Supplementary Material

# Supplementary Tables

## Supplementary Table 1

**Supplementary Table 1**: Frequency of PA (never, seldom, 1-3 times a month, 1-2 times a week, 3-4 times a week, 5 times a week or more) over four time points (T1-T4) in five Alpine regions (x² tests were conducted to evaluate significance of differences between frequency of PA and five regions) (PA less than once a week: never, seldom, 1-3 times a month; at least once a week: 1-2 times a week, 3-4 times a week, 5 times a week or more)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Frequency of PA N (%) |  | T1 | T2 | T3 | T4 |
| Tyrol (n=582) | NeverSeldom1-3 times a month1-2 times a week3-4 times a week5 times a week or moreLess than once a weekAt least once a week | 8 (1.4)11 (1.9)38 (6.5)160 (27.5)257 (44.2)108 (18.6)57 (9.8)525 (90.2) | 58 (10.0)51 (8.8)48 (8.2)161 (27.7)146 (25.1)118 (20.3)157 (27.0)425 (73.0) | 11 (1.9)21 (3.6)38 (6.5)150 (25.8)248 (42.6)114 (19.6)70 (12.0)512 (88.0) | 51 (8.8)48 (8.2)62 (10.7)162 (27.8)151 (25.9)108 (18.6)161 (27.7)421 (72.3) |
| Vorarlberg(n=668) | NeverSeldom1-3 times a month1-2 times a week3-4 times a week5 times a week or moreLess than once a weekAt least once a week | 14 (2.1)21 (3.1)58 (8.7)240 (35.9)232 (34.7)103 (15.4)93 (13.9)575 (86.1) | 56 (8.4)50 (7.5)69 (10.3)171 (25.6)195 (29.2)127 (19.0)175 (26.2)493 (73.8) | 20 (3.0)28 (4.2)46 (6.9)196 (29.3)261 (39.1)117 (17.5)94 (14.1)574 (85.9) | 66 (9.9)58 (8.7)76 (11.4)208 (31.1)164 (24.6)96 (14.4)200 (29.9)468 (70.1) |
| Upper Bavaria(n=446) | NeverSeldom1-3 times a month1-2 times a week3-4 times a week5 times a week or moreLess than once a weekAt least once a week | 10 (2.2)15 (3.4)31 (7.0)134 (30.0)179 (40.1)77 (17.3)56 (12.6)390 (87.4) | 33 (7.4)38 (8.5)37 (8.3)117 (26.2)129 (28.9)92 (20.6)108 (24.2)338 (75.8) | 13 (2.9)21 (4.7)22 (4.9)130 (29.1)165 (37.0)95 (21.3)56 (12.6)390 (87.4) | 40 (9.0)52 (11.7)44 (9.9)133 (29.8)106 (23.8)71 (15.9)136 (30.5)310 (69.5) |
| South Tyrol(n=554) | NeverSeldom1-3 times a month1-2 times a week3-4 times a week5 times a week or moreLess than once a weekAt least once a week | 18 (3.2)21 (3.8)44 (7.9)156 (28.2)231 (41.7)84 (15.2)83 (15.0)471 (85.0) | 59 (10.6)66 (11.9)53 (9.6)133 (24.0)140 (25.3)103 (18.6)178 (32.1)376 (67.9) | 19 (3.4)28 (5.1)40 (7.2)150 (27.1)228 (41.2)89 (16.1)87 (15.7)467 (84.3) | 47 (8.5)48 (8.7)51 (9.2)170 (30.7)166 (30.0)72 (13.0)146 (26.4)408 (73.6) |
| Trentino(n=603) | NeverSeldom1-3 times a month1-2 times a week3-4 times a week5 times a week or moreLess than once a weekAt least once a week | 13 (2.2)20 (3.3)48 (8.0)192 (31.8)233 (38.6)97 (16.1)81 (13.4)522 (86.6) | 122 (20.2)86 (14.3)55 (9.1)145 (24.0)116 (19.2)79 (13.1)263 (43.6)340 (56.4) | 34 (5.6)55 (9.1)48 (8.0)178 (29.5)195 (32.3)93 (15.4)137 (22.7)466 (77.3) | 74 (12.3)82 (13.6)61 (10.1)190 (31.5)135 (22.4)61 (10.1)217 (36.0)386 (64.0) |
| Total(n=2853) | NeverSeldom1-3 times a month1-2 times a week3-4 times a week5 times a week or moreLess than once a weekAt least once a week | 63 (2.2)88 (3.1)219 (7.7)882 (30.9)1132 (39.7)469 (16.4)370 (13.0)2483 (87.0) | 328 (11.5)291 (10.2)262 (9.2)727 (25.5)726 (25.4)519 (18.2)881 (30.9)1972 (69.1) | 97 (3.4)153 (5.4)194 (6.8)804 (28.2)1097 (38.5)508 (17.8)444 (15.6)2409 (84.4) | 278 (9.7)288 (10.1)294 (10.3)863 (30.2)722 (25.3)408 (14.3)860 (30.1)1993 (69.9) |
| p-value |  | p=0.061 | p<0.001 | p<0.001 | p=0.001 |

