The ANOVA Procedure

Class Level Information		
Class	**Levels**	**Values**
AgeGroup	4	Early_Middle_Age Late_Middle_Age Senior Young

Number of Observations Read	366
Number of Observations Used	366

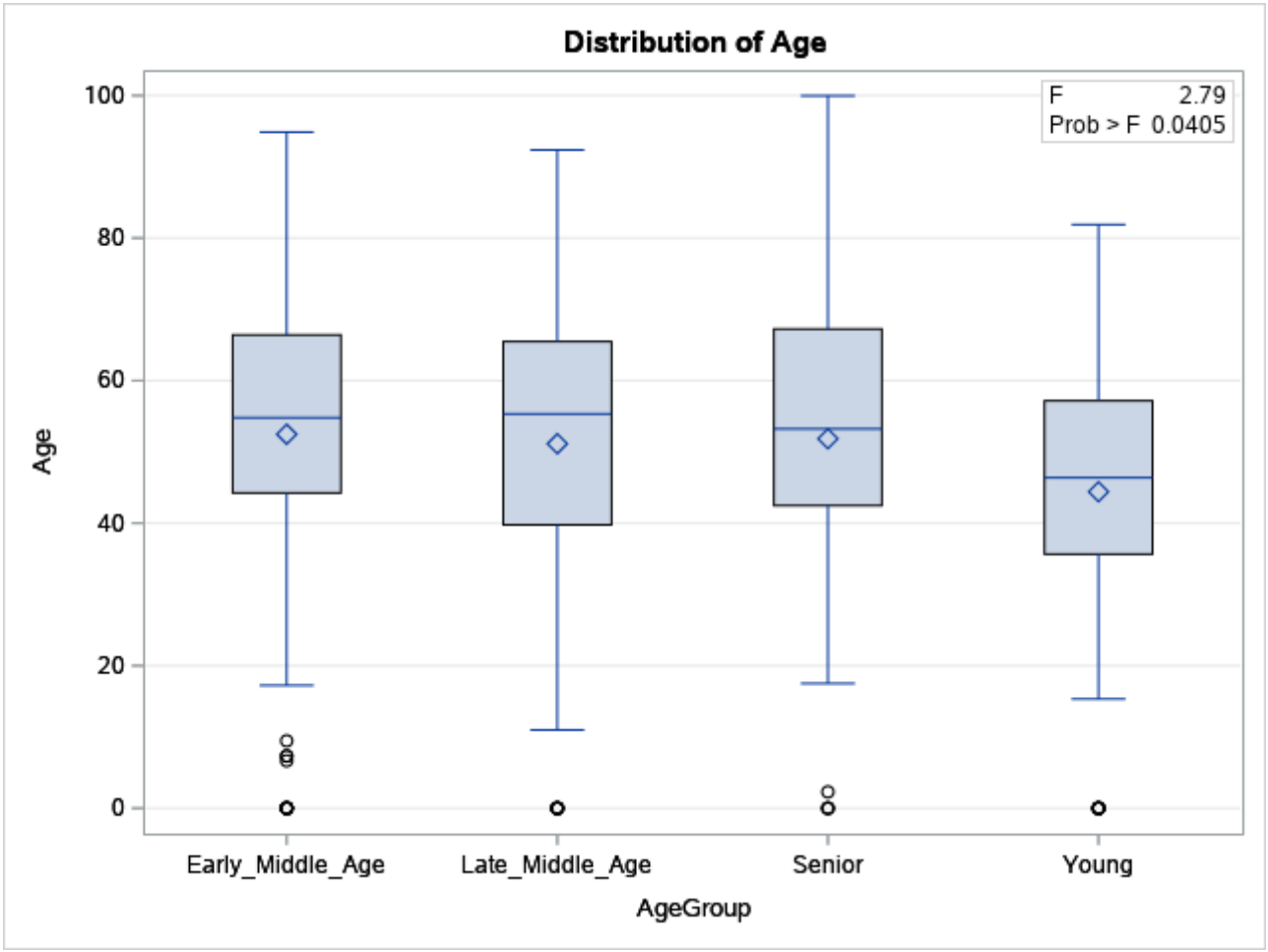
The ANOVA Procedure

Dependent Variable: Age Age

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	3741.3636	1247.1212	2.79	0.0405
Error	362	161870.9817	447.1574		
Corrected Total	365	165612.3453			

R-Square	Coeff Var	Root MSE	Age Mean
0.022591	42.14046	21.14610	50.18003

Source	DF	Anova SS	Mean Square	F Value	Pr > F
AgeGroup	3	3741.363610	1247.121203	2.79	0.0405



The ANOVA Procedure

Class Level Information		
Class	**Levels**	**Values**
AgeGroup	4	Early_Middle_Age Late_Middle_Age Senior Young

Number of Observations Read	366
Number of Observations Used	366

The ANOVA Procedure

Dependent Variable: Age Age

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	3741.3636	1247.1212	2.79	0.0405
Error	362	161870.9817	447.1574		
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R-Square	Coeff Var	Root MSE	Age Mean
0.022591	42.14046	21.14610	50.18003

Source	DF	Anova SS	Mean Square	F Value	Pr > F
AgeGroup	3	3741.363610	1247.121203	2.79	0.0405

The ANOVA Procedure

Tukey's Studentized Range (HSD) Test for Age

Note: This test controls the Type I experimentwise error rate.

