

Centre for Ageing Research (C4AR)

Town and Gown 2021 Resources

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Maintaining Learning in Lockdown

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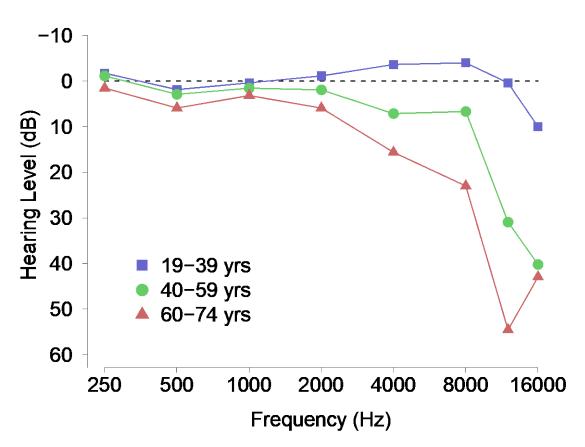


Introduction to Age-Related Hearing Loss

Chris Plack



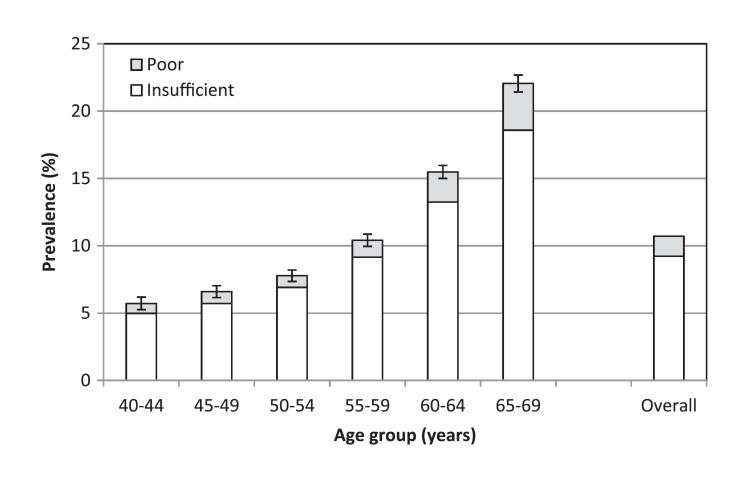
Effects of Age on Hearing Thresholds



Carcagno and Plack (2020)



