



Commonality and variation in mental representations of music revealed by a cross-cultural comparison of rhythm priors in 15 countries

In the format provided by the authors and unedited

Supplementary Information for Jacoby et al.

Supplementary Tables

Supplementary Table 1: Demographic information for the fast tempo experiment. Additional demographic information is provided in Supplementary Table 3.

| # | Group Name | Group abbreviation | Type | Continent | Country | City/Cities | N | Females | Ages |
|----|-------------|--------------------|------|---------------|----------|----------------------|----|---------|---------------------------------|
| 1 | US(NYC)-NM | US.NY | NM | North America | USA | NYC | 26 | 15 | 18-61 (mean = 38.77 std= 13.00) |
| 2 | US(NYC)-WM | US.NY | WM | North America | USA | NYC | 26 | 14 | 18-64 (mean = 30.54 std= 11.29) |
| 3 | US(NYC)-LM | US.NY | LM | North America | USA | NYC | 34 | 4 | 18-64 (mean = 36.94 std= 13.62) |
| 4 | Bulgaria-LM | BG | LM | Europe | Bulgaria | Pleven/Plovdiv/Sofia | 23 | 3 | 20-59 (mean = 41.48 std= 10.51) |
| 5 | Bulgaria-DA | BG | DA | Europe | Bulgaria | Pleven/Plovdiv/Sofia | 32 | 15 | 19-53 (mean = 33.31 std= 8.76) |
| 6 | Turkey-ST | TK | ST | Europe | Turkey | Istanbul | 27 | 18 | 18-28 (mean = 20.67 std= 2.09) |
| 7 | Turkey-LM | TK | LM | Europe | Turkey | Istanbul/ Izmir | 24 | 7 | 22-44 (mean = 31.75 std= 6.19) |
| 8 | Mali-LM | MA | NM | Africa | Mali | Bamako | 20 | 1 | 25-58 (mean = 38.40 std= 9.95) |
| 9 | Mali-DA | MA | NM | Africa | Mali | Sagele | 24 | 21 | 20-62 (mean = 37.67 std= 9.91) |
| 10 | Namibia-NM | NA | NM | Africa | Namibia | Spitzkoppe | 16 | 9 | 18-46 (mean = 30.88 std= 8.45) |
| 11 | Namibia-LM | NA | NM | Africa | Namibia | Spitzkoppe | 14 | 10 | 18-48 (mean = 27.79 std= 8.68) |
| 12 | India-NM | IN | ST | Asia | India | Mumbai | 15 | 14 | 20-44 (mean = 27.13 std= 7.30) |
| 13 | India-LM | IN | LM | Asia | India | Mumbai | 12 | 1 | 17-43 (mean = 25.67 std= 7.09) |

Supplementary Table 2: Supplementary demographic information (main experiment)

| # | Group | Type | Country | City | Number of Languages Spoken | Main Languages | Literacy | Years Playing Instrument/ Singing | Main Instruments Played | Most favorite music | Years of formal education | Total Trials | Mean async. | Std async. |
|----|-------|------|----------|------------------------------|-----------------------------|--|----------|-----------------------------------|--|--|--------------------------------------|--------------|--|---------------------------------------|
| 1 | US.BO | ST | USA | Boston | 1-4 (mean = 1.87 std= 0.92) | English (100%), Spanish (47%), French (20%) | L | 0-4 (mean = 0.93 std= 1.17) | None (47%), Piano (27%), Guitar (20%) | Not reported | 12-17 (mean = 15.13 std= 1.55) | 431 | -74.8 - -2.88 (mean = -41.71 std= 25.24) | 39.8 - 70.6 (mean = 49.38 std= 10.03) |
| 2 | US.BO | WM | USA | Boston | 1-3 (mean = 1.57 std= 0.76) | English (100%), German (14%), Mandarin (14%) | L | 9-47 (mean = 18.29 std= 9.54) | Piano (43%), Guitar (29%), Clarinet (14%) | Not reported | 12-23 (mean = 16.36 std= 3.37) | 529 | -73.2 - 7.76 (mean = -24.23 std= 19.42) | 36.5 - 50.1 (mean = 42.49 std= 4.12) |
| 3 | US.NY | NM | USA | NYC | 1-3 (mean = 1.23 std= 0.59) | English (100%), Spanish (8%), French (4%) | L | 0-9 (mean = 1.73 std= 2.86) | None (58%), Guitar (12%), Piano (12%) | Drake, Stevie wonder | 12-21 (mean = 15.62 std= 2.39) | 633 | -120 - -15.1 (mean = -44.22 std= 26.01) | 28.7 - 62.5 (mean = 47.67 std= 6.94) |
| 4 | US.NY | WM | USA | NYC | 1-5 (mean = 2.07 std= 1.17) | English (100%), French (30%), Spanish (26%) | L | 10-42 (mean = 20.04 std= 8.66) | Piano (70%), Violin (30%), Guitar (15%) | Classical, Beethoven, Brahms, Jazz | 12-24 (mean = 17.63 std= 2.96) | 672 | -61.8 - 8.68 (mean = -17.63 std= 15.89) | 27.5 - 57.3 (mean = 40.22 std= 6.81) |
| 5 | US.NY | LM | USA | NYC | 1-3 (mean = 1.61 std= 0.77) | English (100%), Spanish (31%), French (6%) | L | 8-59 (mean = 24.08 std= 12.62) | Piano (33%), Guitar (19%), Trombone (14%) | Jazz, Miles Davis, John Coltrane, Stravinsky, Bach, Beatles | 12-25 (mean = 17.81 std= 2.86) | 811 | -43.1 - 23.8 (mean = -16.10 std= 14.87) | 27.7 - 57.9 (mean = 38.98 std= 6.46) |
