

Supporting Information

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Table S1. Late Pleistocene fossil human specimens providing younger versus older ages at death

| Younger adult (~20–40 y) | Older adult (>~40 y) |
|---|---|
| Late Archaic humans | |
| Amud 1* | Arcy-Hyène 8 |
| Arcy-Bison P11.8 | Artenac 1 |
| Arcy-Hyène 9 | Banyoles 1 |
| Changyang 1 | (La Chapelle-aux-Saints 1*) |
| Fate 3 | Feldhofer 1* |
| Guattari 3 | Ferrassie 1*, (2*) |
| Kebara 2* | Forbes' Quarry 1 |
| Krapina 57, 58, 59, 63, 66 [†] | Guattari 2 |
| Monsempron 1, 3 | Kiik-Koba 1* |
| La Naulette 1 | Shanidar 1*, 3*, 4*, 5 |
| Palomas 1, 23, 59, 92, 96* | |
| Petit-Puymoyen 2, 3 | |
| Les Pradelles (Marillac) 4 | |
| La Quina 5*, 9 | |
| Regourdou 1* | |
| Saccopastore 1, 2 | |
| Saint-Césaire 1* | |
| Sakažia 1 | |
| Shanidar 2, 6* | |
| Sidrón md1, md2, md3 | |
| Spy 1*, 2* | |
| Subalyuk 1 | |
| Švédův stůl (Ochoz) 1 | |
| Tabun 1* | |
| Vindija 206, 226, 231, 259 | |
| Zafarraya 2 | |
| Total: 45 | Total: 14 |
| Total with borderline specimens: 47 | Total without borderline specimens: 12 |
| Burial total: 10 | Burial total: 8 |
| Middle Paleolithic modern humans [†] | |
| Qafzeh 3*, 6*, 7*, 8*, 27* | Skhul 9* |
| Skhul 2*, 3*, 4*, 5*, 6* | |
| Haua Fteah 1 | |
| Zhiren 3 | |
| Total: 12 | Total: 1 |
| Burial total: 10 | Burial total: 1 |
| Earlier Upper Paleolithic modern humans | |
| Barma Grande 2*, 5* | Brno 2* |
| Caldeirão 1 | Caviglione 1* |
| Cro-Magnon 2, 4 | Dolní Věstonice (3*), 16* |
| La Cruzade 6 | Grotte des Enfants 5* |
| Dolní Věstonice 13*, 15* | Paglicci 14, 15, 24 |
| Grotte des Enfants 4* | (Pavlov 1*) |
| Mittlere Klause 1* | (Předmostí 3*) |
| Mladeč 2, 8, 52, 54 | Sunghir 1* |
| Moh Khiew 1* | Tianyuan 1* |
| Muierii 1 | Zhoukoudian-Upper Cave 101 [†] |
| Nahal 'En-Gev 1* | |
| Nazlet Khater 2* | |
| Oase 1 | |
| Ostuni 1* | |
| Paglicci 25*, 37 | |
| Pataud 1 | |
| Paviland 1* | |
| Pavlov 2, 3 | |
| Předmostí 5*, 9*, 10*, 14*, 21 | |

Table S1. Cont.

| Younger adult (~20–40 y) | Older adult (>~40 y) |
|---|--|
| Veneri (Parabita) 1*, 2* | |
| Zhoukoudian-Upper Cave 102, 103, 104 ⁵ | |
| Total: 36 | Total: 13 |
| Total with borderline specimens: 39 | Total without borderline specimens: 10 |
| Burial total: 18 | Burial total: 9 |

The list includes partial skeletons, mandibles, and maxillae with age indications. No isolated teeth (alone or in series), crania, or postcrania are included. There are no partial skeletons without clear age indicators [minimally partial dentition, histological indicators, fibrocartilagenous surfaces (pubis/auricular), and/or final (third decade) ossifications]. All fossils are fully adult to the extent determinable; late adolescents, although likely to have been reproductively mature, are not listed. Specimens that cluster around 40 y postnatal are in parentheses and have been placed in the older age category.

*Burials or probable burials.

¹To avoid possible duplication of individuals, only ageable adult mandibles are included from Krapina (none of the maxillae).

³The Liujiang 1 young adult associated skeleton is not included, given uncertainties in its antiquity. If it indeed dates to MIS 4, it would only decrease the percent of older adults in the Middle Paleolithic modern human sample.

⁵The Zhoukoudian–Upper Cave individuals are based on the four mandibles with teeth, only one of which (ZKD-UC 101) is securely associated with a cranium.

Table S2. Distributions of younger versus older adult ages at death for Holocene archeological and ethnographic samples

| Sample | Young adults | Older adults (%) | Ref. |
|--------------------------------|--------------|------------------|------|
| Archeological | | | |
| Libben, Ohio | 410 | 180 (30.5%) | 1 |
| Gemeinlebarn, Austria | 88 | 39 (30.7%) | 2 |
| Larson, South Dakota | 121 | 59 (32.8%) | 3 |
| Teotihuacan, Mexico | 49 | 30 (38.0%) | 4 |
| OGSE-80, Ecuador | 75 | 47 (38.5%) | 5 |
| Arikara MO-1, South Dakota | 27 | 21 (43.8%) | 6 |
| Cedar Grove, Arkansas | 19 | 15 (44.1%) | 7 |
| Arikara MO-2, South Dakota | 52 | 46 (46.9%) | 6 |
| Ayalán, Ecuador | 100 | 94 (48.5%) | 8 |
| Average, % | | 39.3 | |
| Ethnographic/historical | | | |
| Yanomama, Venezuela | 512 | 554 (52.0%) | 9 |
| Ache, Paraguay | 56 | 68 (54.8%) | 10 |
| Mucajai, Venezuela | 26 | 33 (55.9%) | 11 |
| Hadza, Tanzania | 83 | 164 (66.4%) | 12 |
| Spitalfields, United Kingdom | 56 | 227 (80.2%) | 13 |
| Dobe !Kung, Botswana | 11 | 45 (80.4%) | 14 |
| Average, % | | 65.0 | |

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