Effects of Age on Speech-in-Noise Difficulties

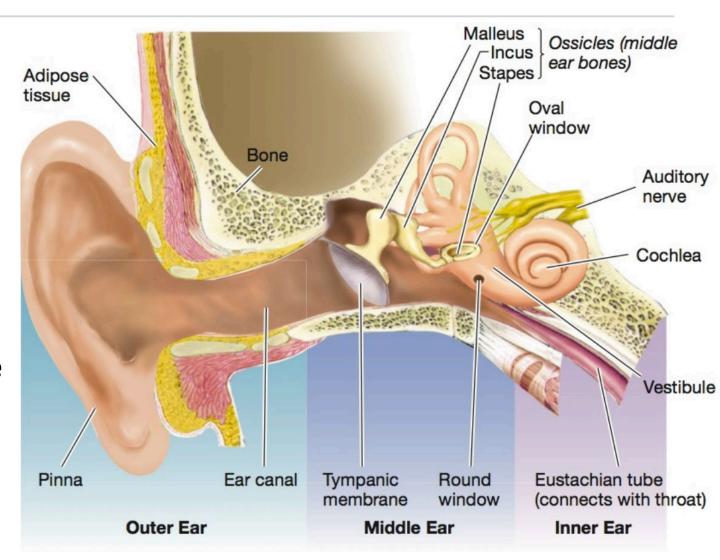


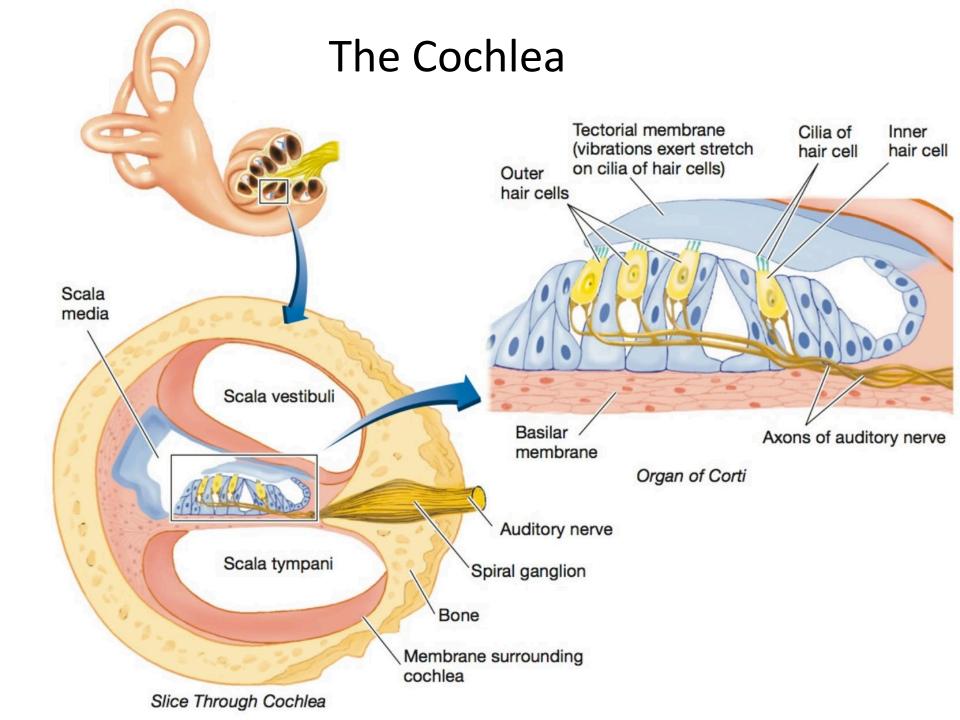
Dawes et al. (2014), UK Biobank, n = 165,000, digit triplet test