| 6 | BR | LM | Brazil | Recife | 1-2 (mean = 1.07 std= 0.26) | Portuguese (100%), English (7%) | L | 5-20 (mean = 12.53 std= 4.78) | Brazilian percussion (100%), Guitar (13%), Cavaquinho (7%) | Rock, Brega, MPB, Reggae, Samba | 9-20 (mean = 12.85 std= 3.39) | 433 | -58 - 11.6 (mean = -26.78 std= 17.26) | 33.3 - 46.4 (mean = 39.21 std= 4.40) |
| 7 | BO.LP | ST | Bolivia | La Paz | 2-4 (mean = 2.38 std= 0.65) | English (100%), Spanish (100%), Portuguese (23%) | P | 0-10 (mean = 3.42 std= 3.48) | Piano (38%), Guitar (31%), None (31%) | Rock, Electronic, Psytrance | 13-18 (mean = 15.62 std= 1.80) | 299 | -89.2 - 9.76 (mean = -27.93 std= 25.38) | 37.5 - 54 (mean = 46.22 std= 5.11) |
| 8 | BO.LP | NM | Bolivia | La Paz | 1-3 (mean = 2.17 std= 0.72) | Spanish (100%), Aymara (50%), English (42%), Quechua (17%) | P | 0-3 (mean = 0.79 std= 1.12) | None (58%), Drums (17%), Charango (8%) | Bolivian folk, Cumbia, Romantic, Salsa, Bachata, Reggaeton | 4-20 (mean = 12.96 std= 5.06) | 304 | -42.9 - 33.4 (mean = -10.61 std= 24.62) | 39.2 - 60.6 (mean = 51.06 std= 6.98) |
| 9 | BO.SB | NM | Bolivia | San Borja | 1-1 (mean = 1.00 std= 0.00) | Spanish (100%) | P | 0-12 (mean = 1.76 std= 3.67) | Sing (65%), None (24%), Drum (12%) | Romantic, Cumbia, Ranchera, Reggaeton, La playa, Pop | 5-19 (mean = 11.35 std= 4.03) | 386 | -64.6 - 24.7 (mean = -24.55 std= 23.14) | 38.9 - 68.1 (mean = 52.81 std= 8.19) |
| 10 | BO.SC | NM | Bolivia | Santa Cruz | 1-1 (mean = 1.00 std= 0.00) | Spanish (100%) | L | 0-9 (mean = 1.24 std= 2.41) | Sing (65%), None (24%), Wind (24%) | Rock, Pop, Romantic, Reggeton, Cristiano, Latin pop | 12-22 (mean = 15.41 std= 2.62) | 376 | -79.2 - 20.4 (mean = -21.03 std= 24.74) | 45.3 - 62.9 (mean = 52.90 std= 4.94) |
| 11 | BO.TS | NM | Bolivia | Tsimane' Villages | 1-2 (mean = 1.23 std= 0.43) | Tsimane' (100%), Spanish (23%) | S | ** (see below) | Drum (64%), Ricarica (64%), None (31%) | Hymns, Traditional | 0-12 (mean = 3.42 std= 2.87) | 792 | -64.7 - 112 (mean = -6.52 std= 33.73) | 52.6 - 80.3 (mean = 68.82 std= 7.58) |
| 12 | UY | ST | Uruguay | Montevideo | 1-4 (mean = 2.44 std= 0.64) | Spanish (100%), English (89%), Portuguese (26%) | L | 0-0 (mean = 0.00 std= 0.00) | None (100%) | Rock, Pop, Pop-rock, Coldplay, Imagine dragons, La vela puerca | 15-22 (mean = 17.41 std= 1.80) | 675 | -89.6 - -6.72 (mean = -38.74 std= 25.47) | 33.1 - 61.7 (mean = 46.48 std= 6.73) |
| 13 | UY | LM | Uruguay | Montevideo | 1-3 (mean = 1.32 std= 0.60) | Spanish (100%), Portuguese (19%), English (10%), Yoruba (3%) | L | 7-60 (mean = 34.65 std= 13.51) | Candombe-Drums (77%), Percussion (61%), Piano (10%) | Candombe, Salsa, Samba, Jazz, Rock, Rubén Rada | 6-18 (mean = 9.45 std= 2.63) | 776 | -74.4 - 10 (mean = -19.89 std= 18.18) | 28 - 51.6 (mean = 37.82 std= 6.00) |
| 14 | UK | ST | UK | Durham | 1-4 (mean = 2.12 std= 0.95) | English (100%), French (21%), Mandarin (17%) | L | 0-8 (mean = 1.29 std= 1.88) | None (75%), Guitar (17%), Piano (17%) | Pop, Rock, Classical, Coldplay, Indie | 12-21 (mean = 16.25 std= 2.17) | 480 | -132 - 19.5 (mean = -44.73 std= 31.09) | 38.6 - 61.1 (mean = 49.88 std= 5.21) |
| 15 | UK | LM | UK | Durham/ Newcastle/ Edinburgh | 1-4 (mean = 1.48 std= 0.83) | English (100%), French (17%), German (7%) | L | 6-45 (mean = 17.17 std= 9.93) | Piano (45%), Guitar (28%), Drums (21%) | Jazz, Rock, Funk, Pop, Classical, Vulfpeck | 12-20 (mean = 16.41 std= 2.26) | 580 | -74.6 - 0.684 (mean = -24.87 std= 17.77) | 27 - 50 (mean = 38.78 std= 5.43) |
| 16 | UK | LM | Sweden | Stockholm | 2-6 (mean = 2.95 std= 1.09) | English (100%), Swedish (100%), German (27%), | L | 10-40 (mean = 21.59 std= 10.28) | Violin (59%), Voice (32%), Piano (23%) | Swedish-folk, Folk, Bach, Beatles | 12-2.2e+02 (mean = 27.40 std= 43.15) | 455 | -42.1 - 9.19 (mean = -16.89 std= 12.04) | 30.4 - 46.6 (mean = 38.78 std= 4.03) |
| 17 | BG | LM | Bulgaria | Pleven/ Plovdiv/ Sofia | 1-4 (mean = 2.30 std= 0.88) | Bulgarian (100%), English (61%), Russian (48%) | L | 10-50 (mean = 29.52 std= 11.41) | Gadulka (35%), Piano (26%), Kaval (22%), | Bulgarian folk, Rock | 12-18 (mean = 15.13 std= 2.40) | 687 | -43 - 8.14 (mean = -18.59 std= 13.89) | 32.3 - 44.5 (mean = 37.95 std= 3.67) |

