

| Obs | id | trial1 | trial2 | trial3 |
|-----|----|--------|--------|--------|
| 1   | 1  | 1.5    | 1.4    | 1.6    |
| 2   | 2  | 1.5    | .      | 1.9    |
| 3   | 3  | .      | 2.0    | 1.6    |
| 4   | 4  | .      | .      | 2.2    |
| 5   | 5  | 2.1    | 2.3    | 2.2    |
| 6   | 6  | 1.8    | 2.0    | 1.9    |

**The MEANS Procedure**

| Variable | N | Mean      | Std Dev   | Minimum   | Maximum   |
|----------|---|-----------|-----------|-----------|-----------|
| trial1   | 4 | 1.7250000 | 0.2872281 | 1.5000000 | 2.1000000 |
| trial2   | 4 | 1.9250000 | 0.3774917 | 1.4000000 | 2.3000000 |
| trial3   | 6 | 1.9000000 | 0.2683282 | 1.6000000 | 2.2000000 |

### The FREQ Procedure

| trial1                | Frequency | Percent | Cumulative<br>Frequency | Cumulative<br>Percent |
|-----------------------|-----------|---------|-------------------------|-----------------------|
| 1.5                   | 2         | 50.00   | 2                       | 50.00                 |
| 1.8                   | 1         | 25.00   | 3                       | 75.00                 |
| 2.1                   | 1         | 25.00   | 4                       | 100.00                |
| Frequency Missing = 2 |           |         |                         |                       |

| trial2                | Frequency | Percent | Cumulative<br>Frequency | Cumulative<br>Percent |
|-----------------------|-----------|---------|-------------------------|-----------------------|
| 1.4                   | 1         | 25.00   | 1                       | 25.00                 |
| 2                     | 2         | 50.00   | 3                       | 75.00                 |
| 2.3                   | 1         | 25.00   | 4                       | 100.00                |
| Frequency Missing = 2 |           |         |                         |                       |

| trial3 | Frequency | Percent | Cumulative<br>Frequency | Cumulative<br>Percent |
|--------|-----------|---------|-------------------------|-----------------------|
| 1.6    | 2         | 33.33   | 2                       | 33.33                 |
| 1.9    | 2         | 33.33   | 4                       | 66.67                 |
| 2.2    | 2         | 33.33   | 6                       | 100.00                |

### The CORR Procedure

3 Variables: trial1 trial2 trial3

| Simple Statistics |   |         |         |          |         |         |
|-------------------|---|---------|---------|----------|---------|---------|
| Variable          | N | Mean    | Std Dev | Sum      | Minimum | Maximum |
| trial1            | 4 | 1.72500 | 0.28723 | 6.90000  | 1.50000 | 2.10000 |
| trial2            | 4 | 1.92500 | 0.37749 | 7.70000  | 1.40000 | 2.30000 |
| trial3            | 6 | 1.90000 | 0.26833 | 11.40000 | 1.60000 | 2.20000 |

| Pearson Correlation Coefficients<br>Prob >  r  under H0: Rho=0<br>Number of Observations |                        |                        |                        |
|--|------------------------|------------------------|------------------------|
|  | trial1                 | trial2                 | trial3                 |
| trial1   | 1.00000<br>4           | 0.98198<br>0.1210<br>3 | 0.85280<br>0.1472<br>4 |
| trial2   | 0.98198<br>0.1210<br>3 | 1.00000<br>4           | 0.76089<br>0.2391<br>4 |
| trial3   | 0.85280<br>0.1472<br>4 | 0.76089<br>0.2391<br>4 | 1.00000<br>6           |

### The CORR Procedure

|                     |                      |
|---------------------|----------------------|
| <b>3 Variables:</b> | trial1 trial2 trial3 |
|---------------------|----------------------|

| Simple Statistics |   |         |         |         |         |         |
|-------------------|---|---------|---------|---------|---------|---------|
| Variable          | N | Mean    | Std Dev | Sum     | Minimum | Maximum |
| trial1            | 3 | 1.80000 | 0.30000 | 5.40000 | 1.50000 | 2.10000 |
| trial2            | 3 | 1.90000 | 0.45826 | 5.70000 | 1.40000 | 2.30000 |
| trial3            | 3 | 1.90000 | 0.30000 | 5.70000 | 1.60000 | 2.20000 |

| Pearson Correlation Coefficients, N = 3<br>Prob >  r  under H0: Rho=0 |                   |                   |                   |
|---|-------------------|-------------------|-------------------|
|   | trial1            | trial2            | trial3            |
| trial1  | 1.00000           | 0.98198<br>0.1210 | 1.00000<br><.0001 |
| trial2  | 0.98198<br>0.1210 | 1.00000           | 0.98198<br>0.1210 |
| trial3  | 1.00000<br><.0001 | 0.98198<br>0.1210 | 1.00000           |

