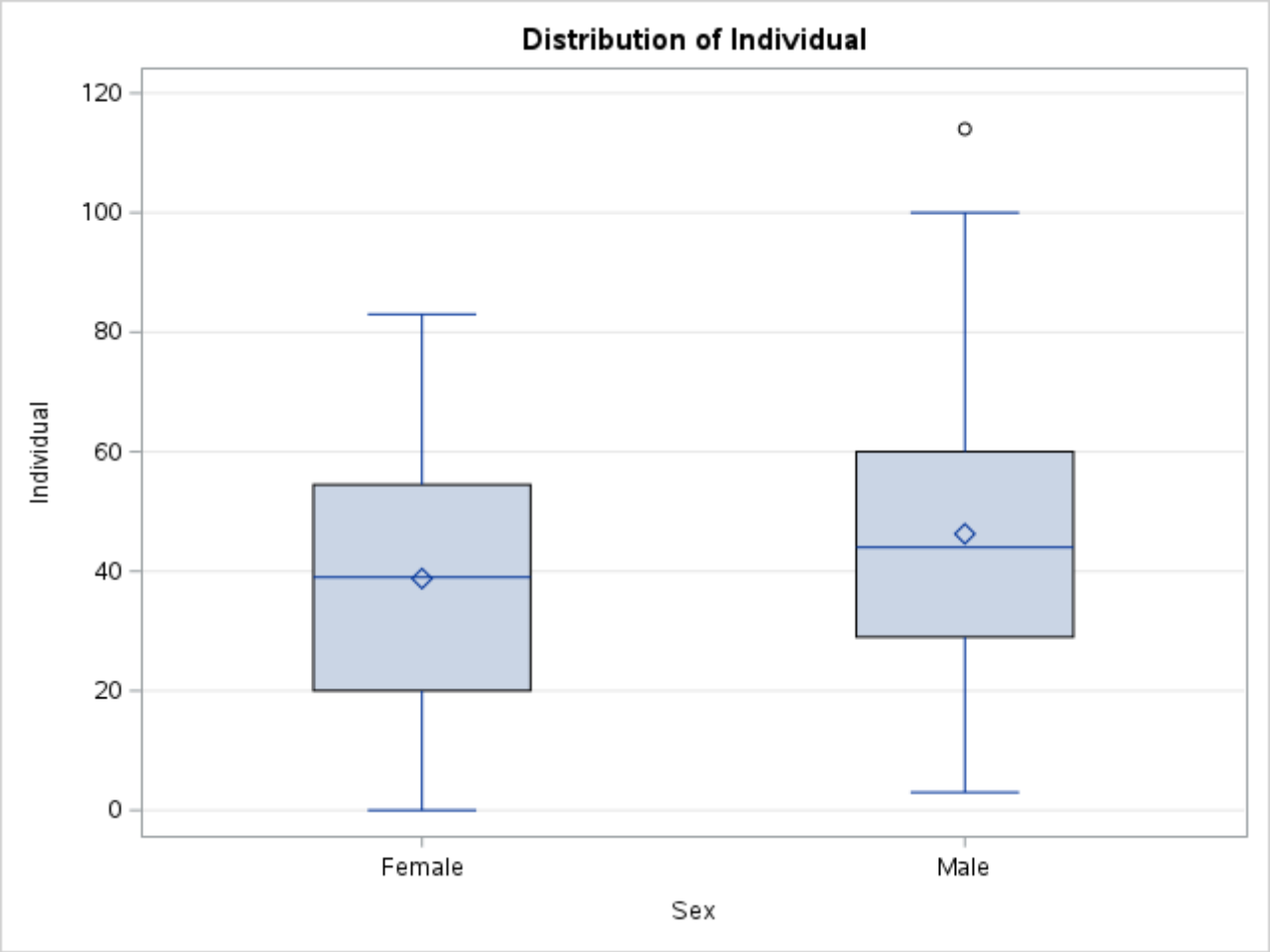


GLM procedures: Fish sex and test effect on entries

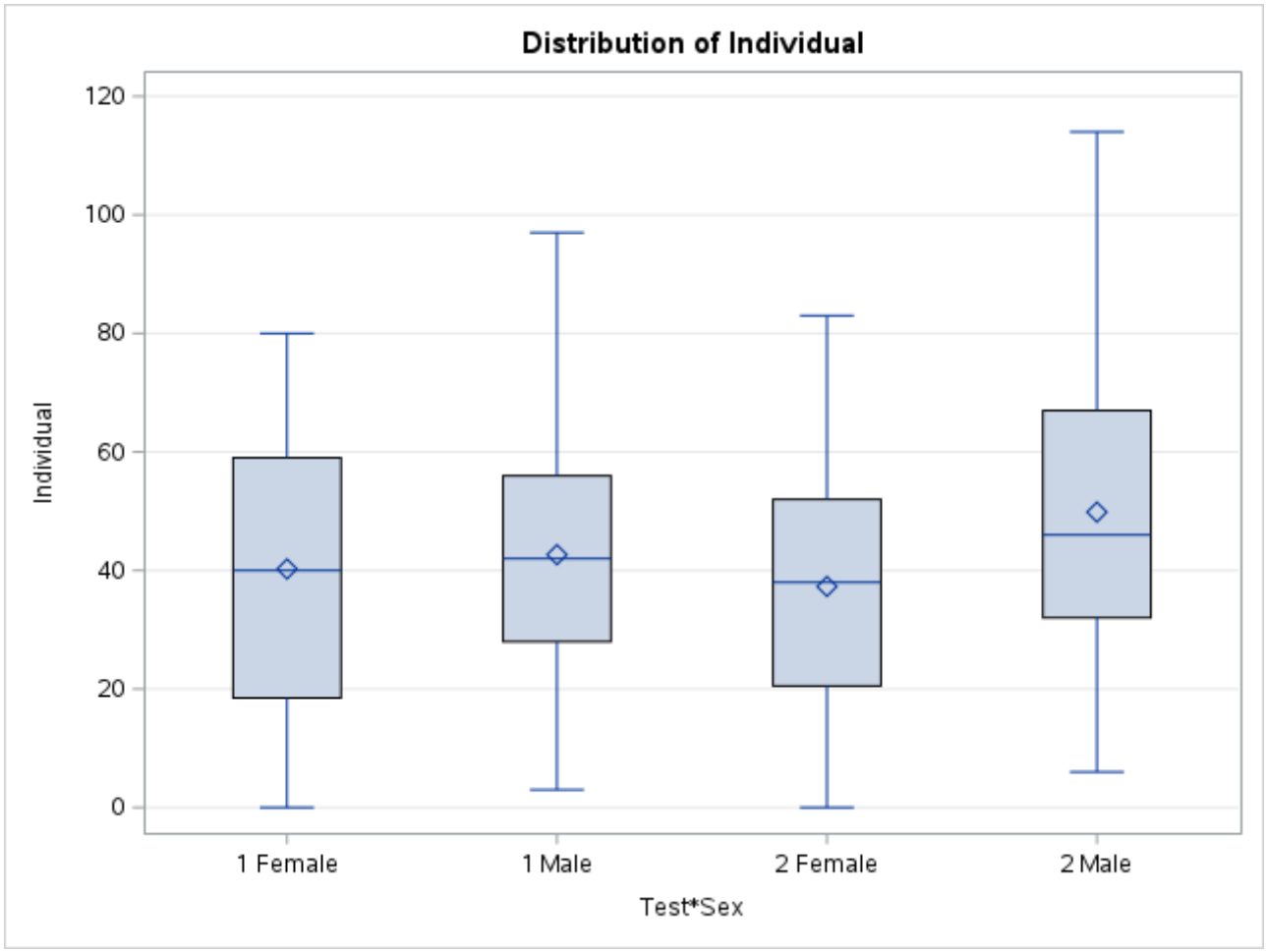
The GLM Procedure



Level of Test	N	Individual	
		Mean	Std Dev
1	119	41.4453782	21.9786867
2	119	43.5210084	23.7996043



Level of Sex	N	Individual	
		Mean	Std Dev
Female	120	38.7750000	21.8753007
Male	118	46.2542373	23.3557352



Level of Test	Level of Sex	N	Individual	
			Mean	Std Dev
1	Female	60	40.2500000	22.8299721
1	Male	59	42.6610169	21.2039441
2	Female	60	37.3000000	20.9651042
2	Male	59	49.8474576	24.9902143