| | | | | | | | | | | | | | | |
|----|-------|----|----------|------------------------------|----------------------------------|--|---|---------------------------------------|---|--|-------------------------------------|-----|---|---|
| 18 | BG | DA | Bulgaria | Pleven/ Plovdiv/ Sofia | 1- 5 (mean = 1.93 std= 0.87) | Bulgarian (100%), English (37%), Russian (26%) | L | 0-34 (mean = 3.11 std= 7.29) | None (56%), Tupan (15%), Kaval (11%), | Bulgarian folk, Rock | 12-32 (mean = 17.04 std= 5.61) | 780 | -75.7 - -0.586 (mean = - 27.20 std= 18.69) | 32.9 - 55.5 (mean = 42.39 std= 5.79) |
| 19 | TK | ST | Turkey | Istanbul | 2- 3 (mean = 2.19 std= 0.40) | English (100%), Turkish (100%), French (11%) | L | 0-11 (mean = 4.31 std= 3.59) | None (15%), Baglama (11%), Gitar (11%) | Pop/rock, Turkish folk, Rock, Pop, Sezen Aksu | 13-21 (mean = 14.89 std= 1.89) | 746 | -79.9 - 10.7 (mean = - 26.93 std= 20.32) | 31.2 - 55.5 (mean = 43.67 std= 6.27) |
| 20 | TK | LM | Turkey | Istanbul / Ismir | 1- 4 (mean = 1.96 std= 0.86) | Turkish (100%), English (67%), German (8%) | L | 9-30 (mean = 17.00 std= 5.85) | Baglama (25%), Oud (21%), Bendir (13%), | Turkish folk, Pop/rock, Pop, Jazz, Turkish classical, Turkish pop | 14-25 (mean = 18.71 std= 3.38) | 617 | -41.1 - 12.3 (mean = - 18.21 std= 12.36) | 31.2 - 45.9 (mean = 38.35 std= 4.25) |
| 21 | MA | ST | Mali | Bamako | 2- 7 (mean = 3.45 std= 1.09) | French (100%), Bambara (97%), English (61%), Sounrhai (16%) | L | 0-15 (mean = 1.10 std= 3.45) | None (84%), Voice (6%), | Malian rap, Malian pop, Oumou Sangaré, Salif Keita, Sidiki Diabaté, Traditional malian | 13-20 (mean = 15.68 std= 1.62) | 636 | -58.9 - 20.6 (mean = - 22.12 std= 21.88) | 31.3 - 59.4 (mean = 44.70 std= 6.79) |
| 22 | MA | LM | Mali | Bamako | 1- 4 (mean = 2.03 std= 0.78) | Bambara (100%), French (69%), Kasonka (14%) | P | 7-57 (mean = 25.93 std= 12.45) | Dundun (97%), Jembe (90%), Ngoni (14%), | Traditional malian, Malian pop, Griot, Babani Koné, Salif Keita | 0-17 (mean = 6.10 std= 4.20) | 589 | -34.7 - 2.59 (mean = - 11.40 std= 8.54) | 22.9 - 49.9 (mean = 34.03 std= 5.92) |
| 23 | MA | DA | Mali | Sagele | 1- 2 (mean = 1.09 std= 0.29) | Maninka (100%), French (9%) | P | 0- 3 (mean = 0.09 std= 0.51) | None (47%), Ji-Dunun (29%), Voice (18%), | Salif Keita, Oumou Sangaré, Sekouba Diabaté, Traditional Malian, Guinean pop, Malian music | 0-12 (mean = 3.85 std= 3.89) | 834 | -52.4 - 10.7 (mean = - 16.69 std= 13.86) | 33.2 - 57.6 (mean = 40.83 std= 5.30) |
| 24 | BW.SA | LM | Botswana | D'Kar | 1- 2 (mean = 1.59 std= 0.51) | English (59%) | P | 10-59 (mean = 29.73 std= 14.73) | Voice (59%), Tagadire (35%), Thumbpiano (18%) | Not reported | Not reported | 170 | -51.9 - 12.9 (mean = - 9.16 std= 15.81) | 25.8 - 49.5 (mean = 39.96 std= 5.90) |
| 25 | BW.EA | LM | Botswana | Etsha | 1- 2 (mean = 1.14 std= 0.36) | English (14%) | P | 7-46 (mean = 16.36 std= 9.79) | Drums (71%), Voice (50%), Fingerguitar (7%) | Not reported | Not reported | 127 | -52.3 - 2.03 (mean = - 20.14 std= 17.33) | 32.3 - 54 (mean = 42.11 std= 5.57) |
| 26 | NA | NM | Namibia | Spitzkoppe | 1- 3 (mean = 1.75 std= 0.58) | Afrikaans (94%), English (75%), Oshivambo (6%) | P | 0- 8 (mean = 3.91 std= 2.76) | Singing (88%), Drums (13%), None (13%) | Ma/Gaisa, Gospel, T-bozz & Staika, Damara, Kalux | Not reported | 370 | -76.4 - 19.6 (mean = - 25.14 std= 25.15) | 41.4 - 68 (mean = 47.64 std= 6.51) |
| 27 | NA | LM | Namibia | Spitzkoppe | 1- 3 (mean = 2.00 std= 0.55) | English (93%), Afrikaans (79%), German (14%) | P | 4-20 (mean = 10.86 std= 4.19) | Singing (100%), Drums (21%), Trumpet (14%), | T-bozz & Staika, Damara, Traditional Damara, R&B | Not reported | 344 | -73.5 - 19.1 (mean = - 25.84 std= 25.98) | 39.3 - 59.6 (mean = 46.71 std= 5.36) |
| 28 | IN | NM | India | Mumbai | 2- 5 (mean = 2.73 std= 0.96) | English (100%), Hindi (80%), Marathi (33%) | L | 0- 1 (mean = 0.38 std= 0.48) | None (87%), Guitar (7%), Keyboard (7%) | A. r. Rahman, Arijit Singh, Bollywood, Shreya Ghoshal, Ilaivaraaja | 14-23 (mean = 17.60 std= 2.97) | 378 | -76.3 - -12.7 (mean = - 39.15 std= 23.40) | 37.3 - 55.7 (mean = 47.23 std= 5.35) |
| 29 | IN | LM | India | Mumbai | 1- 4 (mean = 2.88 std= 0.86) | English (94%), Hindi (94%), Marathi (35%) | L | 6-25 (mean = 11.68 std= 5.24) | Tabla (47%), Voice (18%), Flute (12%), | Zakir Hussain, Bhimsen Joshi, Hariprasad Chaurasia, Indian Ocean, Rashid Khan, Shahid Parvez | 4-26 (mean = 16.76 std= 5.47) | 426 | -61.8 - -1.54 (mean = - 20.28 std= 14.77) | 31.9 - 47.2 (mean = 37.69 std= 4.69) |
| 30 | KR | ST | S.Korea | Daejeon | 1- 1 (mean = 1.00 std= 0.00) | Not-reported (100%) | L | 0- 9 (mean = 3.00 std= 3.48) | None (40%), Piano (40%), Guitar (7%) | K-pop, Pop, Classical music, Hip-hop, Jazz, Rock | Not reported | 450 | -45.2 - 0.483 (mean = - 20.15 std= 14.60) | 35.3 - 54.2 (mean = 44.19 std= 4.67) |
| 31 | KR | WM | S.Korea | Daejeon | 1- 1 (mean = 1.00 std= 0.00) | Not-reported (100%) | L | 5-22 (mean = 12.15 std= 5.34) | Piano (31%), String (31%), Vocal (31%) | Classical music, K- pop, Jazz, Pop, Hip- hop, Rock | Not reported | 390 | -38.9 - 19.4 (mean = - 17.55 std= 16.54) | 32.4 - 58.4 (mean = 42.87 std= 6.17) |
| 32 | KR | LM | S.Korea | Jeonju | 1- 1 (mean = 1.00 std= 0.00) | Not-reported (100%) | L | 5-15 (mean = 8.23 std= 2.74) | Wind (54%), Percussion (15%), String (15%) | K-pop, Hip-hop, Jazz, Classical music, Pop, Traditional Korean music | Not reported | 388 | -30.1 - -0.944 (mean = - 19.88 std= 9.64) | 38.7 - 49.9 (mean = 44.91 std= 3.49) |
| 33 | JP | ST | Japan | Tokyo / Fujisawa | 1- 4 (mean = 1.65 std= 0.99) | Japanese (100%), English (30%), Chinese (5%) | L | 0- 3 (mean = 0.35 std= 0.88) | None (75%), Acoustic Guitar (5%), Piano (5%) | Not reported | Not reported | 428 | -107 - 37.8 (mean = - 42.35 std= 28.91) | 39 - 58.9 (mean = 49.24 std= 5.08) |
| 34 | JP | WM | Japan | Tokyo / Fujisawa | 1- 4 (mean = 2.23 std= 1.09) | Japanese (100%), English (69%), Chinese (8%) | L | 5-20 (mean = 12.77 std= 5.18) | Piano (77%), Vocal (23%), Wadaiko (23%) | Not reported | Not reported | 261 | -50.6 - -8.25 (mean = - 25.64 std= 12.60) | 39.2 - 50 (mean = 44.23 std= 3.07) |
| 35 | JP | LM | Japan | Tokyo / Fujisawa | 1- 4 (mean = 1.58 std= 0.99) | Japanese (100%), English (27%), French (4%) | L | 7-21 (mean = 13.35 std= 3.97) | Shamisen (73%), Koto (46%), Piano (38%), | Not reported | Not reported | 529 | -61.8 - 7.18 (mean = - 20.13 std= 19.45) | 37.9 - 56.2 (mean = 45.45 std= 4.84) |
| 36 | CN | NM | China | Guizhou Province | 1- 2 (mean = 1.77 std= 0.42) | Dong (100%), Mandarin (78%) | P | 0-26 (mean = 1.68 std= 5.23) | None (80%), Voice (20%) | Not reported | Not reported | 575 | -100 - 11.4 (mean = - 28.96 std= 21.84) | 38.7 - 64.4 (mean = 50.15 std= 6.00) |
| 37 | US | OL | USA | Online | 1 - 4 (mean = 1.46 std= 0.79) | English (100%), Spanish (11%), German (6%), | L | 0 - 30 (mean = 5.06 std= 6.75) | none (46%), piano (26%), guitar (17%), | Rock, Pop, Beatles, Taylor Swift, Pop/rock | 8 - 22 (mean = 16.25 std= 2.78) | 948 | -117 - 17 (mean = -37.00 std= 27.65) | 31.5 - 72.5 (mean = 52.48 std= 9.66) |
| 38 | BR | OL | Brazil | Online | 1 - 4 (mean = 2.39 std= 0.69) | Portuguese (100%), English (93%), Spanish (36%) | L | 0 - 20 (mean = 3.52 std= 5.27) | none (43%), guitar (32%), piano (14%), | Rock, Pop, Heavy metal | 11 - 25 (mean = 16.19 std= 3.57) | 413 | -85.8 - 5.91 (mean = -33.15 std= 21.40) | 38.9 - 70.9 (mean = 55.40 std= 7.44) |
| 39 | IN | OL | India | Online | 2 - 5 (mean = 3.11 std= 0.92) | English (100%), Hindi (76%), Tamil (47%), Malayalam (24%) | L | 0 - 20 (mean = 3.06 std= 5.02) | none (53%), guitar (21%), harmonium (8%) | Pop, Rock, A. r. Rahman, Classic, Rap | 8 - 22 (mean = 17.48 std= 2.84) | 569 | -97.2 - 27.2 (mean = -38.30 std= 31.32) | 31.8 - 88 (mean = 61.96 std= 11.85) |