| Obs | id | trial1 | trial2 | trial3 | avg |
|-----|----|--------|--------|--------|-----|
| 1   | 1  | 1.5    | 1.4    | 1.6    | 1.5 |
| 2   | 2  | 1.5    | .      | 1.9    | .   |
| 3   | 3  | .      | 2.0    | 1.6    | .   |
| 4   | 4  | .      | .      | 2.2    | .   |
| 5   | 5  | 2.1    | 2.3    | 2.2    | 2.2 |
| 6   | 6  | 1.8    | 2.0    | 1.9    | 1.9 |

| Obs | id | trial1 | trial2 | trial3 | avg |
|-----|----|--------|--------|--------|-----|
| 1   | 1  | 1.5    | 1.4    | 1.6    | 1.5 |
| 2   | 2  | 1.5    | .      | 1.9    | 1.7 |
| 3   | 3  | .      | 2.0    | 1.6    | 1.8 |
| 4   | 4  | .      | .      | 2.2    | 2.2 |
| 5   | 5  | 2.1    | 2.3    | 2.2    | 2.2 |
| 6   | 6  | 1.8    | 2.0    | 1.9    | 1.9 |

| Obs | id | trial1 | trial2 | trial3 | n |
|-----|----|--------|--------|--------|---|
| 1   | 1  | 1.5    | 1.4    | 1.6    | 3 |
| 2   | 2  | 1.5    | .      | 1.9    | 2 |
| 3   | 3  | .      | 2.0    | 1.6    | 2 |
| 4   | 4  | .      | .      | 2.2    | 1 |
| 5   | 5  | 2.1    | 2.3    | 2.2    | 3 |
| 6   | 6  | 1.8    | 2.0    | 1.9    | 3 |



| Obs | id | trial1 | trial2 | trial3 | n | avg |
|-----|----|--------|--------|--------|---|-----|
| 1   | 1  | 1.5    | 1.4    | 1.6    | 3 | 1.5 |
| 2   | 2  | 1.5    | .      | 1.9    | 2 | 1.7 |
| 3   | 3  | .      | 2.0    | 1.6    | 2 | 1.8 |
| 4   | 4  | .      | .      | 2.2    | 1 | .   |
| 5   | 5  | 2.1    | 2.3    | 2.2    | 3 | 2.2 |
| 6   | 6  | 1.8    | 2.0    | 1.9    | 3 | 1.9 |

| Obs | id | trial1 | trial1a |
|-----|----|--------|---------|
| 1   | 1  | 1.5    | 0       |
| 2   | 2  | 1.5    | 0       |
| 3   | 3  | .      | .       |
| 4   | 4  | .      | .       |
| 5   | 5  | 2.1    | 1       |
| 6   | 6  | 1.8    | 1       |

| Obs | score | female | ses |
|-----|-------|--------|-----|
| 1   | 56    | 1      | 1   |
| 2   | 62    | 1      | 2   |
| 3   | 73    | 0      | 3   |
| 4   | 67    | A      | 1   |
| 5   | 57    | 0      | 1   |
| 6   | 56    | B      | 2   |
| 7   | 57    | 1      | A   |

| Obs | Name    | Orig_Height | Height | Weight | Replaced |
|-----|---------|-------------|--------|--------|----------|
| 1   | Alfred  | 69          | 69     | 112.5  | 0        |
| 2   | Alice   | 56.500      | 56.500 | 84.0   | 0        |
| 3   | Barbara | 65.300      | 65.300 | 98.0   | 0        |
| 4   | Carol   | 62.800      | 62.800 | 102.5  | 0        |
| 5   | Henry   | 63.500      | 63.500 | 102.5  | 0        |
| 6   | James   | .           | 61.500 | 83.0   | 1        |
| 7   | Jane    | 59.800      | 59.800 | 84.5   | 0        |
| 8   | Janet   | .           | 61.500 | 112.5  | 1        |
| 9   | Jeffrey | 62.500      | 62.500 | 84.0   | 0        |
| 10  | John    | 59          | 59     | 99.5   | 0        |
| 11  | Joyce   | 51.300      | 51.300 | 50.5   | 0        |
| 12  | Judy    | 64.300      | 64.300 | 90.0   | 0        |
| 13  | Louise  | .           | 61.500 | 77.0   | 1        |
| 14  | Mary    | 66.500      | 66.500 | 112.0  | 0        |
| 15  | Philip  | .           | 61.500 | 150.0  | 1        |
| 16  | Robert  | .           | 61.500 | 128.0  | 1        |
| 17  | Ronald  | .           | 61.500 | 133.0  | 1        |
| 18  | Thomas  | 57.500      | 57.500 | 85.0   | 0        |
| 19  | William | .           | 61.500 | 112.0  | 1        |