GLM procedures: Fish sex and test effect on time spent

The GLM Procedure

Class Level Information		
Class	Levels	Values
Test	2	1 2
Sex	2	Female Male

Number of Observations Read	238
Number of Observations Used	238

GLM procedures: Fish sex and test effect on time spent

The GLM Procedure

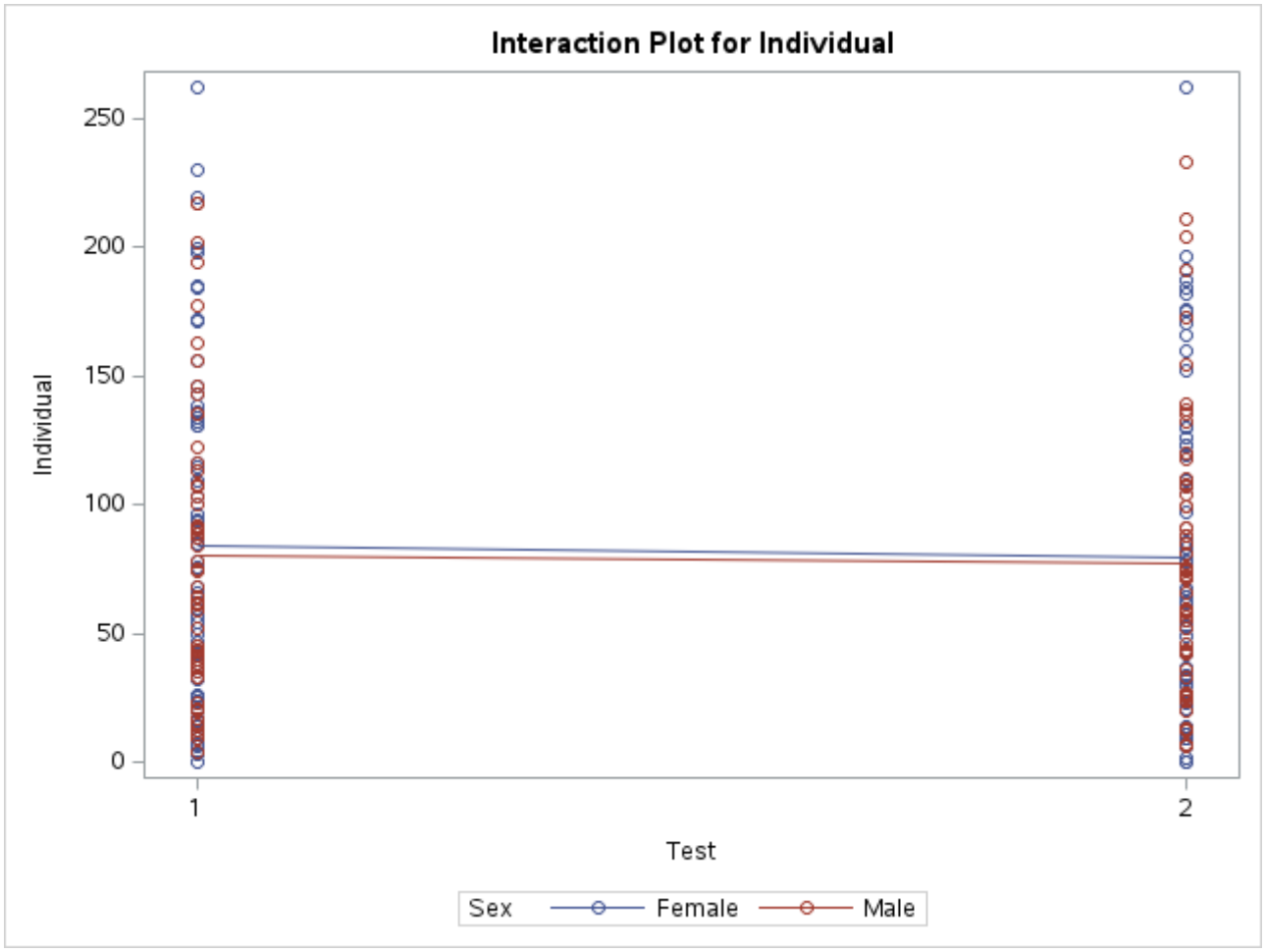
Dependent Variable: Individual

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	1524.9326	508.3109	0.14	0.9368
Error	234	857446.9203	3664.3031		
Corrected Total	237	858971.8529			