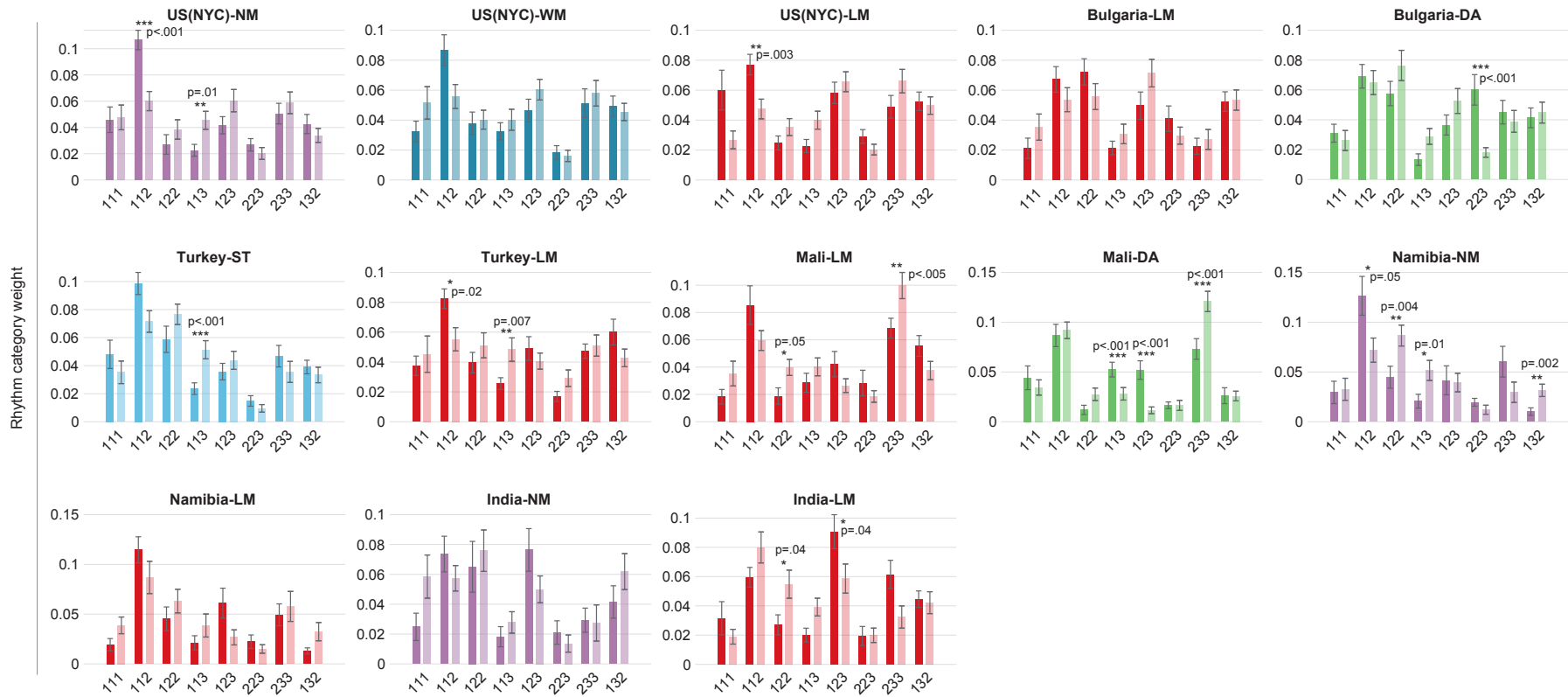
Literacy- L- literate participants; P- partial literacy: some participants are not fully literate; S- some participants had some literacy. **- Two participants reported regularly playing an instrument. 34 participants reported playing an instrument at least once.

