Impact of the COVID-19 lockdown on system usage of an innovative care support system and on the mood of older adults

------- Online Supplement -------

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**Supplementary Table 1**: Descriptive characteristics of study participants.

| Participants                        | Total         |
|-------------------------------------|---------------|
| N (%)                               | 39 (100)      |
| Women, n (%)                        | 28 (72)       |
| Ø Age (SD) participants             | 74.3 (SD 7.3) |
| Median (Range of age in years; IQR) | 74 (64 to 89;[12]) |
| Austria, n (%)                      | 18 (46)       |
| Luxembourg, n (%)                   | 21 (54)       |

*Note. N (%) = total number of participants (percentage); n (%) number of participants (percentage); Ø Age (SD) = mean age (standard deviation); IQR = interquartile range*
Supplementary Table 2: Number of participants using the different functionalities of the DAPAS system stratified country and sex

| Number of participants | Before-LD | LD | After-LD |
|------------------------|-----------|----|----------|
| All events, n (%)      | 39 (100%) | 26 (67%) | 23 (59%) |
| - AT                   | 18 (46%) | 14 (36%) | 12 (31%) |
| - LU                   | 21 (54%) | 12 (31%) | 11 (28%) |
| - Female               | 28 (72%) | 19 (49%) | 16 (41%) |
| - Male                 | 11 (28%) | 7 (18%) | 7 (18%) |
| Communication events, n (%) | 31 (79%) | 11 (28%) | 4 (10%) |
| - AT                   | 15 (38%) | 9 (23%) | 3 (8%) |
| - LU                   | 16 (41%) | 2 (5%) | 1 (3%) |
| - Female               | 22 (56%) | 7 (18%) | 3 (8%) |
| - Male                 | 9 (23%) | 4 (10%) | 1 (3%) |
| Bingo events, n (%)    | 28 (72%) | 15 (38%) | 8 (21%) |
| - AT                   | 15 (38%) | 8 (21%) | 3 (8%) |
| - LU                   | 13 (33%) | 7 (18%) | 5 (13%) |
| - Female               | 21 (54%) | 11 (28%) | 6 (15%) |
| - Male                 | 7 (18%) | 4 (10%) | 2 (5%) |
| Calendar events, n (%) | 37 (95%) | 15 (38%) | 9 (23%) |
| - AT                   | 17 (44%) | 7 (18%) | 4 (10%) |
| - LU                   | 20 (51%) | 8 (21%) | 5 (13%) |
| - Female               | 27 (69%) | 10 (26%) | 7 (18%) |
| - Male                 | 10 (26%) | 5 (13%) | 2 (5%) |
| Medication events, n (%) | 37 (95%) | 20 (51%) | 10 (26%) |
| - AT                   | 17 (44%) | 12 (31%) | 5 (13%) |
| - LU                   | 20 (51%) | 8 (21%) | 5 (13%) |
| - Female               | 26 (67%) | 13 (33%) | 6 (15%) |
| - Male                 | 11 (28%) | 7 (18%) | 4 (10%) |
| Contact events, n (%)  | 36 (92%) | 16 (41%) | 7 (18%) |
| - AT                   | 17 (44%) | 11 (28%) | 4 (10%) |
| - LU                   | 19 (49%) | 5 (13%) | 3 (8%) |
| - Female               | 27 (69%) | 10 (26%) | 7 (18%) |
| - Male                 | 9 (23%) | 6 (15%) | 0 (0%) |
| Screen View events, n (%) | 38 (97%) | 19 (49%) | 13 (33%) |
| - AT                   | 17 (44%) | 11 (28%) | 8 (21%) |
| - LU                   | 21 (54%) | 8 (21%) | 5 (13%) |
| - Female               | 27 (69%) | 13 (33%) | 9 (23%) |
| - Male                 | 11 (28%) | 6 (15%) | 4 (10%) |
| Messages events, n (%) | 30 (77%) | 4 (10%) | 3 (8%) |
| - AT                   | 15 (38%) | 4 (10%) | 2 (5%) |
| - LU                   | 15 (38%) | 0 (0%) | 1 (3%) |
| - Female               | 21 (54%) | 3 (8%) | 2 (5%) |
| - Male                 | 9 (23%) | 1 (3%) | 1 (3%) |
| Mood Button events, n (%) | 38 (97%) | 22 (56%) | 20 (51%) |
| Region  | LD | AT | LU |
|---------|----|----|----|
| Female  | 27 (69%) | 16 (41%) | 15 (38%) |
| Male    | 11 (28%) | 6 (15%) | 5 (13%) |