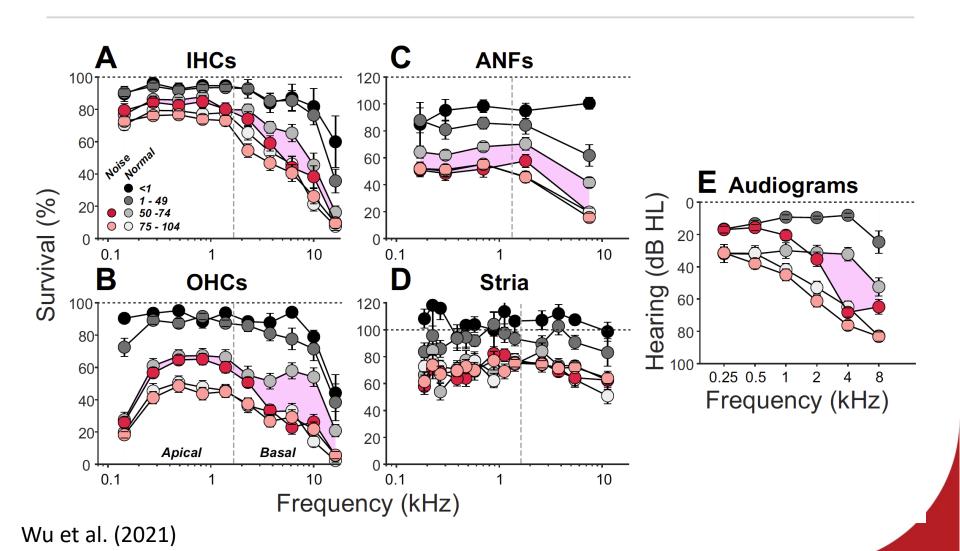
Peripheral Auditory System

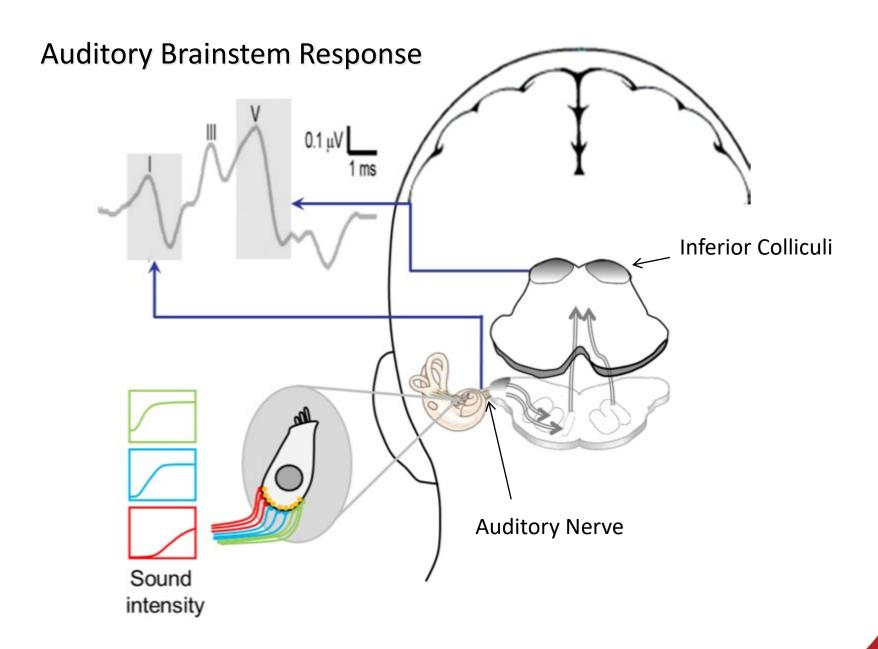
- Outer ear
- Middle ear
- Inner ear
- Auditory nerve





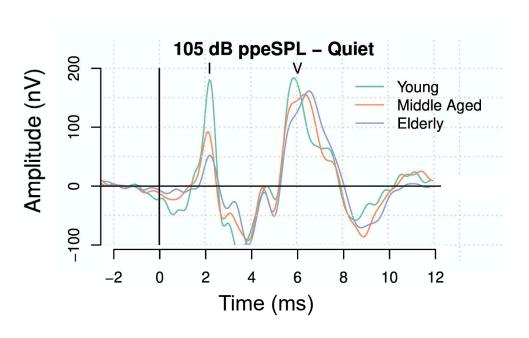
Ageing is Associated with Loss of Hair Cells and Auditory Nerve Fibres

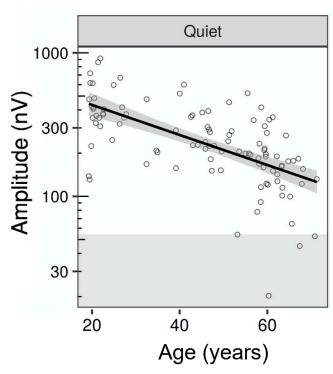




Schaette and McAlpine (2011)

Ageing Affects Auditory Nerve Response, Even Controlling for Audiometric Threshold





Carcagno and Plack (2020)



Summary

- Ageing is associated with a clinical hearing loss, especially at high frequencies, and with difficulties understanding speech in noisy environments
- Clinical hearing loss is caused by hair cell loss and dysfunction
- Listening ability may also be affected by age-related neural loss



Funders:







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Health and frailty effects of anti-COVID measures during the first year of the pandemic in Spanish older people







Esperanza Navarro-Pardo 7th October 2021

Background and research questions

- Physical, social and long-term cognitive activities may influence health and specifically frailty status
- Measures to prevent COVID-19 have reduced these activities during 1 year, mainly in older adults

- Did older adults really reduce their activities during the lockdown? Which daily routines varied along 5 points of time during 1 year?
- How the COVID-19 preventive measures impacted on Spanish older adults' health?
- And specifically on frailty?