R-Square	Coeff Var	Root MSE	Individual Mean
0.001775	75.52802	60.53349	80.14706

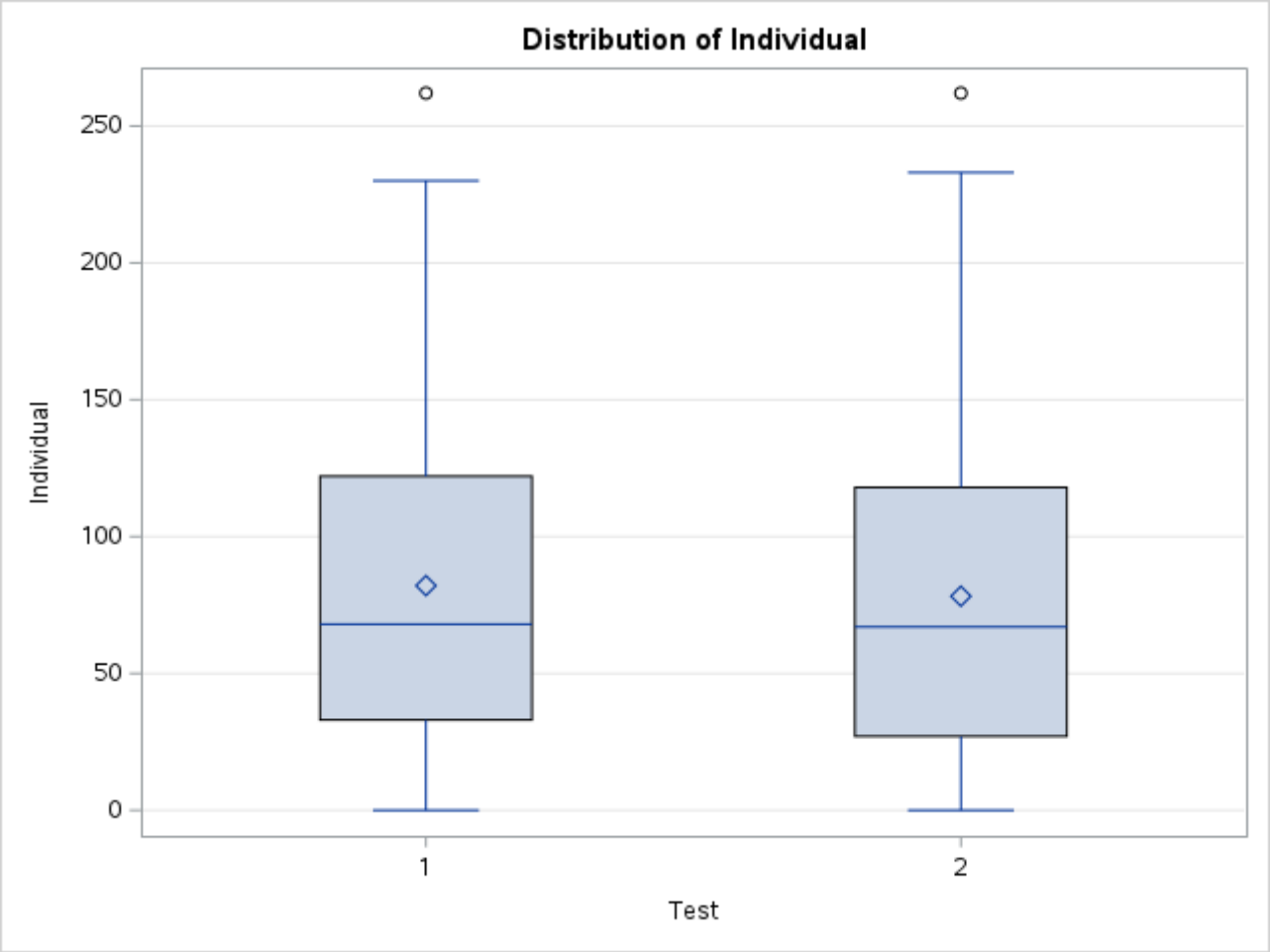
Source	DF	Type I SS	Mean Square	F Value	Pr > F
Test	1	885.2142857	885.2142857	0.24	0.6235
Sex	1	621.8868395	621.8868395	0.17	0.6807
Test*Sex	1	17.8314770	17.8314770	0.00	0.9444