Abbreviations: LD, lockdown; AT, Austria; LU, Luxembourg.
Supplementary Table 3: Average number of events per active user per week stratified by country and sex

| Events                  | Before-LD         | LD            | After-LD        |
|-------------------------|-------------------|---------------|-----------------|
| All events, n (%)       | 138 [75.6,215]    | 80.6 [31.3,145]| 36.1 [16.8,49.9]|
| - AT                    | 177 (156 SD)      | 122 (124 SD)  | 54.9 (53.2 SD)  |
| - LU                    | 157 (100 SD)      | 92.3 (72.3 SD)| 60.8 (51.6 SD)  |
| - Female                | 161 (136 SD)      | 100 (109 SD)  | 58.1 (47.4 SD)  |
| - Male                  | 179 (109 SD)      | 131 (86.7 SD) | 56.9 (66.6 SD)  |
| Communication events, n (%) | 3.75 [3,10]      | 14 [2.63,29]  | 23.5 [5.5,51]   |
| - AT                    | 10 [3.56,13]      | 15 [8.5,38]   | 38 [16.3,57.5]  |
| - LU                    | 3 [2.4]           | 2.25 [2.2,5]  | 2 [2.2]         |
| - Female                | 3.5 [3,10]        | 15 [5.75,29]  | 38 [16.3,57.5]  |
| - Male                  | 6 [2.88,10.8]     | 6.42 [2.2,5,36.2] | 2 [2.2] |
| Bingo events, n (%)     | 7.43 (6.41 SD)    | 6.48 (6.92 SD)| 9.54 (7.79 SD)  |
| - AT                    | 6.96 (7.22 SD)    | 6.83 (9.03 SD)| 14.5 (10.2 SD)  |
| - LU                    | 7.96 (5.58 SD)    | 6.07 (4.05 SD)| 6.6 (5.05 SD)   |
| - Female                | 6.94 (4.84 SD)    | 7.97 (7.61 SD)| 8.18 (6.68 SD)  |
| - Male                  | 2 [2,16.2]        | 2.25 [2,2.75] | 13.6 [4.75,22.5]|
| Calendar events, n (%)  | 7.94 (5.35 SD)    | 3.58 (2.97 SD)| 3.65 (2.49 SD)  |
| - AT                    | 5.93 (2.64 SD)    | 2 (1.55 SD)   | 1.88 (1.03 SD)  |
| - LU                    | 9.64 (4.60 SD)    | 4.97 (3.3 SD) | 5.07 (2.44 SD)  |
| - Female                | 5.67 (4.93)       | 2.25 [1.4]    | 3 [1.5,3.75]    |
| - Male                  | 7.5 [6,11.1]      | 4.5 [2.9,69]  | 5.33 [2.5,8,17] |
| Medication events, n (%)| 5 [2.5,10]        | 2.5 [1.63,5.38]| 3.2 [2.4,67]    |
| - AT                    | 6.71 (7.84 SD)    | 3 (2.12 SD)   | 2.33 (1.55 SD)  |
| - LU                    | 7.67 [2.2.5,11.3] | 3.75 [2.5,88] | 3.83 [3.05,5.38]|
| - Female                | 4.5 [2.5,10]      | 2 [1.45,5.25] | 2.5 [2.3,4]     |
| - Male                  | 8.29 [3.08,14.9]  | 4.5 [3.5,56]  | 4.83 [2.83,5.75]|
| Contact events, n (%)   | 6.67 [3.13,14.9]  | 6.58 [4.7]    | 3 [3.6,67]      |