## Supplementary Table 2

Supplementary Table 2: where (**a**) and with whom participants engaged in PA over four time points (T1-T4) (**b**) and in which type of sports they took part (**c**). (Multiple answers were possible)

**a)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| N (%) |  | T1 | T2 | T3 | T4 |
| Tyrol (n=554) | In a park/outdoors etc.At homeAt a sport clubAt a health/fitness centerOn the way between home and school/work/shops | 407 (73.5)136 (24.5)206 (37.2)111 (20.0)51 (9.2) | 339 (61.2)339 (61.2)17 (3.1)1 (0.2)36 (6.5) | 439 (79.2)199 (35.9)149 (26.9)84 (15.2)47 (8.5) | 401 (72.4)299 (54.0)23 (4.2)1 (0.2)37 (6.7) |
| Vorarlberg(n=632) | In a park/outdoors etc.At homeAt a sport clubAt a health/fitness centerOn the way between home and school/work/shops | 492 (77.8)152 (24.1)178 (28.2)147 (23.3)92 (14.6) | 521 (82.4)256 (40.5)8 (1.3)4 (0.6)69 (10.9) | 523 (82.8)182 (28.8)130 (20.6)102 (16.1)104 (16.5) | 510 (80.7)267 (42.2)8 (1.3)6 (0.9)67 (10.6) |
| Upper Bavaria(n=422) | In a park/outdoors etc.At homeAt a sport clubAt a health/fitness centerOn the way between home and school/work/shops | 320 (75.8)108 (25.6)116 (27.5)102 (24.2)56 (13.3) | 342 (81.0)192 (45.5)8 (1.9)6 (1.4)35 (8.3) | 351 (83.2)136 (32.2)81 (19.2)66 (15.6)52 (12.3) | 319 (75.6)212 (50.2)9 (2.1)2 (0.5)32 (7.6) |
| South Tyrol(n=517) | In a park/outdoors etc.At homeAt a sport clubAt a health/fitness centerOn the way between home and school/work/shops | 391 (75.6)121 (23.4)133 (25.7)84 (16.2)50 (9.7) | 279 (54.0)345 (66.7)10 (1.9)0 (0.0)42 (8.1) | 430 (83.2)173 (33.5)77 (14.9)44 (8.5)43 (8.3) | 406 (78.5)251 (48.5)23 (4.4)3 (0.6)33 (6.4) |
| Trentino(n=573) | In a park/outdoors etc.At homeAt a sport clubAt a health/fitness centerOn the way between home and school/work/shops | 377 (65.8)104 (18.2)174 (30.4)88 (15.4)28 (4.9) | 193 (33.7)392 (68.4)9 (1.6)1 (0.2)26 (4.5) | 427 (74.5)148 (25.8)112 (19.5)34 (5.9)27 (4.7) | 348 (60.7)235 (41.0)56 (9.8)7 (1.2)29 (5.1) |
| Total(n=2698) | In a park/outdoors etc.At homeAt a sport clubAt a health/fitness centerOn the way between home and school/work/shops | 1987 (73.6)621 (23.0)807 (29.9)532 (19.7)277 (10.3) | 1674 (62.0)1524 (56.5)52 (1.9)12 (0.4)208 (7.7) | 2170 (80.4)838 (31.1)549 (20.3)330 (12.2)273 (10.1) | 1984 (73.5)1264 (46.8)119 (4.4)19 (0.7)198 (7.3) |