Alpha	0.05
Error Degrees of Freedom	362
Error Mean Square	447.1574
Critical Value of Studentized Range	3.65009

Comparisons significant at the 0.05 level are indicated by ***.				
AgeGroup Comparison	Difference Between Means	Simultaneous 95% Confidence Limits		
Early_Middle_Age - Senior	0.634	-7.974	9.242	
Early_Middle_Age - Late_Middle_Age	1.333	-6.067	8.734	
Early_Middle_Age - Young	8.074	0.445	15.703	***
Senior - Early_Middle_Age	-0.634	-9.242	7.974	
Senior - Late_Middle_Age	0.699	-8.433	9.831	
Senior - Young	7.440	-1.878	16.757	
Late_Middle_Age - Early_Middle_Age	-1.333	-8.734	6.067	
Late_Middle_Age - Senior	-0.699	-9.831	8.433	
Late_Middle_Age - Young	6.741	-1.475	14.956	

Comparisons significant at the 0.05 level are indicated by ***.				
AgeGroup Comparison	Difference Between Means	Simultaneous 95% Confidence Limits		
Young - Early_Middle_Age	-8.074	-15.703	-0.445	***
Young - Senior	-7.440	-16.757	1.878	
Young - Late_Middle_Age	-6.741	-14.956	1.475	

The ANOVA Procedure

Class Level Information		
Class	Levels	Values
Gender	2	Female Male
Education_Category	4	E1 E2 E3 E4