Supplementary Table 3: Supplementary demographic information (fast tempo experiment).

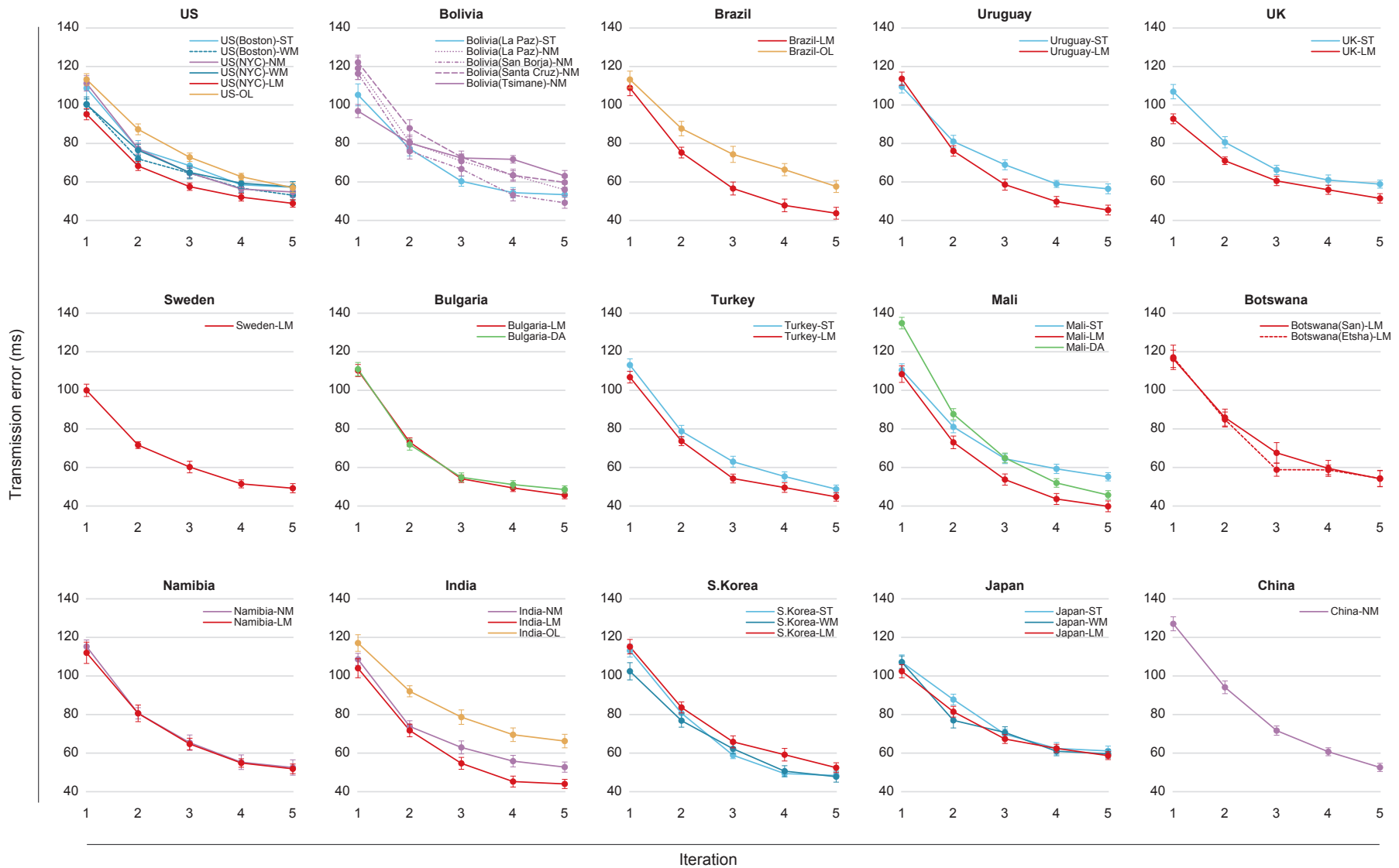
| # | Group | Type | Country | City | Number Of Languages Spoken | Main Languages Spoken | Literacy | Years Playing Instrument/Singing | Main Instruments Played | Most Mentioned Favorite Artists or Musical Genres | Years of formal education | Total Trials | Mean Asynchrony | Std Asynchrony |
|----|-------|------|----------|-----------------------|-----------------------------|---|----------|----------------------------------|--|--|--------------------------------|--------------|---|--------------------------------------|
| 1 | US.NY | NM | USA | NYC | 1-3 (mean = 1.23 std= 0.59) | English (100%), Spanish (8%), French (4%) | L | 0-9 (mean = 1.73 std= 2.86) | None (58%), guitar (12%), piano (12%) | Drake, Stevie Wonder | 12-21 (mean = 15.62 std= 2.39) | 631 | -32.7 - 15.8 (mean = -9.39 std= 13.75) | 17.9 - 32.4 (mean = 25.75 std= 3.39) |
| 2 | US.NY | WM | USA | NYC | 1-4 (mean = 1.96 std= 1.04) | English (100%), French (27%), Spanish (23%) | L | 10-42 (mean = 19.69 std= 8.64) | Piano (73%), violin (27%), guitar (15%) | Classical, Beethoven, Brahms, Jazz | 12-24 (mean = 17.54 std= 2.98) | 636 | -49.8 - 12.6 (mean = -11.79 std= 13.10) | 16.5 - 28.5 (mean = 22.17 std= 3.16) |
| 3 | US.NY | LM | USA | NYC | 1-3 (mean = 1.59 std= 0.74) | English (100%), Spanish (29%), French (6%) | L | 8-59 (mean = 24.65 std= 12.76) | Piano (32%), guitar (21%), bass (12%) | Jazz, Miles Davis, Bach, Stravinsky | 12-25 (mean = 17.83 std= 2.95) | 773 | -35.1 - 25.8 (mean = -3.86 std= 12.62) | 14.3 - 30.7 (mean = 21.98 std= 3.54) |
| 4 | BG | LM | Bulgaria | Pleven/ Plovdiv/Sofia | 1-4 (mean = 2.30 std= 0.88) | Bulgarian (100%), English (61%), Russian (48%) | L | 10-50 (mean = 29.52 std= 11.41) | Garulka (35%), piano (26%), kaval (22%), voice (17%) | Bulgarian folk, Rock | 12-18 (mean = 15.13 std= 2.40) | 641 | -30.7 - 9.49 (mean = -10.61 std= 11.01) | 17.5 - 24.3 (mean = 20.41 std= 1.93) |
| 5 | BG | DA | Bulgaria | Pleven/ Plovdiv/Sofia | 1-5 (mean = 2.03 std= 1.00) | Bulgarian (100%), English (44%), Russian (31%) | L | 0-34 (mean = 3.03 std= 6.76) | None (53%), tapan (19%), kaval (9%), voice (6%) | Bulgarian folk, Rock, Michael Jackson | 12-32 (mean = 17.25 std= 5.25) | 961 | -34.9 - 9.93 (mean = -14.71 std= 9.95) | 15.4 - 28.1 (mean = 22.55 std= 2.97) |
| 6 | TK | ST | Turkey | Istanbul | 2-3 (mean = 2.19 std= 0.40) | Turkish (100%), English (100%), French (11%) | L | 0-11 (mean = 4.31 std= 3.59) | None (15%), baglama (11%), guitar (11%), ney (11%) | Pop/rock, Turkish folk, Rock, Pop, Sezen Aksu | 13-21 (mean = 14.89 std= 1.89) | 741 | -24.2 - 15.3 (mean = -4.55 std= 10.58) | 17.5 - 28.7 (mean = 23.23 std= 3.07) |
| 7 | TK | LM | Turkey | Istanbul / Izmir | 1-4 (mean = 1.96 std= 0.86) | Turkish (100%), English (67%), German (8%) | L | 9-30 (mean = 17.00 std= 5.85) | Baglama (25%), oud (21%), bendir (13%), clarinet (13%) | Turkish folk, Pop/rock, Pop, Jazz, Turkish classical, Turkish pop | 14-25 (mean = 18.71 std= 3.38) | 616 | -18 - 12.4 (mean = -5.75 std= 7.65) | 16.4 - 24 (mean = 20.59 std= 2.05) |
| 8 | MA | LM | Mali | Bamako | 1-4 (mean = 2.00 std= 0.86) | Bambara (95%), French (65%) | P | 7-42 (mean = 23.75 std= 11.62) | Dundun (95%), jembe (90%), tamanin (25%) | Traditional Malian, Malian pop, Griot, Salif Keita | 0-17 (mean = 7.05 std= 4.31) | 606 | -8.9 - 7.19 (mean = -0.32 std= 4.68) | 14 - 22.3 (mean = 16.98 std= 2.37) |
| 9 | MA | DA | Mali | Sagele | 1-2 (mean = 1.08 std= 0.28) | Maninka (100%), French (8%) | P | 0-3 (mean = 0.12 std= 0.61) | None (50%), jidunun (25%), voice (17%) | Salif Keita, Sekouba Diabaté, Traditional Malian, Guinean pop, Malian music | 0-12 (mean = 2.96 std= 3.83) | 604 | -22.9 - 19.1 (mean = -2.85 std= 9.54) | 18.2 - 28.2 (mean = 22.76 std= 2.25) |
| 10 | NA | NM | Nambia | Spitzkoppe | 1-3 (mean = 1.75 std= 0.58) | Afrikaans (94%), English (75%), Oshivambo (6%) | P | 0-8 (mean = 3.91 std= 2.76) | Singing (88%), drums (13%), none (13%) | Ma/Gaisa, Gospel, T-bozz & Staika, Damara, Kalux | not reported | 361 | -28.9 - 32.7 (mean = -5.69 std= 16.53) | 20.9 - 33.5 (mean = 25.72 std= 3.31) |
| 11 | NA | LM | Namibia | Spitzkoppe | 1-3 (mean = 2.00 std= 0.55) | English (93%), Afrikaans (79%), German (14%) | P | 4-20 (mean = 10.86 std= 4.19) | Singing (100%), drums (21%), trumpet (14%) | T-bozz & Staika, Damara, Traditional Damara, R&B | not reported | 341 | -33.2 - 29.8 (mean = -7.11 std= 17.47) | 21.6 - 31.3 (mean = 25.81 std= 2.94) |
| 12 | IN | NM | India | Mumbai | 2-5 (mean = 2.73 std= 0.96) | English (100%), Hindi (80%), Marathi (33%), | L | 0-1 (mean = 0.38 std= 0.48) | None (87%), guitar (7%), keyboard (7%) | A. r. Rahman, Arijit Singh, Bollywood, Ilaiyaraaja, Shreya Ghoshal, Atif Aslam | 14-23 (mean = 17.60 std= 2.97) | 376 | -24.1 - 12 (mean = -8.64 std= 10.67) | 21.6 - 29.5 (mean = 25.39 std= 2.58) |
| 13 | IN | LM | India | Mumbai | 2-4 (mean = 2.75 std= 0.62) | English (100%), Hindi (100%), Marathi (42%), (8%) | L | 7-20 (mean = 12.25 std= 3.74) | Tabla (67%), flute (17%), harmonium (17%) | Zakir Hussain, Hariprasad Chaurasia, Indian ocean | 11-21 (mean = 16.00 std= 3.13) | 300 | -33.4 - 18.2 (mean = -3.88 std= 13.94) | 16.7 - 23.2 (mean = 19.97 std= 1.92) |

Literacy- L- literate participants; P- partial literacy: some participants are not fully literate; S- some participants had some literacy.

