

|   | variable        | session | sex   | team | location |
|---|-----------------|---------|-------|------|----------|
| 1 | PerformExpected | 0.01    | 0.06  | 0.08 | 0.01     |
| 2 | GroupClick      | 0.08    | -0.03 | 0.09 | 0.08     |
| 3 | GroupBonding    | 0.15    | -0.01 | 0.24 | 0.15     |

Table 1: Intra class correlations of grouping variables according to key variables of interest

|                              | Overall      | high         | low          |
|------------------------------|--------------|--------------|--------------|
| n                            | 58           | 29           | 29           |
| Age (mean (sd))              | 21.33 (3.33) | 20.48 (3.11) | 22.14 (3.39) |
| Sex = male (%)               | 31 (53.4)    | 15 (51.7)    | 16 (55.2)    |
| Team (%)                     |              |              |              |
| Beijing Men                  | 16 (27.6)    | 8 (27.6)     | 8 (27.6)     |
| Beijing Women                | 11 (19.0)    | 6 (20.7)     | 5 (17.2)     |
| Shandong Men                 | 15 (25.9)    | 7 (24.1)     | 8 (27.6)     |
| Shandong Women               | 16 (27.6)    | 8 (27.6)     | 8 (27.6)     |
| Position = Starting Team (%) | 18 (32.7)    | 9 (33.3)     | 9 (32.1)     |
| TrainingAge (mean (sd))      | 4.22 (2.11)  | 3.74 (1.89)  | 4.68 (2.25)  |
| YearsInTeam (mean (sd))      | 5.64 (2.08)  | 5.37 (1.94)  | 5.89 (2.20)  |
| AthleteLevel (%)             |              |              |              |
| 1st Level                    | 11 (20.8)    | 5 (19.2)     | 6 (22.2)     |
| 2nd Level                    | 6 (11.3)     | 5 (19.2)     | 1 ( 3.7)     |
| Master                       | 36 (67.9)    | 16 (61.5)    | 20 (74.1)    |
| ContractStatus (%)           |              |              |              |
| Full time contract           | 8 (14.5)     | 3 (11.1)     | 5 (17.9)     |
| Full time employee           | 21 (38.2)    | 10 (37.0)    | 11 (39.3)    |
| Student contract             | 8 (14.5)     | 5 (18.5)     | 3 (10.7)     |
| Training contract            | 16 (29.1)    | 8 (29.6)     | 8 (28.6)     |
| Trial                        | 2 ( 3.6)     | 1 ( 3.7)     | 1 ( 3.6)     |

Table 2: Overview of experiment sample by condition

|                                       | Baseline      | Pre           | Post          |
|---------------------------------------|---------------|---------------|---------------|
| n                                     | 29            | 29            | 29            |
| PerformanceVsExpectations (mean (sd)) | NaN (NA)      | NaN (NA)      | 58.31 (17.71) |
| ConfidenceInAbility (mean (sd))       | NaN (NA)      | 77.76 (15.37) | 68.93 (24.87) |
| Defence (mean (sd))                   | 60.96 (19.16) | 63.62 (19.56) | 58.69 (23.58) |
| Passing (mean (sd))                   | 61.74 (22.23) | 70.28 (16.21) | 60.21 (22.78) |
| SupportPlay (mean (sd))               | 69.19 (14.23) | 70.31 (15.79) | 67.62 (23.05) |
| DecisionMaking (mean (sd))            | 59.89 (16.76) | 62.93 (16.89) | 68.21 (14.68) |
| OverallPerformance (mean (sd))        | 66.11 (19.47) | 69.90 (17.35) | NaN (NA)      |

Table 3: Athlete perceptions of individual performance (low difficulty condition)

|                                       | Baseline      | Pre           | Post          |
|---------------------------------------|---------------|---------------|---------------|
| n                                     | 29            | 29            | 29            |
| PerformanceVsExpectations (mean (sd)) | NaN (NA)      | NaN (NA)      | 64.79 (16.83) |
| ConfidenceInAbility (mean (sd))       | NaN (NA)      | 76.90 (22.65) | 73.32 (14.03) |
| Defence (mean (sd))                   | 67.44 (16.83) | 66.76 (19.68) | 66.11 (16.67) |
| Passing (mean (sd))                   | 63.63 (26.69) | 65.83 (20.93) | 59.75 (24.52) |
| SupportPlay (mean (sd))               | 67.30 (24.88) | 67.90 (23.13) | 66.61 (21.35) |
| DecisionMaking (mean (sd))            | 60.78 (23.72) | 65.93 (20.43) | 67.11 (21.70) |
| OverallPerformance (mean (sd))        | 69.07 (18.62) | 65.66 (27.57) | NaN (NA)      |