Methods

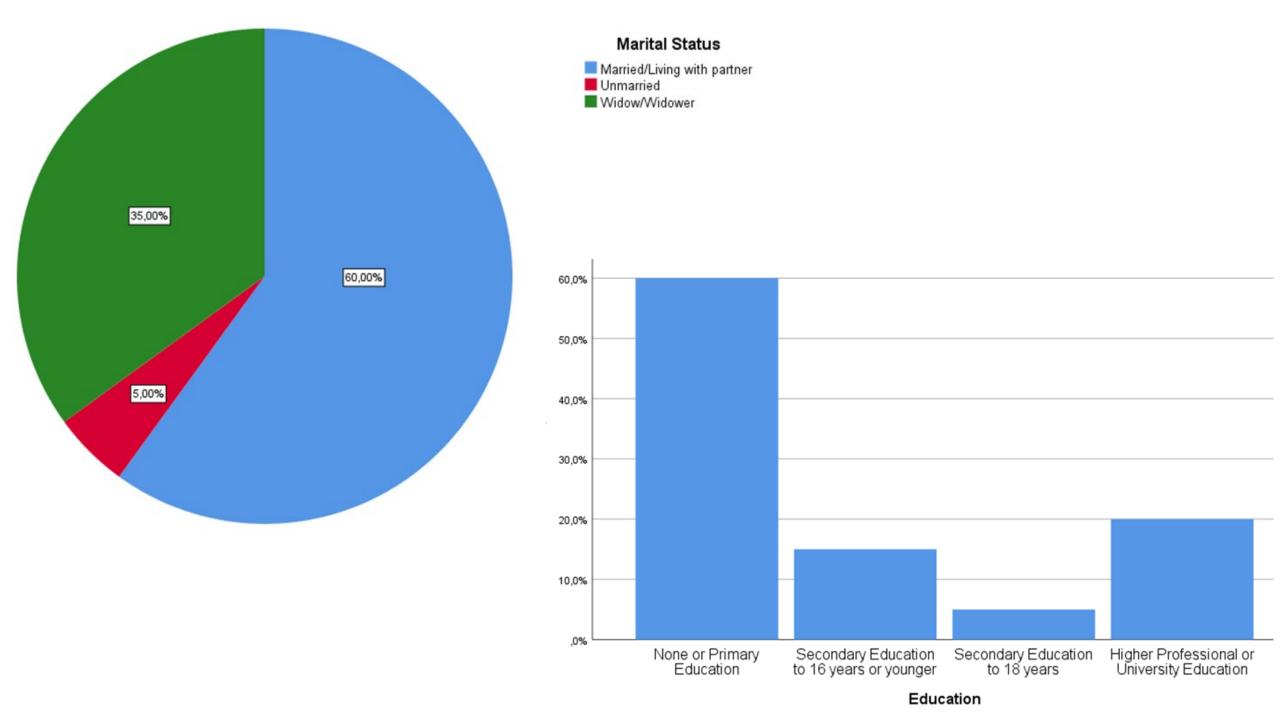
- Design: Longitudinal cohort, 5 times: May 2020, Jul 2020, Sept 2020, Dec 2020, May 2021
- Sociodemographics: sex, age, marital status, education, career, SES level
- IV: cognitive status (fluency score), physical activity, nutrition style, BMI, comorbidities, healthy lifestyle, social isolation, coping resources, quality of life, environmental, quality of life
- **DV**: health status and frailty (through 1st year of pandemic)
- Participants: non systematic, convenience sample, over 70 y.
- **Procedure**: 1 examiner, phone interview individually, 1 session/assessment, lasted 20 minutes (on average)