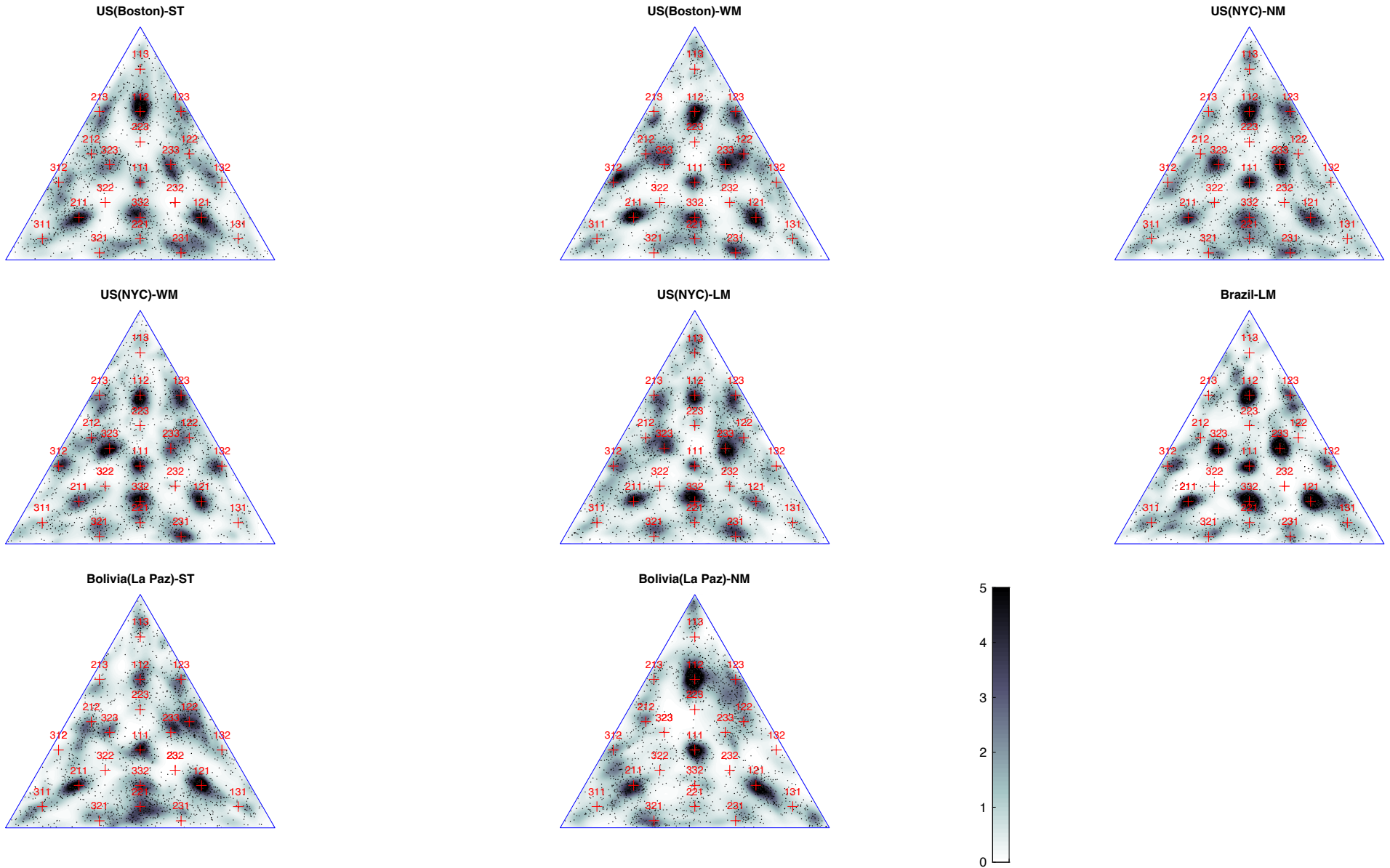
Supplementary Figures



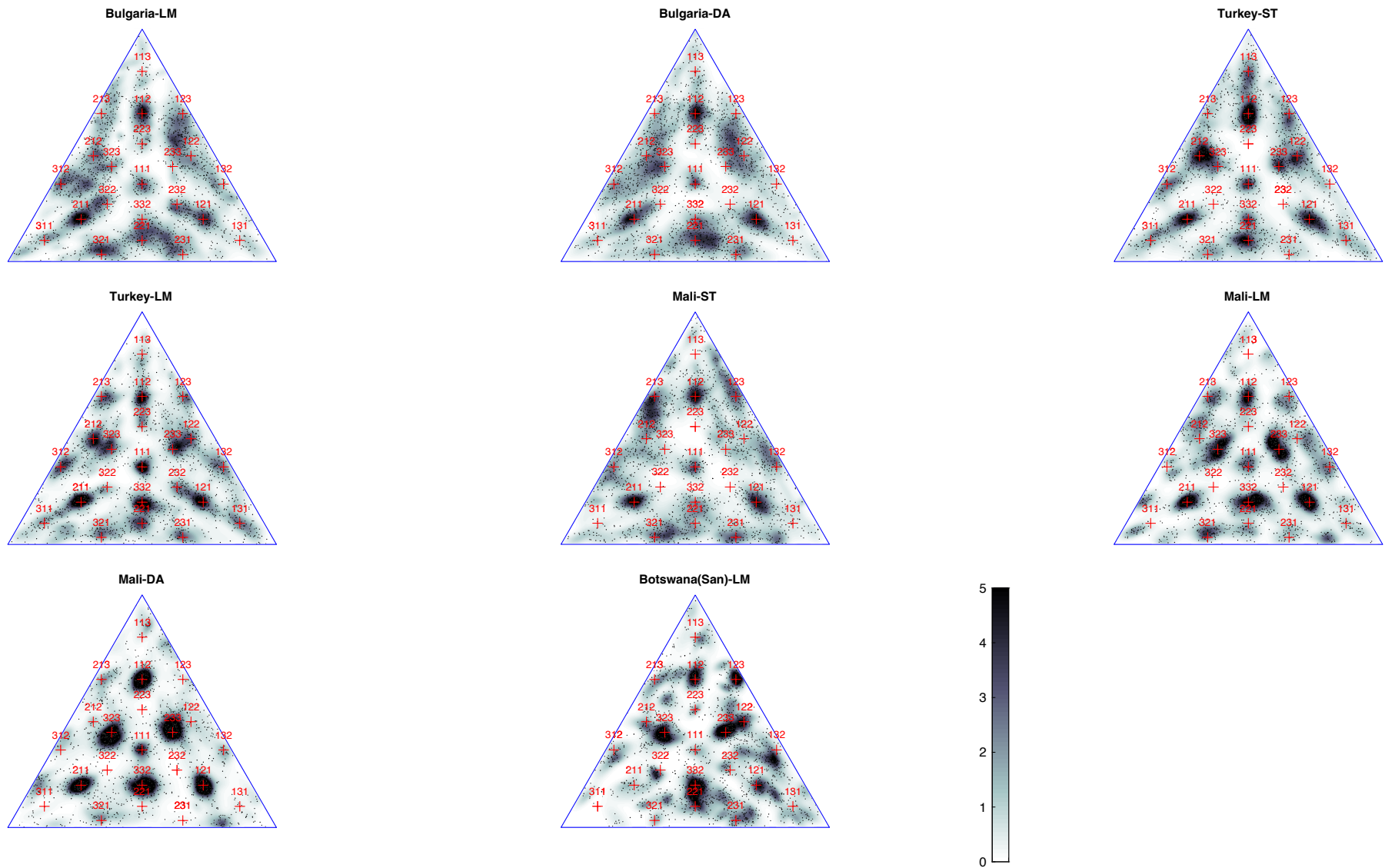
Supplementary Figure 1: Category weights of the fast tempo experiment, compared to those from the slow tempo experiment. Category weights from the fast and slow tempo experiments in 13 groups that performed both experiments. Darker colored bars plot category weights for the fast tempo; lighter colored bars plot category weights for the slow tempo. Asterisks mark statistical significance after Bonferroni correction for multiple comparisons (***: $p < .001$; **: $p < .01$; *: $p < .05$). Error bars plot SEM, derived from 1000 bootstrap samples.