Number of Observations Read	80
Number of Observations Used	80

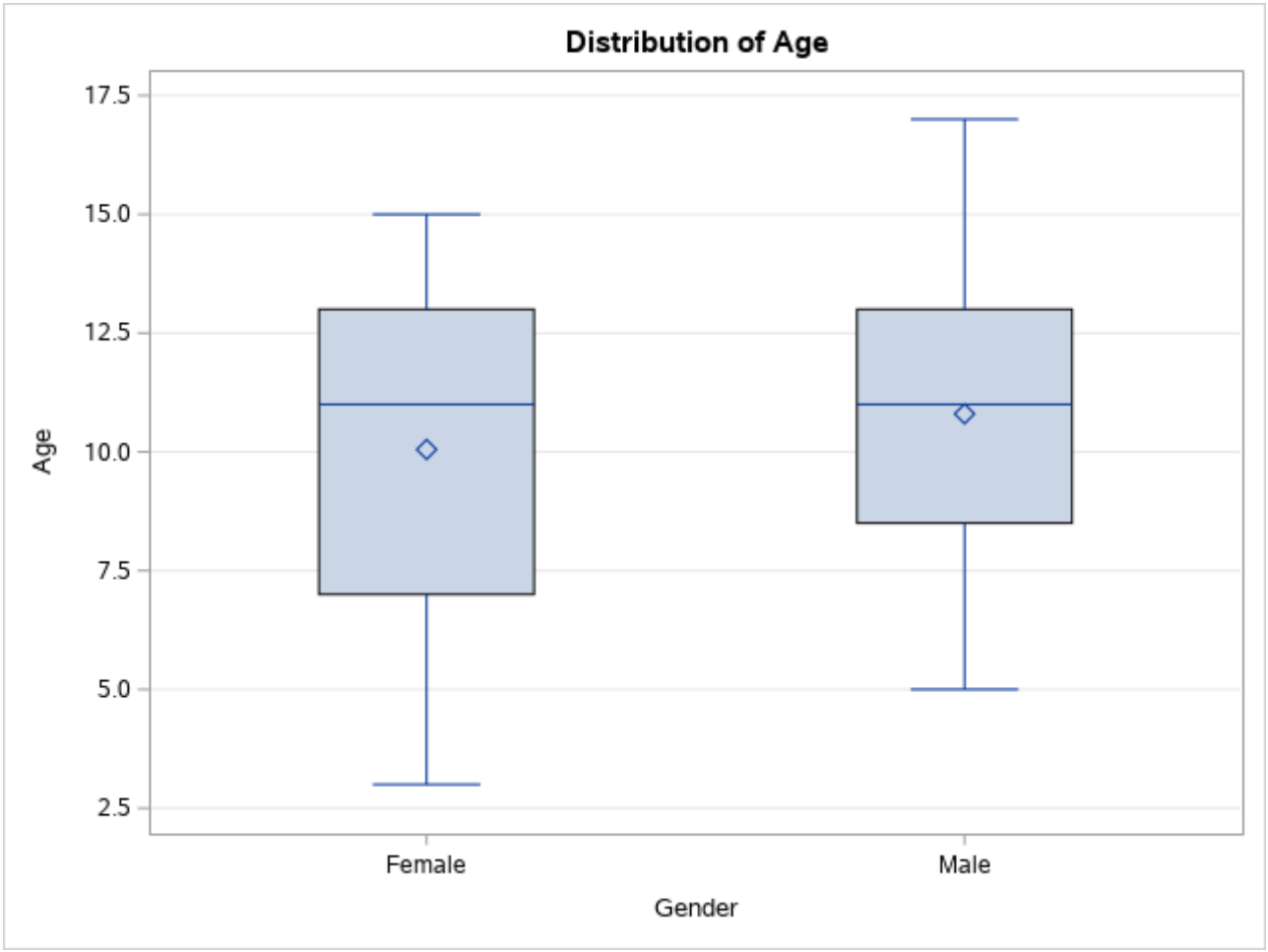
The ANOVA Procedure

Dependent Variable: Age Age

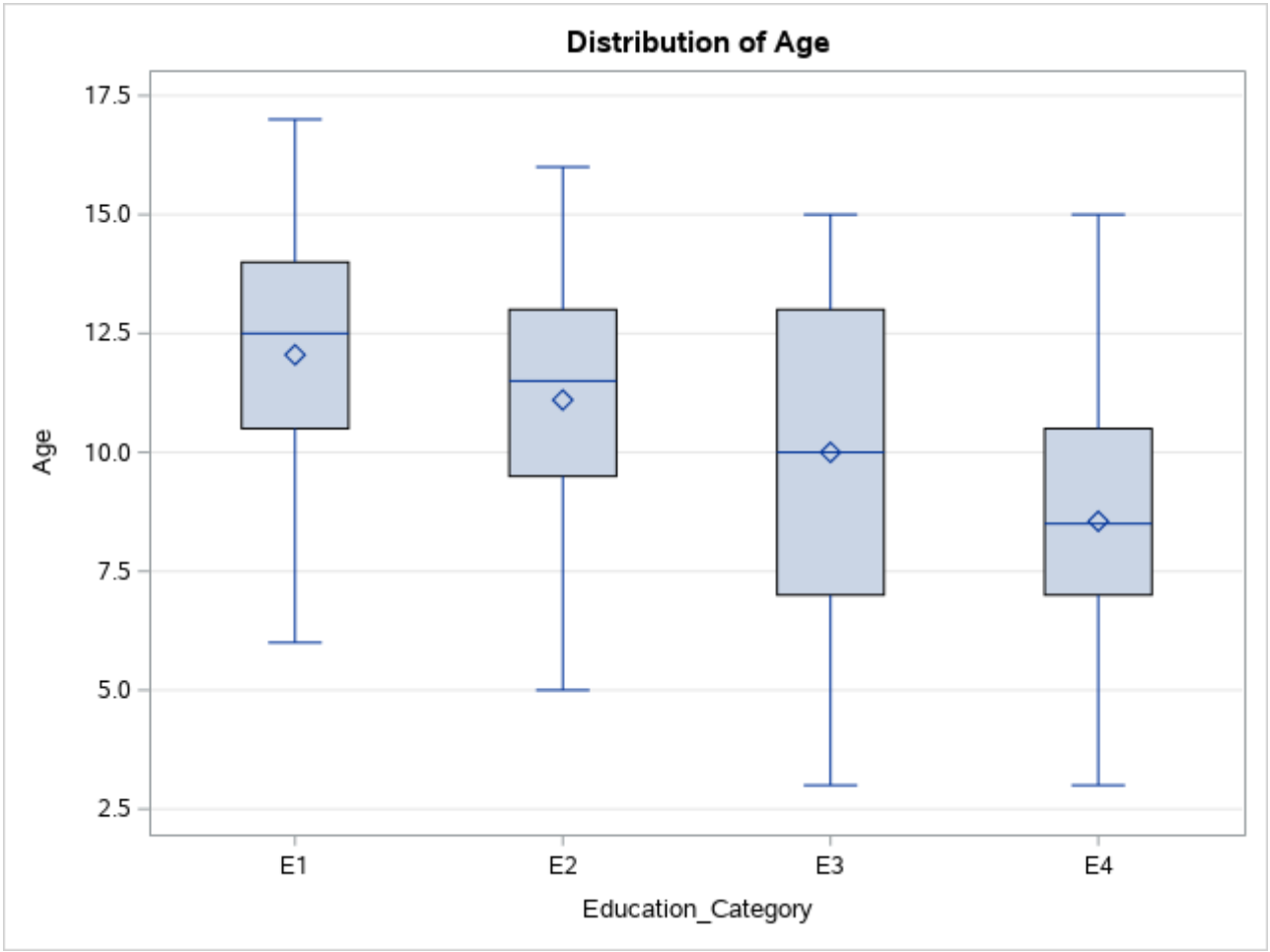
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	7	153.3500000	21.9071429	2.17	0.0467
Error	72	726.2000000	10.0861111		
Corrected Total	79	879.5500000			

R-Square	Coeff Var	Root MSE	Age Mean
0.174351	30.46392	3.175864	10.42500

Source	DF	Anova SS	Mean Square	F Value	Pr > F
Gender	1	11.2500000	11.2500000	1.12	0.2944
Education_Category	3	135.8500000	45.2833333	4.49	0.0060
Gender*Education_Cat	3	6.2500000	2.0833333	0.21	0.8915



Level of Gender	N	Age	
		Mean	Std Dev
Female	40	10.0500000	3.57304725
Male	40	10.8000000	3.08179102



Level of Education_Category	N	Age	
		Mean	Std Dev
E1	20	12.0500000	2.85574214
E2	20	11.1000000	2.95403382
E3	20	10.0000000	3.69921756
E4	20	8.5500000	2.92853475

Class Level Information		
Class	Levels	Values
Gender	2	Female Male
Education_Category	4	E1 E2 E3 E4