Table 4: Athlete perceptions of individual performance (high difficulty condition)

|                                      | Baseline | Pre           | Post          |
|--------------------------------------|----------|---------------|---------------|
| n                                    | 29       | 29            | 29            |
| ConfidenceInGroupAbility (mean (sd)) | NaN (NA) | 78.62 (12.75) | NaN (NA)      |
| GroupAttack (mean (sd))              | NaN (NA) | 75.66 (13.36) | 67.34 (15.61) |
| GroupDefence (mean (sd))             | NaN (NA) | 77.62 (14.44) | 63.14 (19.90) |
| GroupCommunication (mean (sd))       | NaN (NA) | 75.72 (14.84) | 70.66 (15.46) |
| GroupSupportPlay (mean (sd))         | NaN (NA) | 75.97 (12.80) | 69.66 (13.72) |

Table 5: Athlete perceptions of group performance (low difficulty condition)

|                                      | Baseline | Pre           | Post          |
|--------------------------------------|----------|---------------|---------------|
| n                                    | 29       | 29            | 29            |
| ConfidenceInGroupAbility (mean (sd)) | NaN (NA) | 76.03 (17.16) | NaN (NA)      |
| GroupAttack (mean (sd))              | NaN (NA) | 74.55 (20.93) | 64.07 (24.38) |
| GroupDefence (mean (sd))             | NaN (NA) | 73.38 (22.09) | 57.04 (25.55) |
| GroupCommunication (mean (sd))       | NaN (NA) | 77.76 (16.09) | 66.25 (20.78) |
| GroupSupportPlay (mean (sd))         | NaN (NA) | 75.55 (15.65) | 64.46 (25.32) |

Table 6: Athlete perceptions of group performance (high difficulty condition)

|                                   | high          | low           | p     | test |
|-----------------------------------|---------------|---------------|-------|------|
| n                                 | 87            | 87            |       |      |
| TeamPerformance (mean (sd))       | 69.96 (19.74) | 68.00 (23.11) | 0.739 |      |
| TeamCompetenceInChina (mean (sd)) | 37.81 (16.08) | 41.19 (13.43) | 0.407 |      |
| TeamAttack (mean (sd))            | 65.74 (24.68) | 66.85 (15.07) | 0.843 |      |
| TeamDefence (mean (sd))           | 67.30 (16.99) | 63.26 (17.79) | 0.398 |      |
| TeamCommunication (mean (sd))     | 70.67 (19.48) | 65.67 (22.27) | 0.384 |      |
| TeamSupportPlay (mean (sd))       | 68.11 (18.61) | 64.15 (19.15) | 0.444 |      |

Table 7: Athlete perceptions of team performance at Baseline, by condition

|                                   | Baseline | Pre           | Post          |
|-----------------------------------|----------|---------------|---------------|
| n                                 | 29       | 29            | 29            |
| ClickPictorial (mean (sd))        | NaN (NA) | 4.00 (0.89)   | 3.75 (0.93)   |
| UnspokenUnderstanding (mean (sd)) | NaN (NA) | 72.90 (15.77) | 64.64 (20.99) |
| GeneralAtmosphere (mean (sd))     | NaN (NA) | 78.03 (17.48) | 74.50 (20.54) |
| AbilitiesExtended (mean (sd))     | NaN (NA) | 72.28 (16.22) | 61.86 (28.68) |
| ReliabilityForOthers (mean (sd))  | NaN (NA) | NaN (NA)      | 63.46 (14.56) |
| ReliabilityOfOthers (mean (sd))   | NaN (NA) | NaN (NA)      | 72.29 (17.79) |