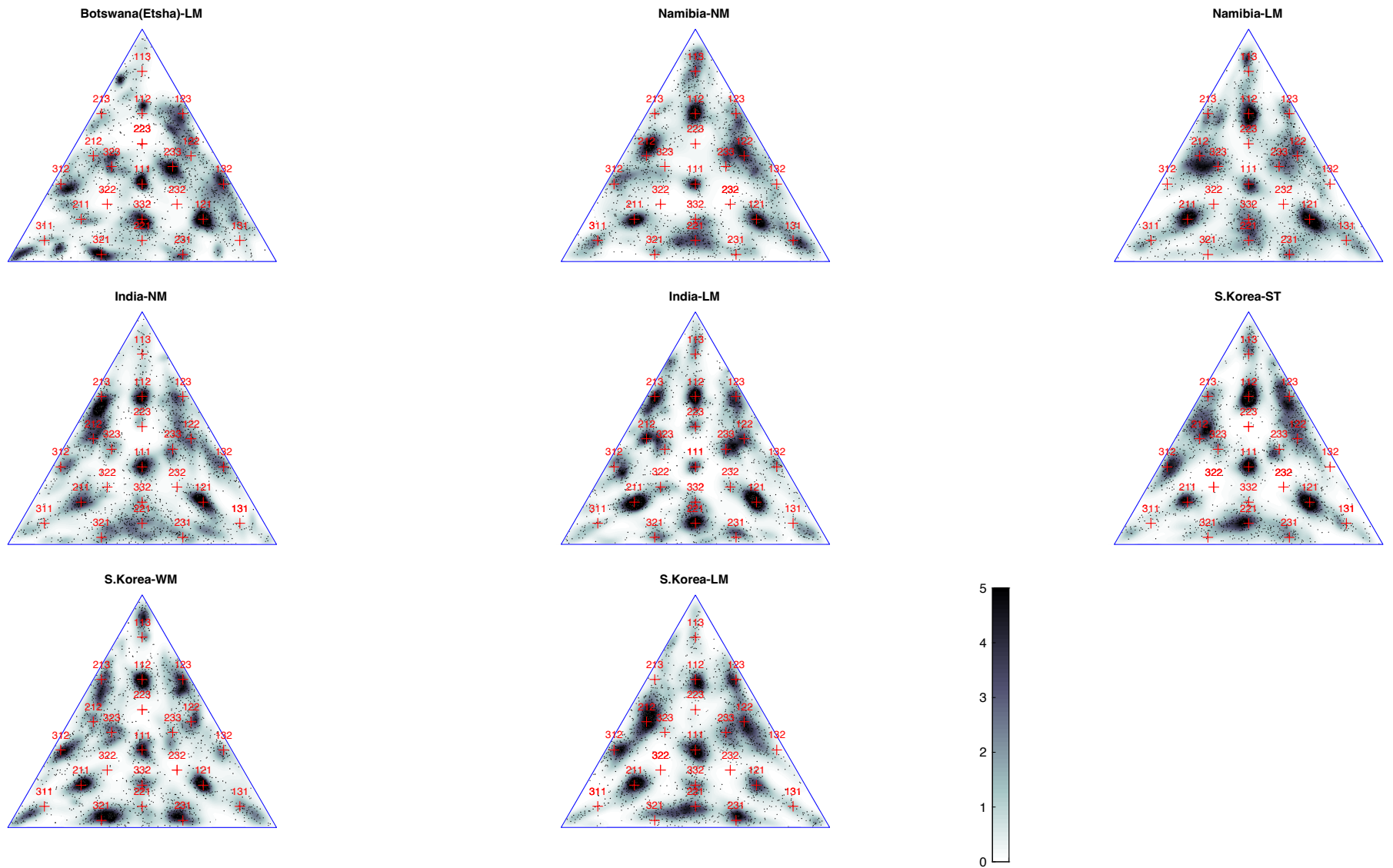
Supplementary Figure 2: Transmission error in 39 groups. Transmission error is a standard way to monitor the dynamics of serial reproduction experiments. As an error measure, we use the average distance in milliseconds between the seed and response in each iteration. Namely, the average across trials of $e = \sqrt{(s_1 - r_1)^2 + (s_2 - r_2)^2 + (s_3 - r_3)^2}$, where (s_1, s_2, s_3) and (r_1, r_2, r_3) are the stimulus and average response of each iteration, respectively (i.e., the response is averaged across the 10 repetitions within each iteration). Transmission error is expected to remain constant after convergence. The figure shows that the dynamics converged or nearly converged in all 39 groups by the fifth iteration. Data are presented as mean values \pm SEM across participants (see methods, number of participants is detailed in Extended Data Table 1).



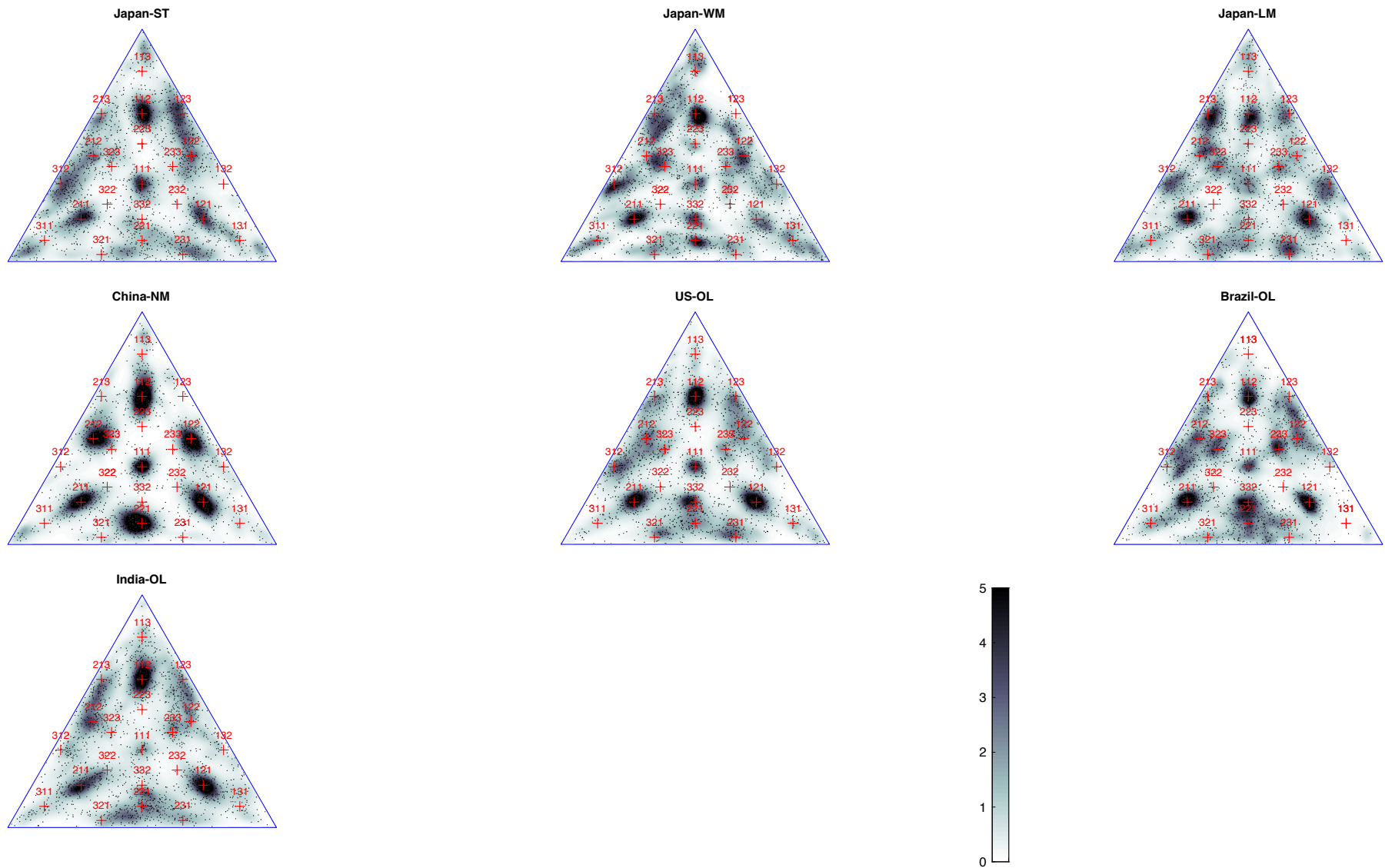
Supplementary Figure 3: *Rhythm priors from main experiment (1/5).* Kernel density estimates were clipped at a value of 5 (relative to uniform distribution; see Methods) in order to preserve the dynamic range for details at low density values.



