

The Mixed Procedure

| Model Information | |
|---------------------------|---------------------|
| Data Set | WORK.BOWLERS |
| Dependent Variable | score |
| Covariance Structure | Variance Components |
| Estimation Method | Type 3 |
| Residual Variance Method | Factor |
| Fixed Effects SE Method | Model-Based |
| Degrees of Freedom Method | Containment |

| Class Level Information | | |
|-------------------------|--------|---------|
| Class | Levels | Values |
| day | 3 | 1 2 3 |
| time | 4 | 1 2 3 4 |
| coach | 4 | 1 2 3 4 |
| treat | 4 | a b c d |

| Dimensions | |
|-----------------------|----|
| Covariance Parameters | 4 |
| Columns in X | 5 |
| Columns in Z | 11 |
| Subjects | 1 |
| Max Obs Per Subject | 48 |

| Number of Observations | |
|---------------------------------|----|
| Number of Observations Read | 48 |
| Number of Observations Used | 48 |
| Number of Observations Not Used | 0 |

The Mixed Procedure

| Type 3 Analysis of Variance | | | | | | | | |
|-----------------------------|----|----------------|-------------|-------------------------------|--------------|----------|---------|--------|
| Source | DF | Sum of Squares | Mean Square | Expected Mean Square | Error Term | Error DF | F Value | Pr > F |
| treat | 3 | 34631 | 11544 | Var(Residual) + Q(treat) | MS(Residual) | 36 | 11.91 | <.0001 |
| day | 2 | 57.541667 | 28.770833 | Var(Residual) + 16 Var(day) | MS(Residual) | 36 | 0.03 | 0.9708 |
| time | 3 | 2074.229167 | 691.409722 | Var(Residual) + 12 Var(time) | MS(Residual) | 36 | 0.71 | 0.5503 |
| coach | 3 | 19922 | 6640.687500 | Var(Residual) + 12 Var(coach) | MS(Residual) | 36 | 6.85 | 0.0009 |
| Residual | 36 | 34878 | 968.844907 | Var(Residual) | . | . | . | . |

| Covariance Parameter Estimates | |
|--------------------------------|----------|
| Cov Parm | Estimate |
| day | -58.7546 |
| time | -23.1196 |
| coach | 472.65 |
| Residual | 968.84 |

| Fit Statistics | |
|--------------------------|-------|
| -2 Res Log Likelihood | 435.1 |
| AIC (smaller is better) | 443.1 |
| AICC (smaller is better) | 444.1 |
| BIC (smaller is better) | 439.5 |

| Type 3 Tests of Fixed Effects | | | | |
|-------------------------------|--------|--------|---------|--------|
| Effect | Num DF | Den DF | F Value | Pr > F |
| treat | 3 | 36 | 11.91 | <.0001 |

| Contrasts | | | | |
|--------------|--------|--------|---------|--------|
| Label | Num DF | Den DF | F Value | Pr > F |
| motor | 1 | 36 | 13.45 | 0.0008 |
| visual | 1 | 36 | 16.09 | 0.0003 |
| motor*visual | 1 | 36 | 6.20 | 0.0175 |

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| Least Squares Means | | | | | | | | | |
|---------------------|-------|----------|----------------|----|---------|---------|-------|---------|---------|
| Effect | treat | Estimate | Standard Error | DF | t Value | Pr > t | Alpha | Lower | Upper |
| treat | a | 62.6667 | 13.1733 | 36 | 4.76 | <.0001 | 0.05 | 35.9500 | 89.3833 |
| treat | b | 73.2500 | 13.1733 | 36 | 5.56 | <.0001 | 0.05 | 46.5333 | 99.9667 |
| treat | c | 76.3333 | 13.1733 | 36 | 5.79 | <.0001 | 0.05 | 49.6167 | 103.05 |
| treat | d | 131.67 | 13.1733 | 36 | 9.99 | <.0001 | 0.05 | 104.95 | 158.38 |