| - AT                    | 12.7 [6.67,26.7]  | 7 [5.75,7.75] | 6.33 [3.87,8.73]|
| - LU                    | 4 [3.7,5]         | 3 [2.63,4.67] | 3 [3.3]         |
| - Female                | 11.3 (11.6 SD)    | 11.1 (12.5 SD)| 4.62 (2.51 SD)  |
| - Male                  | 6 [3.75,21.9]     | 4 [3.4,5]     | *               |
| Screen View events, n (%)| 58.5 (54.6 SD)    | 39.2 (41.2 SD)| 37.9 (45.3 SD)  |
| - AT                    | 54.1 (51.3 SD)    | 28.9 (21.9 SD)| 34.2 (55.4 SD)  |
| - LU                    | 62 (58.1 SD)      | 53.3 (57.4 SD)| 43.8 (26.7 SD)  |
| - Female                | 36.7 [17.3,81.5]  | 27 [17.4,51.3]| 20.8 [3.75,65.4]|
| - Male                  | 68.4 (65.6 SD)    | 46.2 (70.9 SD)| 21.3 (18.5 SD)  |
| Messages events, n (%)  | 3.25 [2.5,6]      | 6 [4,10]      | 24 [7.5,34.5]   |
| - AT                    | 5.5 [3.9,63]      | 6 [4,10]      | 31 [24.38]      |
| - LU                    | 3 [2.4]           | *             | 2 [2.2]         |
| - Female                | 3 [2.46,5.63]     | 6 [3,12]      | 31 [24.38]      |
| - Male                  | 4 [2.5,8.88]      | 6 [6,6]       | 2 [2.2]         |
| Mood Button events, n (%)| 3.9 [2.5,5]       | 3.25 [2.25,5] | 2 [1.4,52]      |
|        | AT       | LU       |       |
|--------|----------|----------|-------|
|        | 3.95 (2.27 SD) | 4.12 (3.08 SD) | 3.28 (2.71 SD) |
| - LU   | 4.14 [2.19,5.44] | 3.58 [2.67,5]  | 2 [1,2.2]     |
| - Female | 3.89 (2.23 SD) | 3.8 (2.78 SD)   | 2.31 (1.85 SD) |
| - Male  | 5.31 (3.43 SD) | 6.08 (5.36 SD) | 7.3 (7.41 SD) |

* No data available.

Abbreviations: LD, lockdown; AT, Austria; LU, Luxembourg.
Supplementary Table 4: Average subjective mood data stratified by country and sex

| Number participants (N=14) | Baseline | LD-start | LD-end | Final |
|----------------------------|----------|----------|--------|-------|
| Mood data (-)              | 2.33 [1.96,2.86] | 2.34 [2,2.76] | 2.7 [2,3.22] | 2.43 [2,3] |
| - AT (N=8)                 | 2.73 [2.15,3.05] | 2.3 [1.99,2.67] | 2.57 [2,3.11] | 2.43 [2,11,3] |
| - LU (N=6)                 | 1.92 [1.8,2.5] | 2.52 [2.11,2.76] | 2.87 [2,3.5] | 2.4 [2,3] |
| - Female (N=10)            | 2.43 [1.96,2.95] | 2.3 [2,2.76] | 2.57 [2,3.22] | 2.43 [2,3] |
| - Male (N=4)               | 2.25 [1.94,2.68] | 2.52 [2,17,2.83] | 2.87 [2,37,3.25] | 2.4 [1.75,2.9] |

Abbreviations: LD, lockdown; AT, Austria; LU, Luxembourg.