Number of Observations Read	80
Number of Observations Used	80

The GLM Procedure

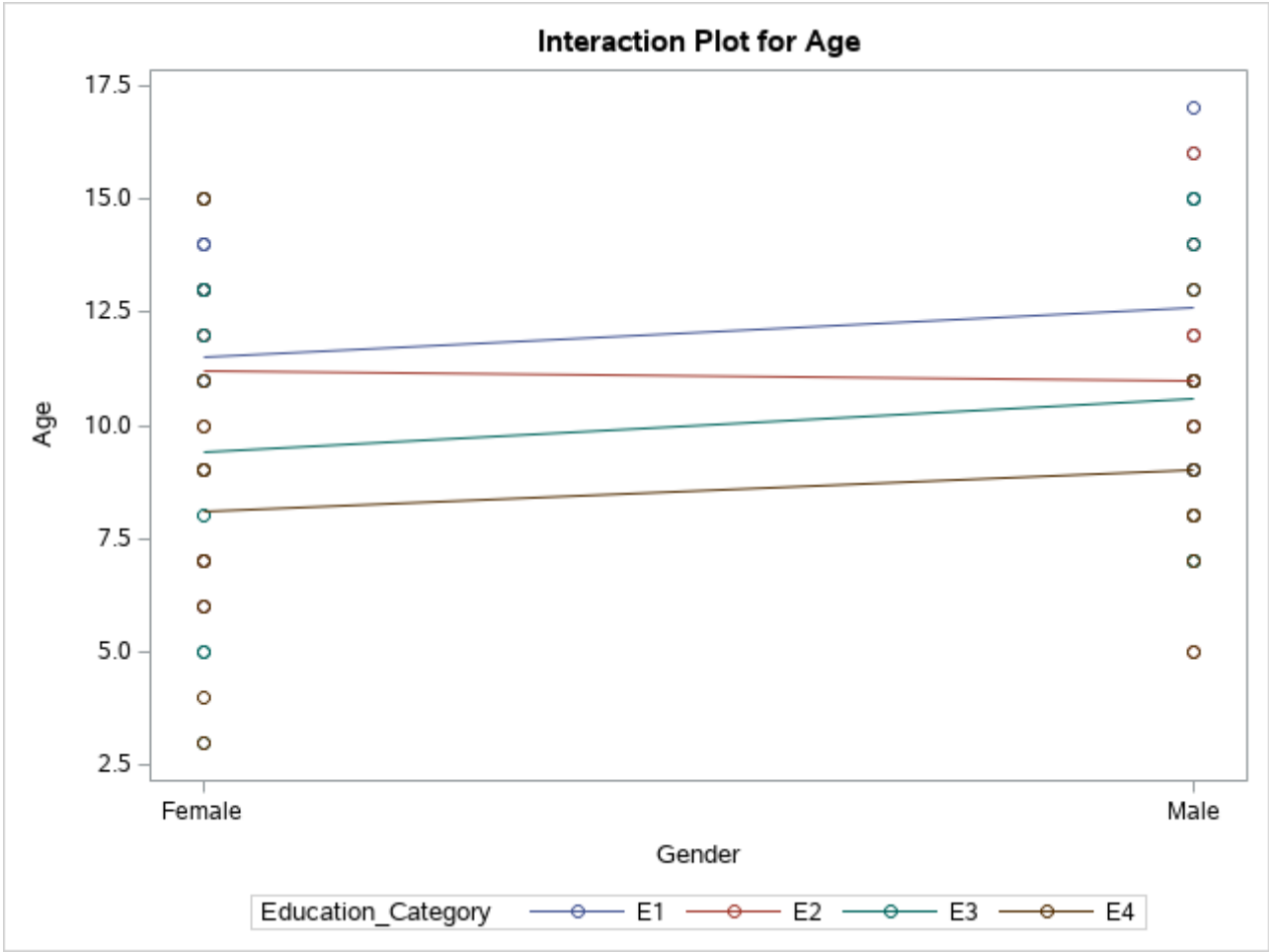
Dependent Variable: Age Age

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	7	153.3500000	21.9071429	2.17	0.0467
Error	72	726.2000000	10.0861111		
Corrected Total	79	879.5500000			

R-Square	Coeff Var	Root MSE	Age Mean
0.174351	30.46392	3.175864	10.42500

Source	DF	Type I SS	Mean Square	F Value	Pr > F
Gender	1	11.2500000	11.2500000	1.12	0.2944
Education_Category	3	135.8500000	45.2833333	4.49	0.0060
Gender*Education_Cat	3	6.2500000	2.0833333	0.21	0.8915