Table 8: Athlete perceptions of group click (high difficulty condition)

|                                   | Baseline | Pre           | Post          |
|-----------------------------------|----------|---------------|---------------|
| n                                 | 29       | 29            | 29            |
| ClickPictorial (mean (sd))        | NaN (NA) | 3.76 (1.18)   | 3.45 (1.24)   |
| UnspokenUnderstanding (mean (sd)) | NaN (NA) | 72.45 (19.40) | 68.34 (14.69) |
| GeneralAtmosphere (mean (sd))     | NaN (NA) | 81.79 (11.60) | 76.79 (13.73) |
| AbilitiesExtended (mean (sd))     | NaN (NA) | 77.66 (14.33) | 65.86 (18.09) |
| ReliabilityForOthers (mean (sd))  | NaN (NA) | NaN (NA)      | 61.03 (21.33) |
| ReliabilityOfOthers (mean (sd))   | NaN (NA) | NaN (NA)      | 68.55 (23.47) |

Table 9: Athlete perceptions of group click (low difficulty condition)

|                              | Baseline | Pre           | Post          |
|------------------------------|----------|---------------|---------------|
| n                            | 29       | 29            | 29            |
| EmotionalSupport (mean (sd)) | NaN (NA) | 78.55 (18.90) | 73.86 (19.61) |
| SharedGoal (mean (sd))       | NaN (NA) | 80.79 (24.98) | 79.04 (20.80) |
| FusionPictorial (mean (sd))  | NaN (NA) | 4.14 (0.64)   | 4.00 (1.09)   |
| StayOrChange (mean (sd))     | NaN (NA) | NaN (NA)      | 68.25 (24.75) |

Table 10: Athlete perceptions of group bonding (high difficulty condition)

|                              | Baseline | Pre           | Post          |
|------------------------------|----------|---------------|---------------|
| n                            | 29       | 29            | 29            |
| EmotionalSupport (mean (sd)) | NaN (NA) | 78.69 (24.33) | 76.52 (14.92) |
| SharedGoal (mean (sd))       | NaN (NA) | 90.21 (9.33)  | 83.62 (15.34) |
| FusionPictorial (mean (sd))  | NaN (NA) | 4.31 (0.71)   | 3.79 (1.52)   |
| StayOrChange (mean (sd))     | NaN (NA) | NaN (NA)      | 71.79 (24.23) |

Table 11: Athlete perceptions of group bonding (low difficulty condition)

|                                    | Baseline      | Pre      | Post          |
|------------------------------------|---------------|----------|---------------|
| n                                  | 29            | 29       | 29            |
| EmotionalSupport (mean (sd))       | 77.11 (17.76) | NaN (NA) | 76.90 (11.97) |
| SharedGoal (mean (sd))             | 84.96 (16.93) | NaN (NA) | 84.28 (14.13) |
| FusionVerbalTeam (mean (sd))       | 4.15 (0.65)   | NaN (NA) | 4.06 (0.61)   |
| GroupIdentification (mean (sd))    | 4.49 (0.57)   | NaN (NA) | 4.40 (0.64)   |
| FusionPictorialTeam (mean (sd))    | 4.67 (0.48)   | NaN (NA) | 4.45 (0.63)   |
| FusionPictorialFamily (mean (sd))  | 4.52 (1.09)   | NaN (NA) | 4.69 (0.71)   |
| FusionPictorialCountry (mean (sd)) | 4.00 (1.33)   | NaN (NA) | 3.93 (1.36)   |
| TeamRank (mean (sd))               | 1.33 (0.68)   | NaN (NA) | 1.28 (0.70)   |
| FamilyRank (mean (sd))             | 1.56 (0.85)   | NaN (NA) | 1.69 (0.81)   |
| CountryRank (mean (sd))            | 0.56 (1.01)   | NaN (NA) | 0.59 (1.05)   |