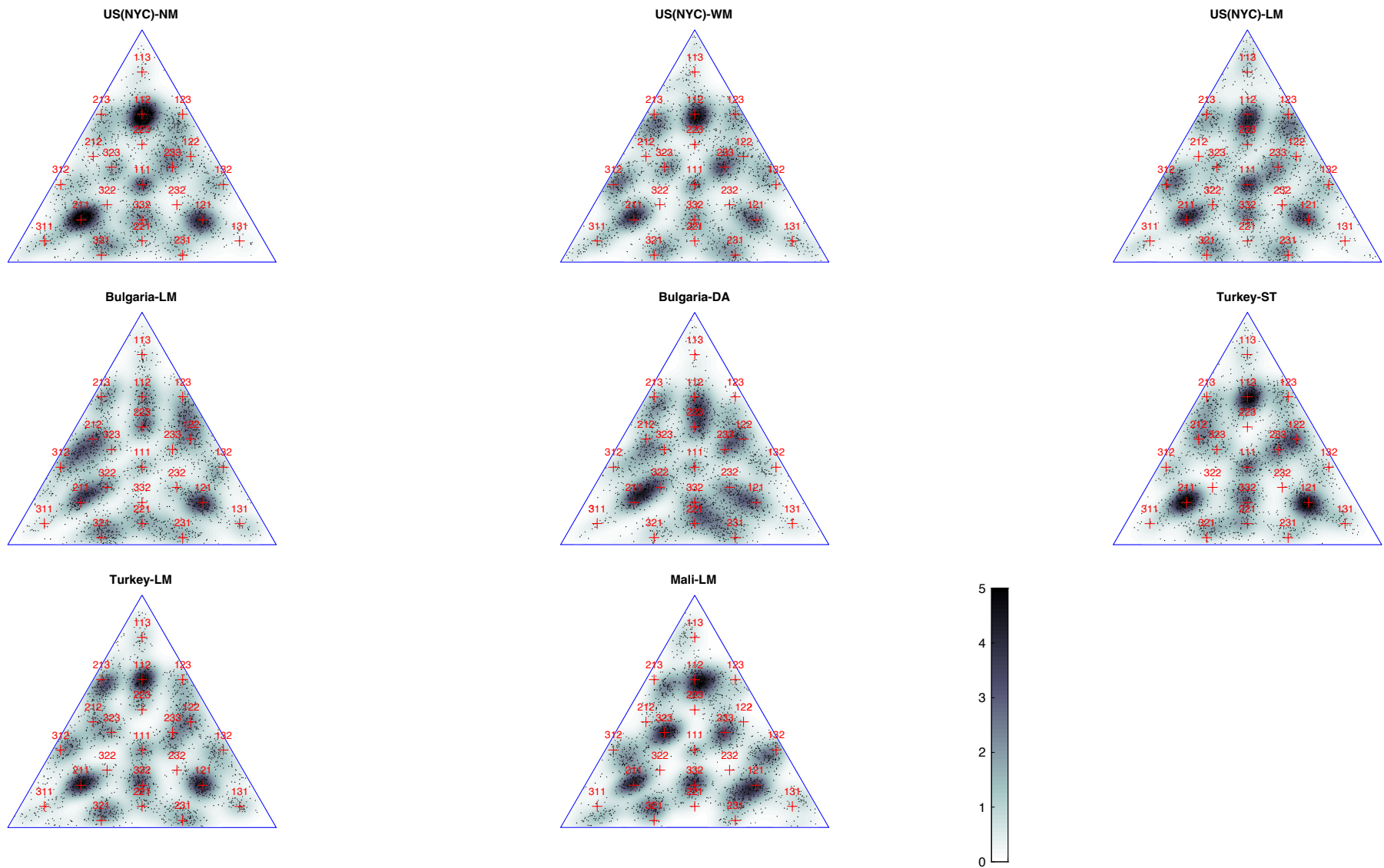
Supplementary Figure 5: *Rhythm priors from main experiment (3/5).* Kernel density estimates were clipped at a value of 5 (relative to uniform distribution see Methods) in order to preserve the dynamic range for details at low density values.



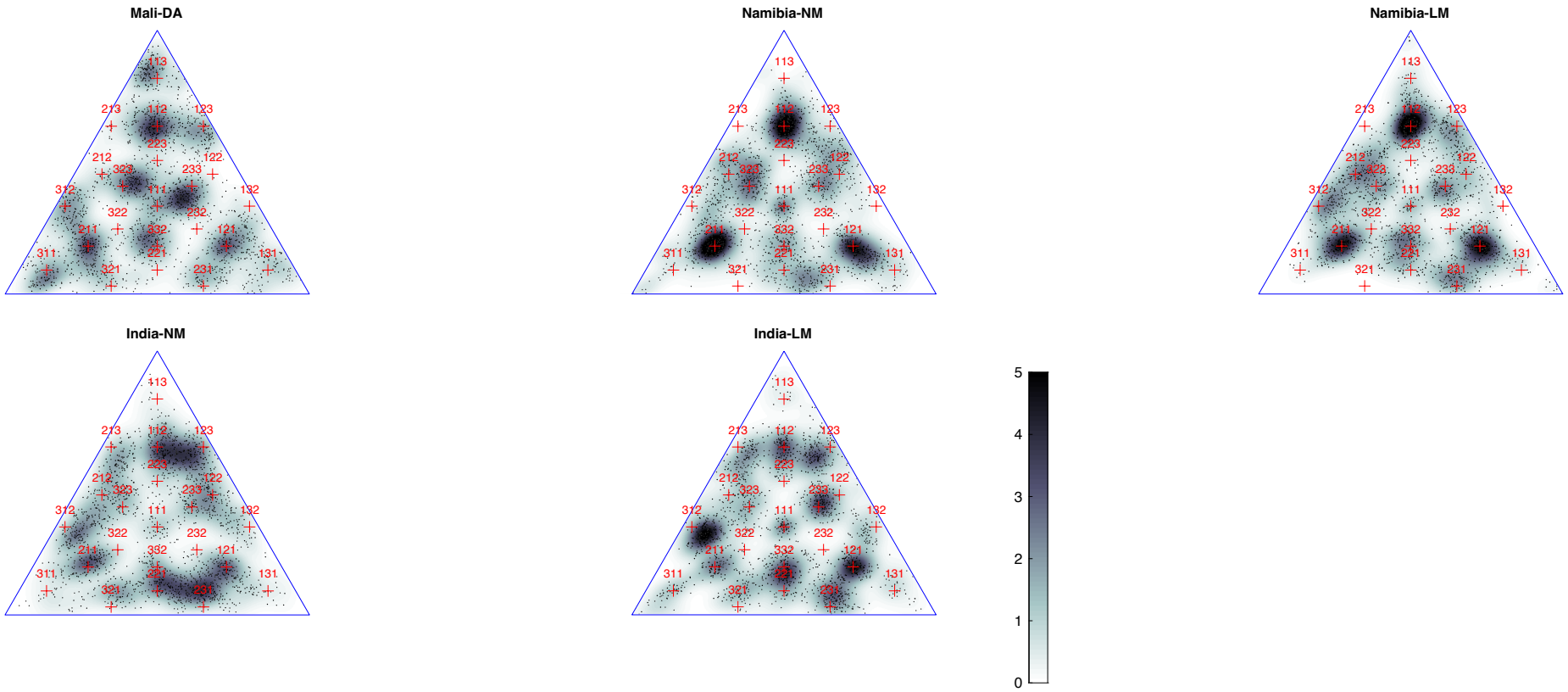
Supplementary Figure 6: *Rhythm priors from main experiment (4/5).* Kernel density estimates were clipped at a value of 5 (relative to uniform distribution see Methods) in order to preserve the dynamic range for details at low density values.



Supplementary Figure 7: *Rhythm priors from main experiment (5/5).* Kernel density estimates were clipped at a value of 5 (relative to uniform distribution see Methods) in order to preserve the dynamic range for details at low density values.



Supplementary Figure 8: *Rhythm priors from fast tempo experiment (1/2).* Kernel density estimates were clipped at a value of 5 (relative to uniform distribution see Methods) in order to preserve the dynamic range for details at low density values.



Supplementary Figure 9: *Rhythm priors from fast tempo experiment (2/2).* Kernel density estimates were clipped at a value of 5 (relative to uniform distribution see Methods) in order to preserve the dynamic range for details at low density values.