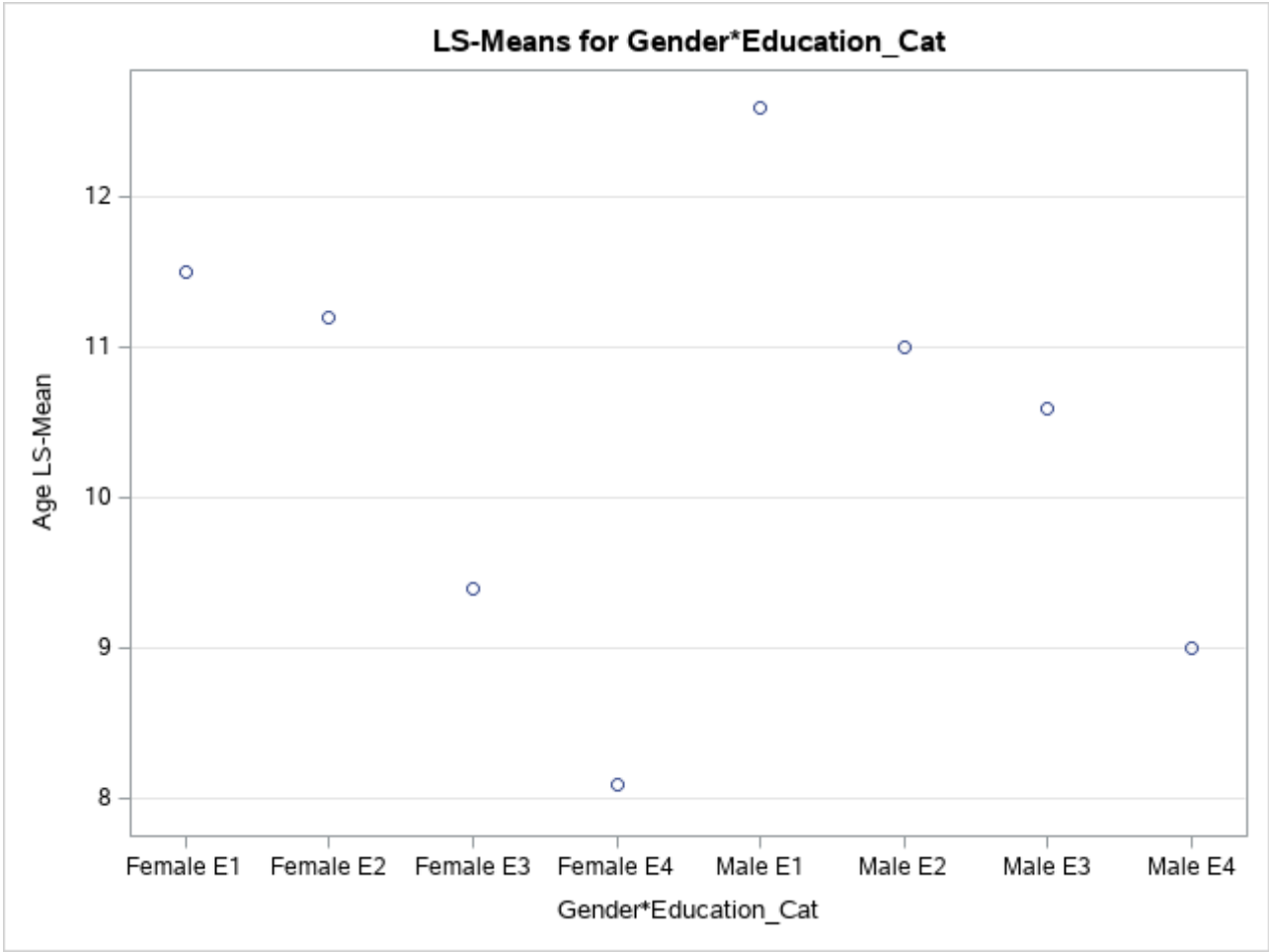
Source	DF	Type III SS	Mean Square	F Value	Pr > F
Gender	1	11.2500000	11.2500000	1.12	0.2944
Education_Category	3	135.8500000	45.2833333	4.49	0.0060
Gender*Education_Cat	3	6.2500000	2.0833333	0.21	0.8915

