Table 25-4 Two-Way ANOVA for the Effect of Medication and Modality on Pain-Free ROM: Showing Interaction

```
UNIANOVA ROMChange BY Modality Med
  /METHOD=SSTYPE(3)
  /INTERCEPT=INCLUDE
  /PLOT=PROFILE(Modality*Med Med*Modality) TYPE=LINE ERRORBAR=NO
MEANREFERENCE=NO YAXIS=AUTO
  /PRINT ETASQ DESCRIPTIVE HOMOGENEITY OPOWER
  /CRITERIA=ALPHA(.05)
  /DESIGN=Modality Med Modality*Med.
```

Univariate Analysis of Variance
Run using General Linear Model

Between-Subjects Factors

		Value Label	N
Modality	1	Ice	20
	2	Splint	20
	3	Rest	20
Med	1	NSAID	30
	2	No Med	30

Descriptive Statistics

Dependent Variable: ROMChange

Modality	Med	Mean	Std. Deviation	N
Ice	NSAID	50.0000	8.44591	10
	No Med	22.0000	19.43079	10
	Total	36.0000	20.46820	20
Splint	NSAID	20.0000	15.65602	10
	No Med	21.0000	12.35584	10
	Total	20.5000	13.73624	20
Rest	NSAID	24.0000	17.50555	10
	No Med	23.0000	14.32946	10
	Total	23.5000	15.57833	20
Total	NSAID	31.3333	19.39842	30
	No Med	22.0000	15.13161	30
	Total	26.6667	17.87875	60

Levene's Test of Equality of Error Variances[a,b]

		Levene Statistic	df1	df2	Sig.
ROMChange	Based on Mean	1.857	5	54	.117
	Based on Median	1.002	5	54	.425
	Based on Median and with adjusted df	1.002	5	28.537	.434
	Based on trimmed mean	1.541	5	54	.193

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.[a,b]

a. Dependent variable: ROMChange

b. Design: Intercept + Modality + Med + Modality * Med

Tests of Between-Subjects Effects

Dependent Variable: ROMChange

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[b]
Corrected Model	6633.333[a]	5	1326.667	5.860	.000	.352	29.298	.989
Intercept	42666.667	1	42666.667	188.451	.000	.777	188.451	1.000
Modality	2703.333	2	1351.667	5.970	.005	.181	11.940	.862
Med	1306.667	1	1306.667	5.771	.020	.097	5.771	.655
Modality * Med	2623.333	2	1311.667	5.793	.005	.177	11.587	.851
Error	12226.000	54	226.407					
Total	61526.000	60						
Corrected Total	18859.333	59						

a. R Squared = .352 (Adjusted R Squared = .292)

b. Computed using alpha = .05

Profile Plots

Estimated Marginal Means of ROMChange

Estimated Marginal Means of ROMChange