**b)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| N (%) |  | T1 | T2 | T3 | T4 |
| Tyrol (n=554) | AloneWith familyWith friendsIn a training groupUnder guidance/trainerWith videos/online tools/TV | 286 (51.6)215 (38.8)301 (54.3)203 (36.6)118 (21.3)23 (4.2) | 400 (72.2)211 (38.1)55 (9.9)7 (1.3)14 (2.5)106 (19.1) | 314 (56.7)250 (45.1)291 (52.5)158 (28.5)88 (15.9)56 (10.1) | 390 (70.4)214 (38.6)104 (18.8)23 (4.2)23 (4.2)91 (16.4) |
| Vorarlberg(n=632) | AloneWith familyWith friendsIn a training groupUnder guidance/trainerWith videos/online tools/TV | 346 (54.7)310 (49.1)312 (49.4)190 (30.1)108 (17.1)25 (4.0) | 418 (66.1)341 (54.0)58 (9.2)9 (1.4)18 (2.8)69 (10.9) | 370 (58.5)360 (57.0)283 (44.8)123 (19.5)79 (12.5)40 (6.3) | 416 (65.8)331 (52.4)83 (13.1)9 (1.4)14 (2.2)84 (13.3) |
| Upper Bavaria(n=422) | AloneWith familyWith friendsIn a training groupUnder guidance/trainerWith videos/online tools/TV | 239 (56.6)178 (42.2)201 (47.6)121 (28.7)79 (18.7)19 (4.5) | 290 (68.7)185 (43.8)62 (14.7)10 (2.4)13 (3.1)72 (17.1) | 249 (59.0)196 (46.4)199 (47.2)86 (20.4)54 (12.8)33 (7.8) | 298 (70.6)172 (40.8)76 (18.0)12 (2.8)13 (3.1)76 (18.0) |
| South Tyrol(n=517) | AloneWith familyWith friendsIn a training groupUnder guidance/trainerWith videos/online tools/TV | 271 (52.4)215 (41.6)248 (48.0)142 (27.5)79 (15.3)23 (4.4) | 364 (70.4)191 (36.9)33 (6.4)11 (2.1)16 (3.1)86 (16.6) | 305 (59.0)252 (48.7)234 (45.3)83 (16.1)51 (9.9)38 (7.4) | 354 (68.5)227 (43.9)107 (20.7)16 (3.1)23 (4.4)70 (13.5) |
| Trentino(n=573) | AloneWith familyWith friendsIn a training groupUnder guidance/trainerWith videos/online tools/TV | 288 (50.3)172 (30.0)246 (42.9)175 (30.5)107 (18.7)12 (2.1) | 387 (67.5)161 (28.1)24 (4.2)20 (3.5)10 (1.7)97 (16.9) | 315 (55.0)203 (35.4)225 (39.3)106 (18.5)54 (9.4)35 (6.1) | 354 (61.8)181 (31.6)125 (21.8)62 (10.8)35 (6.1)64 (11.2) |
| Total(n=2698) | AloneWith familyWith friendsIn a training groupUnder guidance/trainerWith videos/online tools/TV | 1430 (53.0)1090 (40.4)1308 (48.5)831 (30.8)491 (18.2)102 (3.8) | 1859 (68.9)1089 (40.4)232 (8.6)57 (2.1)71 (2.6)430 (15.9) | 1553 (57.6)1261 (46.7)1232 (45.7)556 (20.6)326 (12.1)202 (7.5) | 1812 (67.2)1125 (41.7)495 (18.3)122 (4.5)108 (4.0)385 (14.3) |