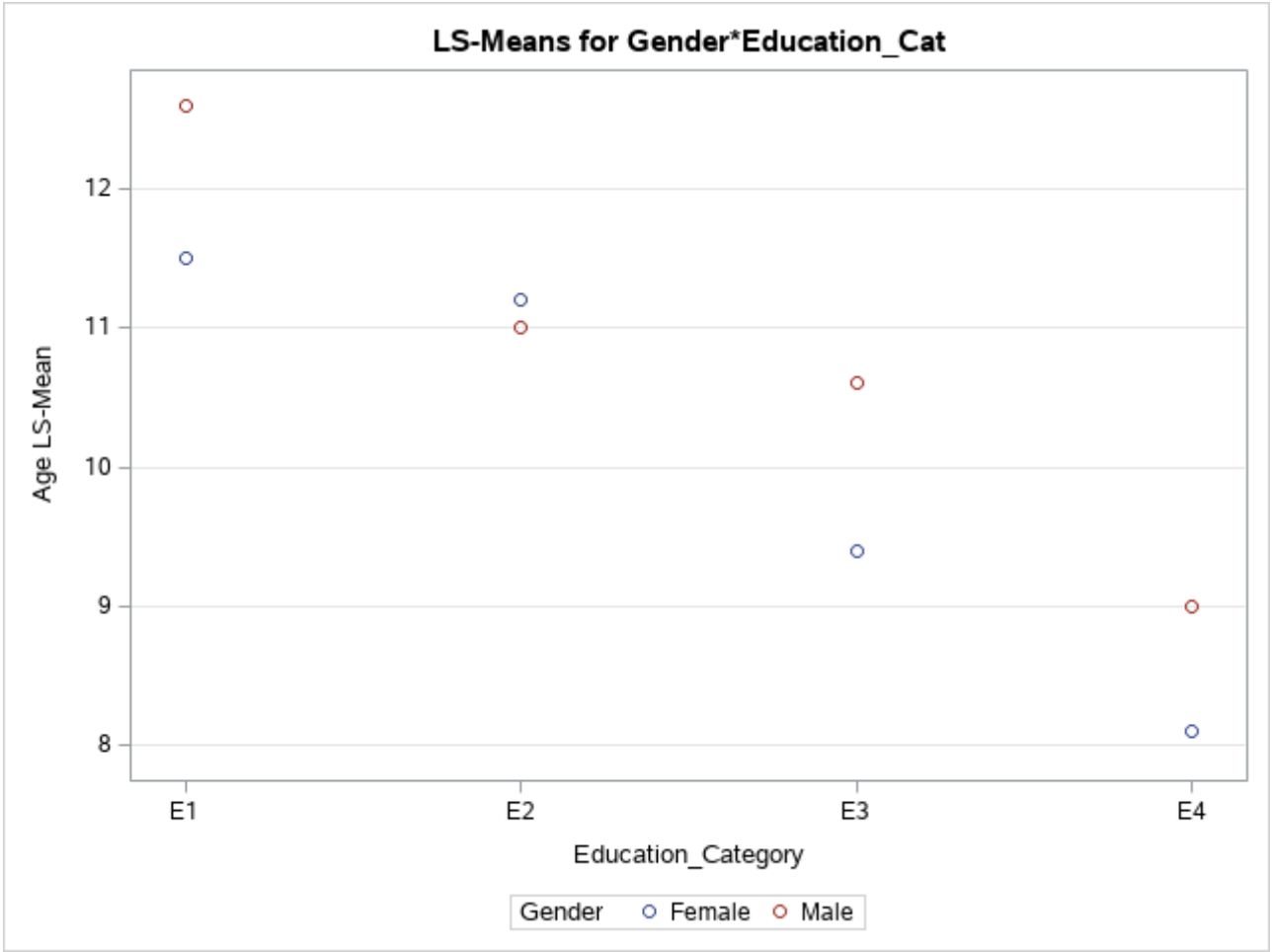


The GLM Procedure
Least Squares Means

Gender	Education_Category	Age LSMEAN
Female	E1	11.5000000
Female	E2	11.2000000
Female	E3	9.4000000
Female	E4	8.1000000
Male	E1	12.6000000
Male	E2	11.0000000

Gender	Education_Category	Age LSMEAN
Male	E3	10.6000000
Male	E4	9.0000000





The GLM Procedure
Least Squares Means

Gender*Education_Cat Effect Sliced by Gender for Age					
Gender	DF	Sum of Squares	Mean Square	F Value	Pr > F
Female	3	76.500000	25.500000	2.53	0.0640
Male	3	65.600000	21.866667	2.17	0.0992

Class Level Information		
Class	Levels	Values
Gender	2	Female Male
Education_Category	4	E1 E2 E3 E4