Variables and tools

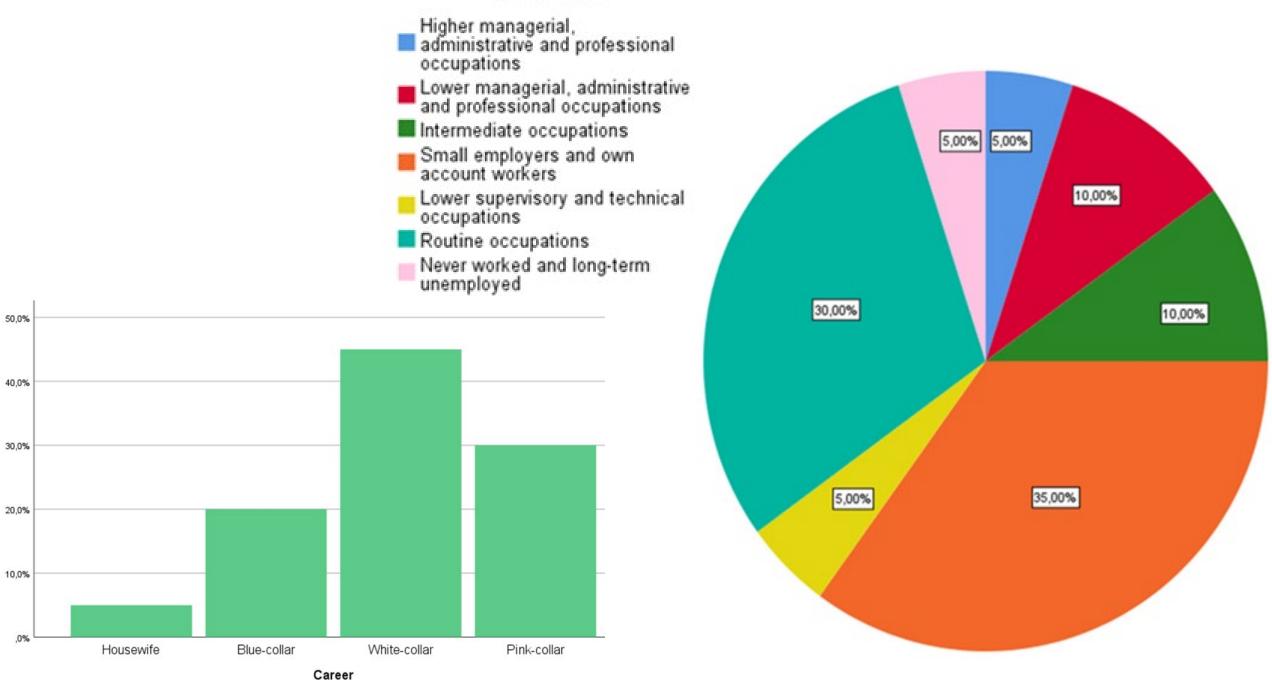
- Frailty: Tilburg Frailty Indicator, Community Frailty Index
- Age friendly environment: AFEAT
- Quality of life: CASP-12
- Social relationships: ASCOT
- Loneliness: UCLA-short
- Exercise: min. 30 min/day

Participants description

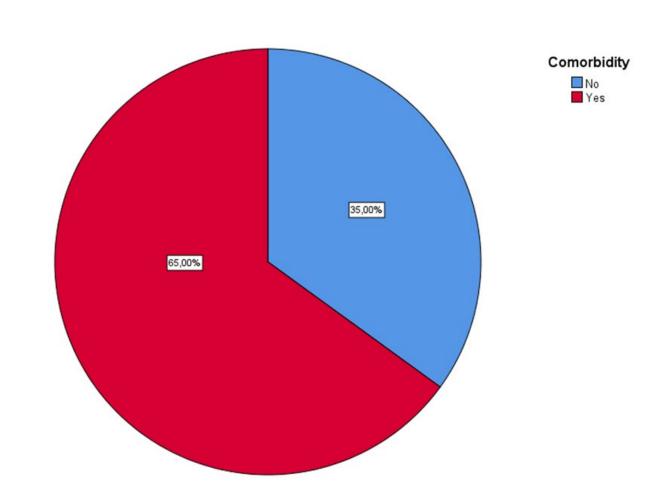
20 Spanish older people Gender Age (Mean, SD) = 78.65 years, 3.85 y. male Range= 73-85 y. 30,00% 70,00%



SES Level



Initial health status sample



Analyses

Descriptive analysis to compare the participants' characteristics between May 2020-May 2021.