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Test	1	883.0415610	883.0415610	0.24	0.6240
Sex	1	621.8868395	621.8868395	0.17	0.6807
Test*Sex	1	17.8314770	17.8314770	0.00	0.9444

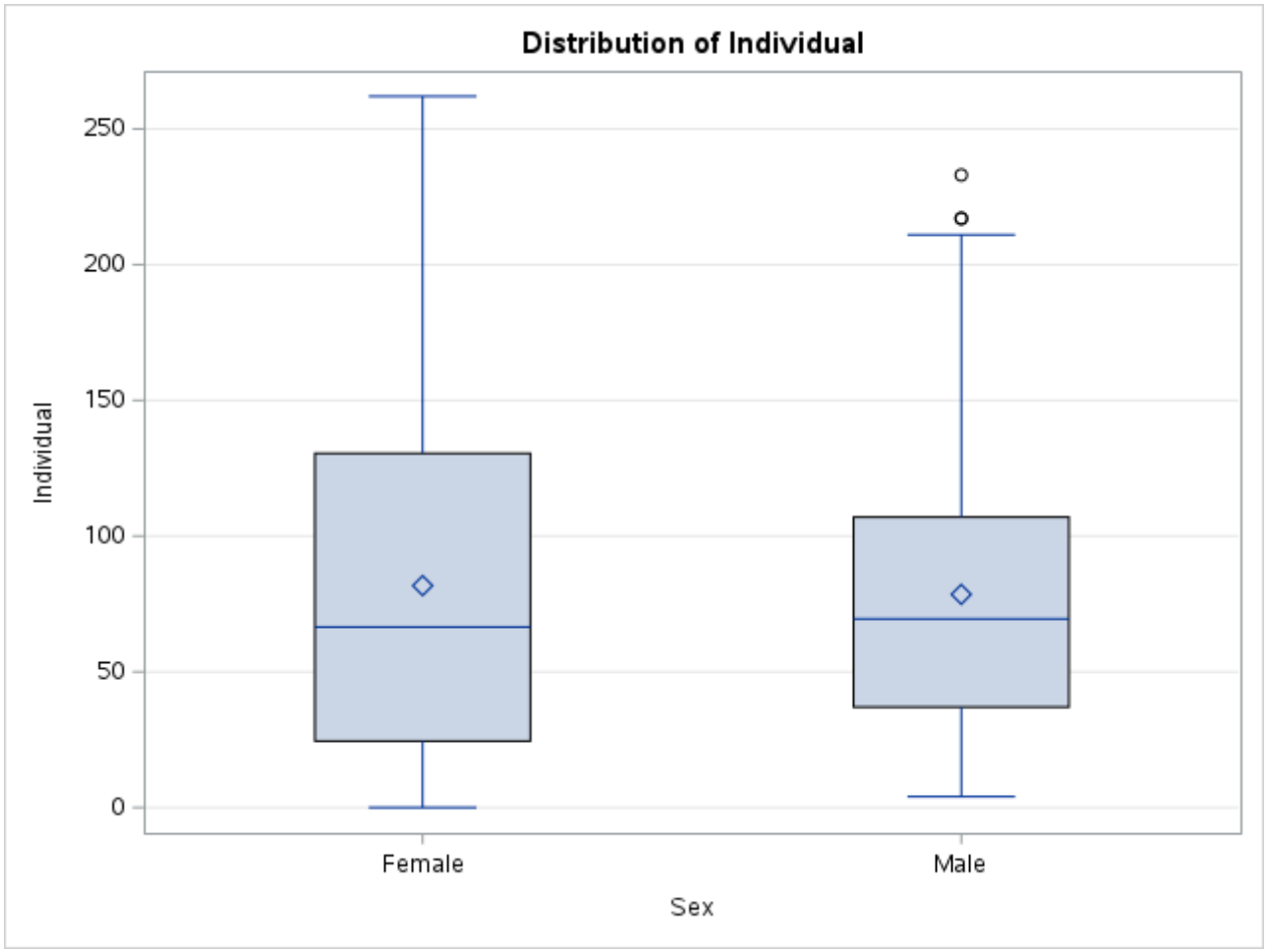


GLM procedures: Fish sex and test effect on time spent

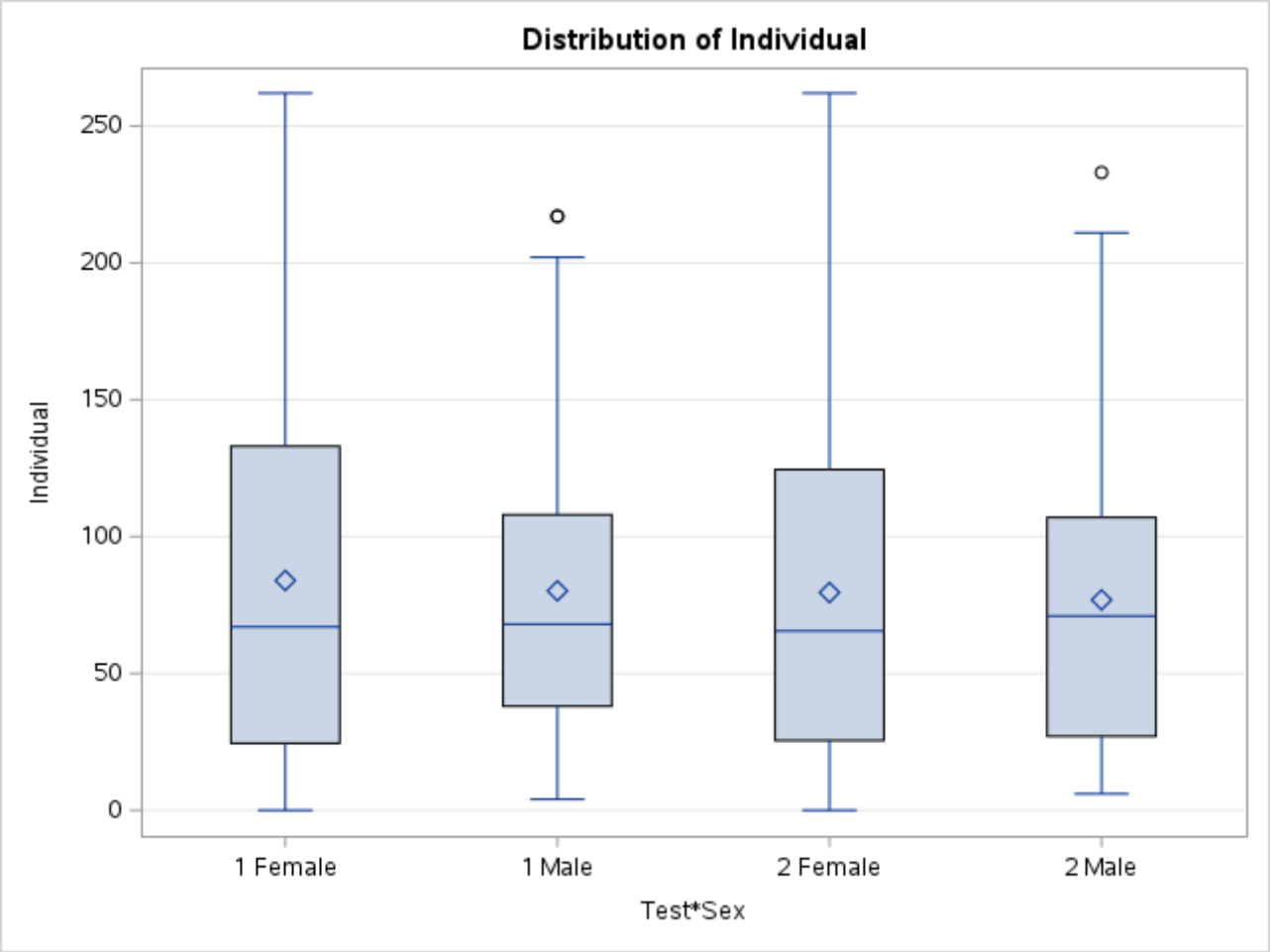
The GLM Procedure



Level of Test	N	Individual	
		Mean	Std Dev
1	119	82.0756303	61.1127271
2	119	78.2184874	59.4739880



Level of Sex	N	Individual	
		Mean	Std Dev
Female	120	81.7500000	65.7176607
Male	118	78.5169492	54.2557623



Level of Test	Level of Sex	N	Individual	
			Mean	Std Dev
1	Female	60	83.9500000	67.3600055
1	Male	59	80.1694915	54.5470858
2	Female	60	79.5500000	64.5260229
2	Male	59	76.8644068	54.3800349