| Obs | Name    | Orig_Height | Height | Weight | Replaced |
|-----|---------|-------------|--------|--------|----------|
| 1   | Alfred  | 69          | 69     | 112.5  | 0        |
| 2   | Alice   | 56.500      | 56.500 | 84.0   | 0        |
| 3   | Barbara | 65.300      | 65.300 | 98.0   | 0        |
| 4   | Carol   | 62.800      | 62.800 | 102.5  | 0        |
| 5   | Henry   | 63.500      | 63.500 | 102.5  | 0        |
| 6   | James   | .           | 62.650 | 83.0   | 1        |
| 7   | Jane    | 59.800      | 59.800 | 84.5   | 0        |
| 8   | Janet   | .           | 62.650 | 112.5  | 1        |
| 9   | Jeffrey | 62.500      | 62.500 | 84.0   | 0        |
| 10  | John    | 59          | 59     | 99.5   | 0        |
| 11  | Joyce   | 51.300      | 51.300 | 50.5   | 0        |
| 12  | Judy    | 64.300      | 64.300 | 90.0   | 0        |
| 13  | Louise  | .           | 62.650 | 77.0   | 1        |
| 14  | Mary    | 66.500      | 66.500 | 112.0  | 0        |
| 15  | Philip  | .           | 62.650 | 150.0  | 1        |
| 16  | Robert  | .           | 62.650 | 128.0  | 1        |
| 17  | Ronald  | .           | 62.650 | 133.0  | 1        |
| 18  | Thomas  | 57.500      | 57.500 | 85.0   | 0        |
| 19  | William | .           | 62.650 | 112.0  | 1        |

### The MI Procedure

| Model Information                |            |
|----------------------------------|------------|
| Data Set                         | WORK.FISH1 |
| Method                           | Monotone   |
| Number of Imputations            | 25         |
| Seed for random number generator | 899603     |

| Monotone Model Specification |                   |
|------------------------------|-------------------|
| Method                       | Imputed Variables |
| Regression                   | Length2           |
| Regression-PMM( K= 5)        | Length3           |

| Missing Data Patterns |         |         |         |      |         |             |           |           |
|-----------------------|---------|---------|---------|------|---------|-------------|-----------|-----------|
| Group                 | Length1 | Length2 | Length3 | Freq | Percent | Group Means |           |           |
|                       |         |         |         |      |         | Length1     | Length2   | Length3   |
| 1                     | X       | X       | X       | 30   | 85.71   | 30.603333   | 33.436667 | 38.720000 |
| 2                     | X       | X       | .       | 3    | 8.57    | 29.033333   | 31.666667 | .         |
| 3                     | X       | .       | .       | 2    | 5.71    | 27.750000   | .         | .         |

| Variance Information (25 Imputations) |             |          |          |        |                               |                              |                     |
|---------------------------------------|-------------|----------|----------|--------|-------------------------------|------------------------------|---------------------|
| Variable                              | Variance    |          |          | DF     | Relative Increase in Variance | Fraction Missing Information | Relative Efficiency |
|                                       | Between     | Within   | Total    |        |                               |                              |                     |
| Length2                               | 0.000088357 | 0.439952 | 0.440044 | 32.155 | 0.000209                      | 0.000209                     | 0.999992            |
| Length3                               | 0.002769    | 0.486035 | 0.488915 | 31.971 | 0.005924                      | 0.005892                     | 0.999764            |

| Parameter Estimates (25 Imputations) |           |           |                       |          |        |           |           |     |                    |         |
|--------------------------------------|-----------|-----------|-----------------------|----------|--------|-----------|-----------|-----|--------------------|---------|
| Variable                             | Mean      | Std Error | 95% Confidence Limits |          | DF     | Minimum   | Maximum   | Mu0 | t for H0: Mean=Mu0 | Pr >  t |
| Length2                              | 33.100424 | 0.663358  | 31.74946              | 34.45138 | 32.155 | 33.082260 | 33.128103 | 0   | 49.90              | <.0001  |
| Length3                              | 38.436229 | 0.699224  | 37.01190              | 39.86055 | 31.971 | 38.362857 | 38.545714 | 0   | 54.97              | <.0001  |