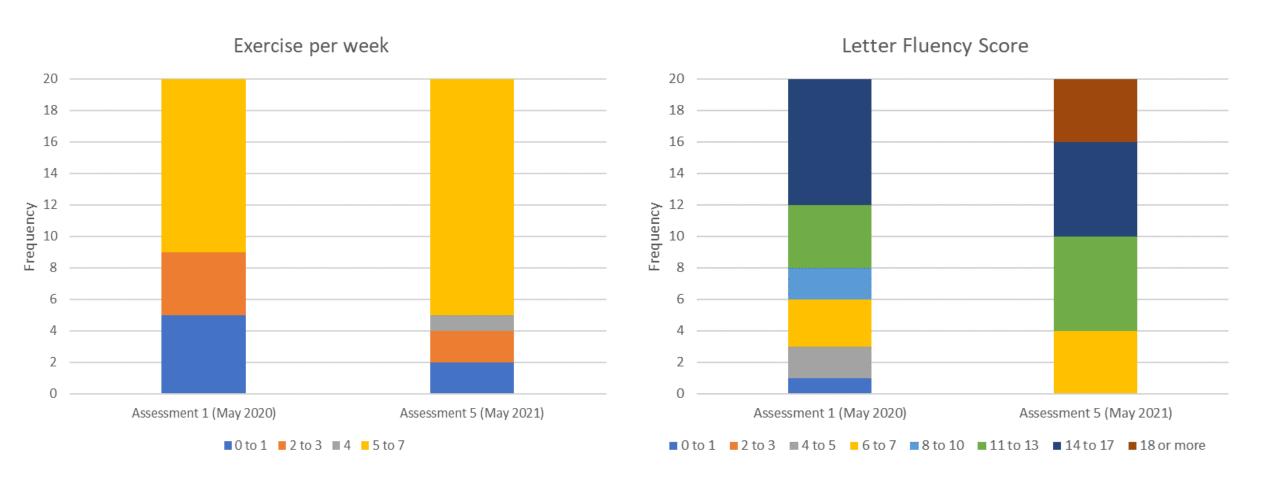
Friedman and post-hoc Wilcoxon tests were applied for significant characteristics to detect differences between all assessments.

Linear model for differences in frailty between the initial and the final assessments to identify which factors influenced the changes on frailty.

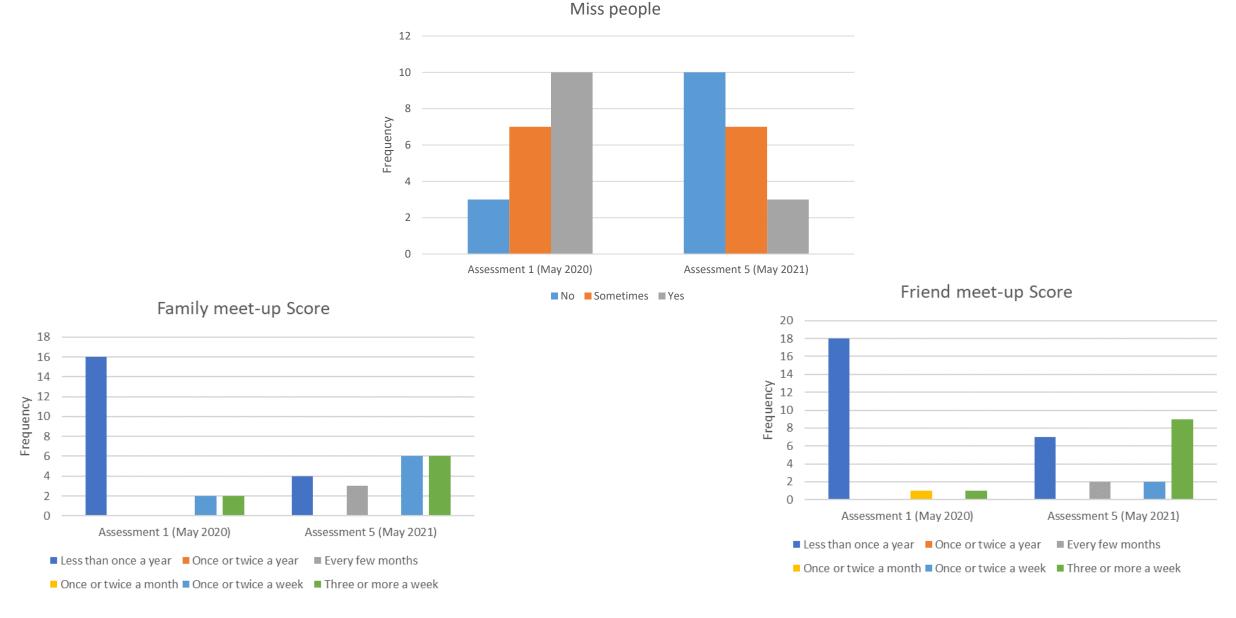
Frailty was categorized in frail vs. robust; exploratory analysis to find changes in behaviours related to quality of life, physical activity and social isolation for those participants switching from one category to another between May 2020 and May 2021.

