

## Developing topics

# Loneliness and social engagement in older adults based in Lombardy during COVID-19 lockdown: The long-term effects of social networking sites training course

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**Abstract**

**Background:** Older people are at greater risk of infection and mortality from COVID-19 and 52.3% of the deceased in Italy are Lombardy's residents. Moreover, lockdown measurements may disproportionately affect elderly, since they are less familiar with communication technology used to overcome the lack of in person social contacts. The present study aimed at exploring how older adults residing in Lombardy are experiencing the lockdown period, in relation to loneliness, social isolation and use of communication technology.

**Method:** In the first two weeks of May (2020) a telephone interview was conducted with people aged between 81 and 85, residing in the community, who participated in a study aimed at evaluating the impact of Social Networking Sites (SNS) use and older people's social relationship (clinicaltrials.gov: NCT04242628). We collected information on SNS use, self-perceived loneliness (UCLA scale 3-item), social engagement with family and friends (Lubben Social Network Scale 6-item). Among the eligible individuals (N=144), 1 deceased, 4 refused and 9 were unreachable, resulting in a sample of 130 interviewed. For the aim of the present investigation, participants were stratified as trained (N=60) and untrained (N=70) for SNS use, based on their attendance to group courses held last year as part of the main experimental study.

**Result:** Trained and untrained participants were comparable for age, sex, education, percentage of living alone, global cognition, depressive symptoms and comorbidity (Table 1). Participants trained for SNS use reported significantly higher usage of Facebook and WhatsApp and reduced feeling of being left out during the COVID-19 lockdown (Table 2). Moreover, a trend toward significance was found for an inverse relationship between WhatsApp usage frequency and feeling of lack of companionship ( $r_s = -0.257$ ,  $p = 0.051$ ; Table 3).

**Conclusion:** Though SNS are unable to completely replace in person contact, these preliminary results support the utility to train older adults for SNS use in order to improve their social inclusion, even in extreme conditions of self-isolation and vulnerability due to COVID-19 pandemic.

TABLE 1

**Table 1:** Comparisons of socio-demographic, clinical and cognitive features between older adults trained and untrained for social network use.

	Trained for SNS use N=60	Untrained for SNS use N=70	p*
Age	82.0 ± 1.6	81.6 ± 1.2	0.102
Sex, female	32 (53%)	36 (51%)	0.828
Education	8.7 ± 3.3	8.6 ± 3.5	0.883
Living alone	23 (38%)	25 (36%)	0.758
Comorbidity (CIRS)	1.7 ± 0.3	1.7 ± 0.3	0.438
Depressive symptoms (GDS)	2.0 ± 1.9	1.8 ± 2.0	0.579
Global cognition (MMSE)	28.3 ± 1.4	28.4 ± 1.5	0.503

Values denote mean ± SD for continuous variables, counts (%) for dichotomous variables.

\* p indicate significance at Independent Sample T-test for continuous variables, Chi-squared test for dichotomous variables.

Abbreviations: CIRS: Cumulative Illness Rating Scale; GDS: Geriatric Depression Scale (15 item); MMSE: Mini Mental State Examination; SNS: Social Networking Sites.

**TABLE 2**

**Table 2:** Comparisons of SNS use, self-feeling of loneliness and social isolation during COVID-19 pandemic between older adults trained and untrained for social network use.

	Trained for SNS use N=60	Untrained for SNS use N=70	p*
<b>SNS use<sup>a</sup></b>			
Facebook users	22 (37%)	5 (7%)	< <b>0.001</b>
WhatsApp users	37 (62%)	22 (31%)	<b>0.001</b>
<b>UCLA loneliness scale<sup>b</sup></b>			
How often do you feel that you lack companionship?	63.4	66.4	0.623
How often do you feel left out?	59.8	69.4	<b>0.033</b>
How often do you feel isolated from others?	60.2	69.1	0.076
<b>Social engagement<sup>b</sup></b>			
LSNS-6 Total	71.0	60.0	0.095
LSNS-6 Family Subscale	71.6	59.4	0.063
LSNS-6 Friend Subscale	66.6	60.0	0.306

Values denote counts (%)<sup>a</sup> for dichotomous variables, mean ranks<sup>b</sup> for continuous variables.  
 \* p indicate significance at Mann-Whitney test for continuous variables, Chi-squared test for dichotomous variables.  
 Abbreviation: Lubben Social Network Scale 6-items; SNS: Social Networking Sites.

**TABLE 3**

**Table 3:** Correlations between social network usage frequency and measures of loneliness and social engagement.

		Loneliness			Social engagement		
		UCLA lack companionship	UCLA left out	UCLA isolated	LSNS-6 Total	LSNS-6 Family	LSNS-6 Friend
<b>WhatsApp usage frequency</b> N=58	<i>r<sub>s</sub></i>	-0.257	-0.051	-0.018	0.021	0.024	0.034
	<b>p</b>	<b>0.051</b>	0.706	0.895	0.875	0.858	0.805
<b>Facebook usage frequency</b> N=26	<i>r<sub>s</sub></i>	0.286	-0.125	0.102	0.275	0.229	0.339
	<b>p</b>	0.157	0.544	0.619	0.174	0.260	0.106

*r<sub>s</sub>*: Spearman’s correlation coefficient. P values denote significance at Spearman’s rank-order correlation.