Table 12: Athlete perceptions of team bonding (low difficulty condition)

|                                    | Baseline      | Pre      | Post          |
|------------------------------------|---------------|----------|---------------|
| n                                  | 29            | 29       | 29            |
| EmotionalSupport (mean (sd))       | 71.89 (24.66) | NaN (NA) | 71.71 (17.46) |
| SharedGoal (mean (sd))             | 81.59 (17.66) | NaN (NA) | 82.64 (17.18) |
| FusionVerbalTeam (mean (sd))       | 4.00 (0.81)   | NaN (NA) | 3.88 (0.76)   |
| GroupIdentification (mean (sd))    | 4.20 (0.78)   | NaN (NA) | 4.16 (0.71)   |
| FusionPictorialTeam (mean (sd))    | 4.33 (0.73)   | NaN (NA) | 4.25 (0.75)   |
| FusionPictorialFamily (mean (sd))  | 4.56 (0.80)   | NaN (NA) | 4.71 (0.71)   |
| FusionPictorialCountry (mean (sd)) | 3.56 (1.31)   | NaN (NA) | 3.61 (1.57)   |
| TeamRank (mean (sd))               | 1.30 (0.78)   | NaN (NA) | 1.25 (0.75)   |
| FamilyRank (mean (sd))             | 1.81 (0.74)   | NaN (NA) | 1.75 (0.65)   |
| CountryRank (mean (sd))            | 0.56 (1.05)   | NaN (NA) | 0.57 (1.00)   |

Table 13: Athlete perceptions of team bonding (high difficulty condition)

|   | high          | low           |
|---|---------------|---------------|
| n   | 87            | 87            |
| CompetenceVsTeammates (mean (sd))         | 25.41 (15.49) | 22.52 (16.46) |
| CompetenceVsChinesePros (mean (sd))       | 16.89 (19.39) | 17.30 (17.69) |
| CompetenceVsInternationalPros (mean (sd)) | 24.85 (24.52) | 14.11 (26.88) |
| PerformanceImpactOnConfidence (mean (sd)) | 68.00 (23.06) | 69.26 (24.80) |
| PerformanceImpactOnMood (mean (sd))       | 67.70 (23.78) | 66.89 (16.21) |

Table 14: Athlete subjective perceptions of individual technical competence by condition

|                            | Baseline      | Pre      | Post          |
|----------------------------|---------------|----------|---------------|
| n                          | 29            | 29       | 29            |
| Punctuality (mean (sd))    | 87.33 (19.22) | NaN (NA) | 86.76 (19.33) |
| MealAttendance (mean (sd)) | 92.78 (11.56) | NaN (NA) | 93.62 (9.48)  |
| GeneralConduct (mean (sd)) | 90.81 (11.68) | NaN (NA) | 92.86 (9.15)  |
| Curfew (mean (sd))         | 89.33 (19.39) | NaN (NA) | 89.34 (14.61) |

Table 15: Athlete perceptions of team discipline (low difficulty condition)

|                                | high        | low         |
|--------------------------------|-------------|-------------|
| n                              | 87          | 87          |
| Agreeableness (mean (sd))      | 4.94 (1.16) | 4.74 (0.93) |
| Conscientiousness (mean (sd))  | 5.46 (1.18) | 5.20 (1.29) |
| EmotionalStability (mean (sd)) | 4.26 (1.40) | 4.54 (1.42) |
| Extraverted (mean (sd))        | 5.28 (1.44) | 4.74 (1.68) |
| Openness (mean (sd))           | 4.62 (1.15) | 4.74 (0.97) |

Table 16: Athlete personality type by condition

|   | variable        | session | sex   | team | location |
|---|-----------------|---------|-------|------|----------|
| 1 | PerformExpected | 0.06    | 0.06  | 0.08 | 0.01     |
| 2 | GroupClick      | 0.14    | -0.03 | 0.09 | 0.08     |
| 3 | GroupBonding    | 0.21    | -0.01 | 0.24 | 0.15     |

Table 17: Intra class correlations of variables of interest according to groups

|   | Session           | Mean | SD   |
|---|-------------------|------|------|
| 1 | ShandongWomenHigh | 4.06 | 2.08 |
| 2 | ShandongMenHigh   | 3.81 | 2.04 |
| 3 | BeijingWomenHigh  | 4.50 | 1.90 |
| 4 | BeijingMenHigh    | 4.39 | 1.82 |
| 5 | ShandongWomenLow  | 4.75 | 1.34 |
| 6 | ShandongMenLow    | 5.00 | 1.71 |
| 7 | BeijingWomenLow   | 2.75 | 1.81 |
| 8 | BeijingMenLow     | 3.31 | 1.85 |

Table 18: Mean and standard deviation of performance outcome according to experiment session