Descriptive analysis to compare the participants' characteristics between May 2020 – May 2021 (assessments 1 and 5):

Characteristic	p-value			
Exercise per week	0.048			
Close family	0.039			
Fluency score	0.023			
Close friends	0.020			
Letter Fluency score	0.013			
Family meet-up score	0.011			
Miss people	0.009			
Frailty	0.004			
Friends meet-up score	0.002			



Fluency Score (median): 10 in Assessment 1 vs. 11.5 in Assessment 5



Close Family (median): 12 in Assessment 1 vs. 10 in Assessment 5 Close Friends (median): 9 in Assessment 1 vs. 6 in Assessment 5

Friedman and post-hoc Wilcoxon tests were applied for significant characteristics to detect differences between all assessments:

· · · · · · · · · · · · · · · · · ·		
Family	/ meet-up	score
	, illege ap	

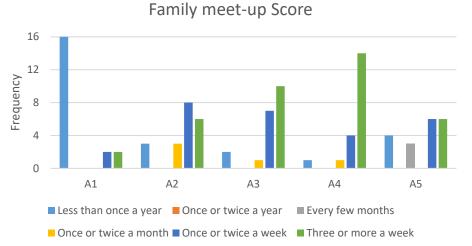
A1 & A2: p=0.047

A1 & A3: p=0.021

A1 & A4: p=0.009

A2 & A4: p=0.034

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Friends meet-up score

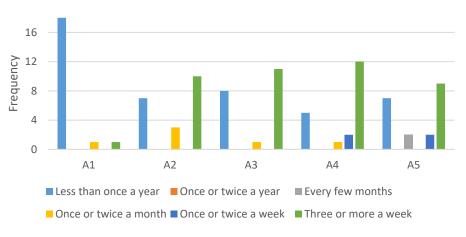
A1 & A2: p=0.016

A1 & A3: p=0.016

A1 & A4: p=0.007

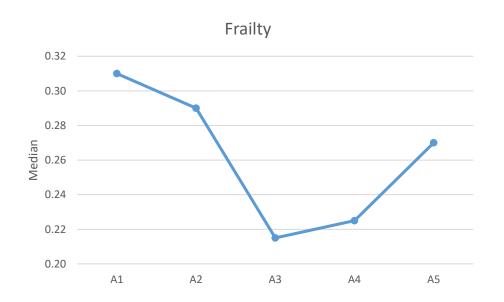
A1 & A5: p=0.016

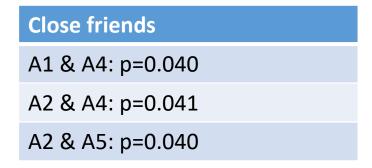
Friends meet-up Score

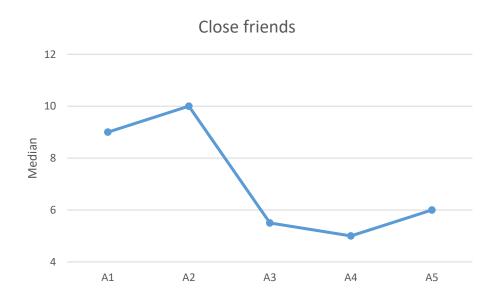


Friedman and post-hoc Wilcoxon tests were applied for significant characteristics to detect differences between all assessments