Number of Observations Read	80
Number of Observations Used	80

The GLM Procedure

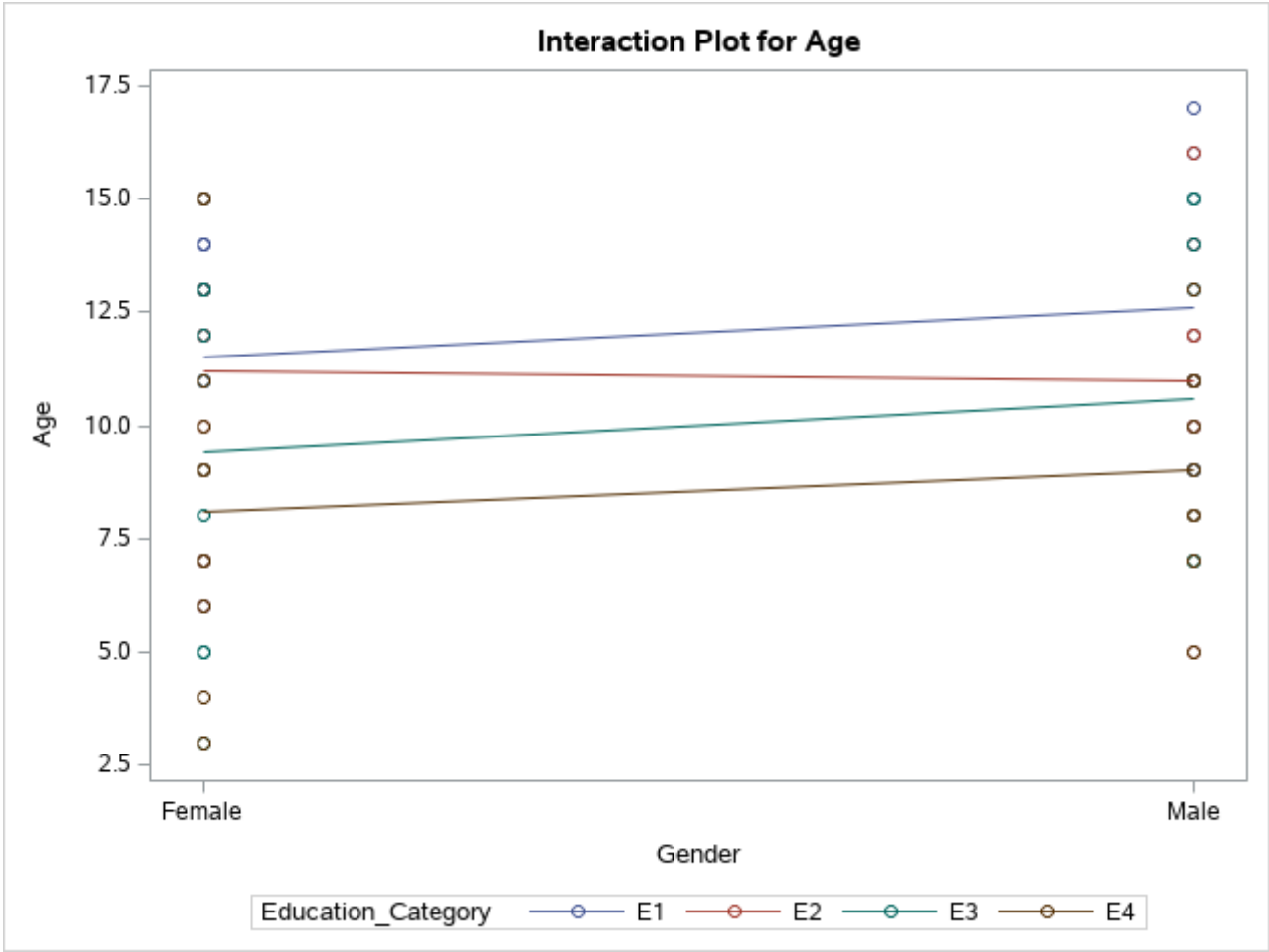
Dependent Variable: Age Age

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	7	153.3500000	21.9071429	2.17	0.0467
Error	72	726.2000000	10.0861111		
Corrected Total	79	879.5500000			

R-Square	Coeff Var	Root MSE	Age Mean
0.174351	30.46392	3.175864	10.42500

Source	DF	Type I SS	Mean Square	F Value	Pr > F
Gender	1	11.2500000	11.2500000	1.12	0.2944
Education_Category	3	135.8500000	45.2833333	4.49	0.0060
Gender*Education_Cat	3	6.2500000	2.0833333	0.21	0.8915

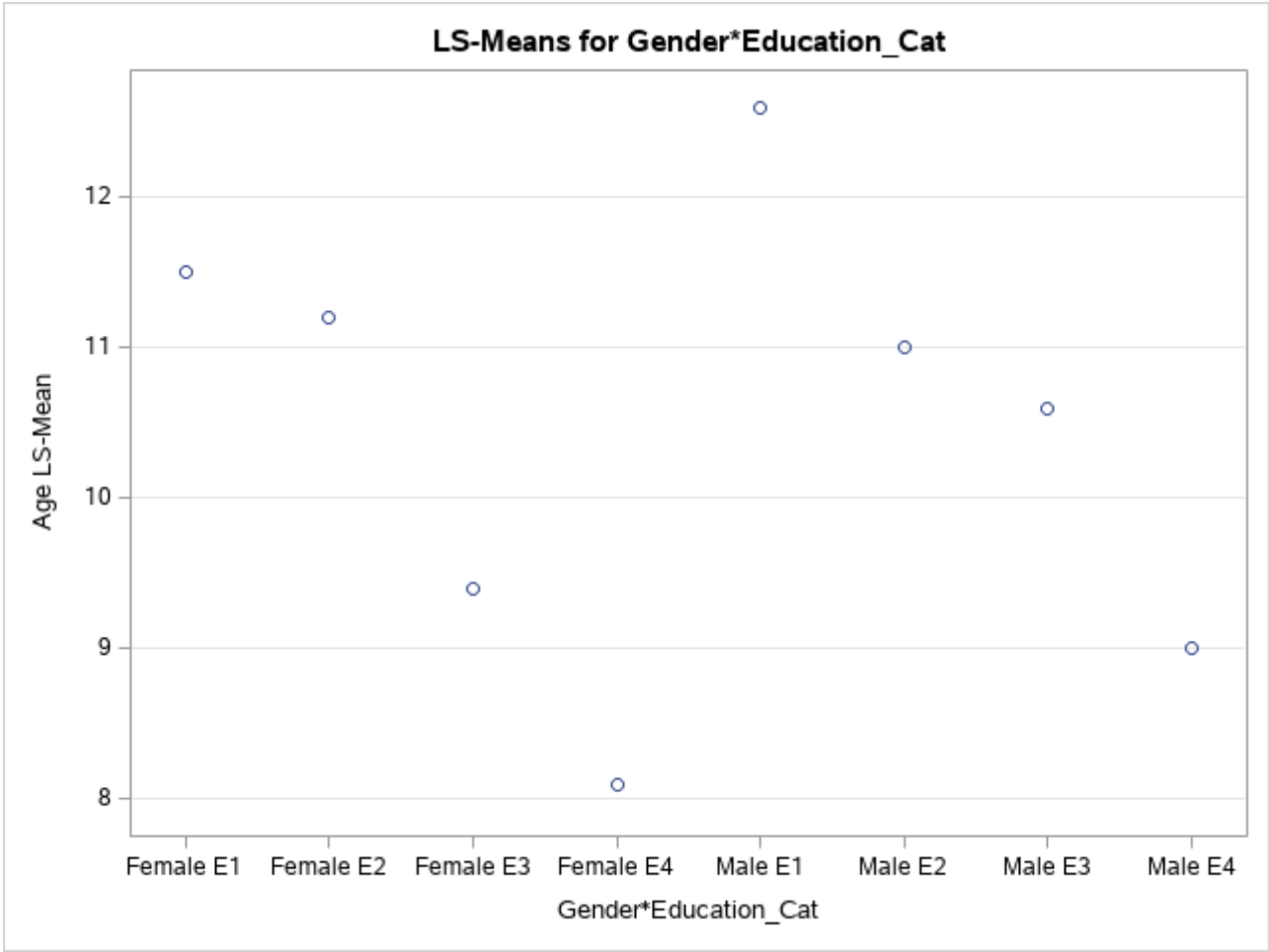
Source	DF	Type III SS	Mean Square	F Value	Pr > F
Gender	1	11.2500000	11.2500000	1.12	0.2944
Education_Category	3	135.8500000	45.2833333	4.49	0.0060
Gender*Education_Cat	3	6.2500000	2.0833333	0.21	0.8915