**c)** Participants indicated the 3 most frequently practiced types of sports during the four periods. The types of sports were added together and categorized. Only the most frequently mentioned types of sports can be seen in the Table 2c.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| N (%) |  | T1 | T2 | T3 | T4 |
| Tyrol  | Mountaineering/hikingRunning/joggingCyclingWorkoutWalkingSkiing/ski tourBall sports/tennisSwimmingYoga/pilates/qigong etc. | 132 (11.6)153 (13.4)106 (9.3)116 (10.2)35 (3.1)35 (3.1)85 (7.4)71 (6.2)35 (3.1) | 111 (13.7)150 (18.5)75 (9.3)173 (21.4)75 (9.3)51 (6.3)17 (2.1)18 (2.2)51 (6.3) | 190 (18.3)141 (13.6)163 (15.7)114 (11.0)39 (3.8)33 (3.2)71 (6.8)71 (6.8)33 (3.2) | 139 (16.3)153 (17.9)68 (8.0)153 (17.9)59 (6.9)39 (4.6)17 (2.0)22 (2.6)39 (4.6) |
| Vorarlberg | Mountaineering/hikingRunning/joggingCyclingWorkoutWalkingSkiing/ski tourBall sports/tennisSwimmingYoga/pilates/qigong etc. | 223 (15.7)250 (17.6)190 (13.4)105 (7.4)80 (5.6)113 (8.0)85 (6.0)66 (4.7)64 (4.5) | 229 (20.3)261 (23.1)201 (17.8)120 (10.6)103 (9.1)18 (1.6)23 (2.0)31 (2.7)54 (4.8) | 261 (19.5)241 (18.0)247 (18.5)99 (7.4)75 (5.6)4 (0.3)74 (5.5)104 (7.8)54 (4.0) | 217 (20.1)254 (23.6)118 (10.9)123 (11.4)89 (8.3)62 (5.8)18 (1.7)26 (2.4)62 (5.8) |
| Upper Bavaria | Mountaineering/hikingRunning/joggingCyclingWorkoutWalkingSkiing/ski tourBall sports/tennisSwimmingYoga/pilates/qigong etc. | 143 (17.2)110 (13.2)120 (14.4)75 (9.0)62 (7.4)58 (7.0)37 (4.4)31 (3.7)33 (4.0) | 136 (19.7)115 (16.6)132 (19.1)92 (13.3)79 (11.4)12 (1.7)12 (1.7)10 (1.4)29 (4.2) | 157 (19.7)95 (11.9)154 (19.3)88 (11.1)64 (8.0)6 (0.8)32 (4.0)43 (5.4)33 (4.1) | 132 (20.4)107 (16.5)73 (11.3)90 (13.9)83 (12.8)25 (3.9)11 (1.7)9 (1.4)40 (6.2) |
| South Tyrol | Mountaineering/hikingRunning/joggingCyclingWorkoutWalkingSkiing/ski tourBall sports/tennisSwimmingYoga/pilates/qigong etc. | 175 (17.5)153 (15.3)114 (11.4)99 (9.9)66 (6.6)121 (12.1)57 (5.7)37 (3.7)35 (3.5) | 113 (15.3)137 (18.5)65 (8.8)158 (21.4)77 (10.4)11 (1.5)23 (3.1)11 (1.5)34 (4.6) | 235 (26.0)145 (16.0)162 (17.9)92 (10.2)65 (7.2)5 (0.6)48 (5.3)45 (5.0)25 (2.8) | 155 (20.0)143 (18.5)70 (9.0)117 (15.1)70 (9.0)66 (8.5)19 (2.5)15 (1.9)30 (3.9) |
| Trentino(n=573) | Mountaineering/hikingRunning/joggingCyclingWorkoutWalkingSkiing/ski tourBall sports/tennisSwimmingYoga/pilates/qigong etc. | 83 (9.3)137 (15.3)109 (12.2)39 (4.4)94 (10.5)82 (9.2)89 (9.9)53 (5.9)19 (2.1) | 53 (8.1)101 (15.4)69 (10.6)95 (14.5)77 (11.8)24 (3.7)37 (5.7)21 (3.2)22 (3.4) | 110 (14.4)133 (17.4)125 (16.3)38 (5.0)97 (12.7)12 (1.6)71 (9.3)36 (4.7)14 (1.8) | 87 (12.6)118 (17.1)87 (12.6)56 (8.1)90 (13.1)49 (7.1)46 (6.7)16 (2.3)18 (2.6) |
| Total | Mountaineering/hikingRunning/joggingCyclingWorkoutWalkingSkiing/ski tourBall sports/tennisSwimmingYoga/pilates/qigong etc. | 756 (14.3)803 (15.2)639 (12.1)434 (8.2)337 (6.4)518 (9.8)353 (6.7)258 (4.9)186 (3.5) | 642 (16.0)764 (19.0)542 (13.5)638 (15.9)411 (10.2)86 (2.1)112 (2.8)91 (2.3)190 (4.7) | 953 (19.7)755 (15.6)851 (17.6)431 (8.9)340 (7.0)40 (0.8)296 (6.1)299 (6.2)159 (3.3) | 730 (18.1)775 (19.2)416 (10.3)539 (13.3)391 (9.7)266 (6.6)111 (2.7)88 (2.2)189 (4.7) |