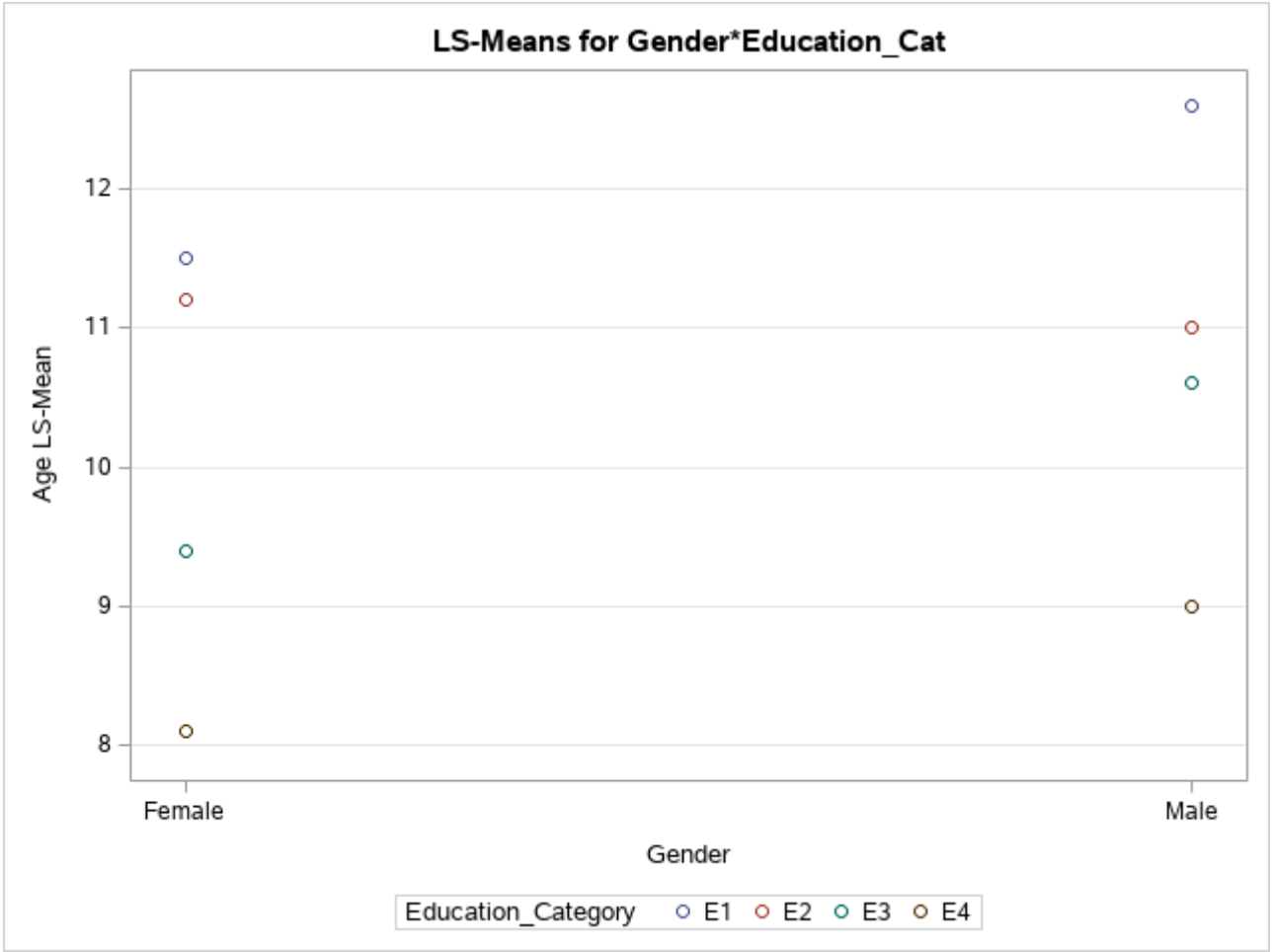


The GLM Procedure
Least Squares Means

Gender	Education_Category	Age LSMEAN
Female	E1	11.5000000
Female	E2	11.2000000
Female	E3	9.4000000
Female	E4	8.1000000
Male	E1	12.6000000
Male	E2	11.0000000

Gender	Education_Category	Age LSMEAN
Male	E3	10.6000000
Male	E4	9.0000000





The GLM Procedure
Least Squares Means

Gender*Education_Cat Effect Sliced by Education_Category for Age					
Education_Category	**DF**	**Sum of Squares**	**Mean Square**	**F Value**	**Pr > F**
E1	1	6.050000	6.050000	0.60	0.4412
E2	1	0.200000	0.200000	0.02	0.8884
E3	1	7.200000	7.200000	0.71	0.4010
E4	1	4.050000	4.050000	0.40	0.5283