Frailty
A1 & A3: p=0.041
A1 & A4: p=0.007
A1 & A5: p=0.034







Modelling the difference on Frailty between A5 and A1:

Frailty ~ Quality of life + Physical activity + Friends meet-up score

	Estimate	Std. error	t value	p-value
Intercept	-0.170028	0.032373	-5.252	0.00000975
Quality of life	-0.009671	0.002683	-3.604	0.0026
Less physical activity	0.196923	0.076959	2.559	0.0218
More physical activity	0.069045	0.040849	1.690	0.1116
Higher friends meet-up score	0.082777	0.035768	2.314	0.0352

The model explained 48% (adjusted R2) of total variability on frailty

5 participants switched from frail to robust between A1 and A5:

ID	FRAILTY		FRAILTY QUALITY OF EXERCISE PER WEEK		FAMILY MEET-UP SCORE		FRIENDS MEET-UP SCORE			
	A1	A5	A1	A5	A1	A5	A1	A5	A1	A5
9	0.24	0.09	36	39	0 to 1	5 to 7	≥3/week	1-2/week	<1/year	<1/year
12	0.24	0.17	39	38	5 to 7	5 to 7	<1/year	≥3/week	<1/year	≥3/week
17	0.31	0.07	36	41	5 to 7	5 to 7	<1/year	1-2/month	<1/year	≥3/week
18	0.31	0.11	35	40	5 to 7	5 to 7	<1/year	≥3/week	≥3/week	≥3/week
21	0.22	0.01	34	42	2 to 3	5 to 7	<1/year	≥3/week	<1/year	1-2/week

Conclusions

- ✓ The sample size
- ✓ During the year-long study, only at the last assessment (May 2021) the sample was vaccinated
- ✓ During the whole evaluation period older people were losing their fear of socialising, although they were not vaccinated and there was a high prevalence of frailty; the actual **isolation was decreasing throughout the year**
- ✓ The prolonged experience of social isolation led older people to believe that their social network was smaller than at the beginning

Conclusions

- ✓ Even during a lockdown period, some participants did more physical exercise and had more contact with family and friends
- √ These participants improved their self-perception of quality of life and decreased their frailty
- ✓ Perhaps the Spanish public **promotion of the benefits of physical exercise** was **successful** and people
- ✓ Lockdown and social restrictions should be time-limited measures
- ✓ Alternatives should be encouraged to maintain the general health status of older people





"Getting me through the pandemic": the importance of technology for older adults' wellbeing during COVID-19

Sandra Varey, Carol Holland, Ian Garner & Calum Marr

Centre for Ageing Research, Lancaster University, UK

Thursday 7th October 2021

Phase 2 - Methods



- A total of 95 qualitative interviews undertaken by telephone at five time points over 12 months starting May 2020
- All interviews were audio recorded and transcribed
- Interviews addressed daily life, relationships, activities, social connectedness, health, and other experiences during COVID-19
- Interview transcripts and researcher interview notes being analysed thematically using the software Nvivo
- Pseudonyms have been used to protect participant identities

Phase 2 - Participant profile



- 20 participants took part in qualitative telephone interviews
- 10 participants had received a high risk letter (Cohort 1) and 10 were not high risk (Cohort 2)
- 11 women and 9 men
- Age range 70-85 years (mean age 74.4 years)
- 7 participants lived alone, 13 lived with a partner/spouse
- Cohort 1 (high risk) illnesses included: COPD, heart failure, hypertension, Motor Neurone Disease and lung cancer

'Being able to just give them a hug, that's one of the big – oh for goodness sake, hurry up and let me be able to hug them [...] we're a very huggy [family] ...' (Elizabeth, C1, Int 5)

'I miss seeing the grandchildren, they're teenagers and they're growing up so fast.' (Cynthia, C2, Int 5)

'I've not seen [my daughter] since
Christmas 2019, so 18 months [...] we
would have met up for Christmas and then
sometimes we meet up for what we call
birthday weekend [and go] down to stay.'

(Jill, C2, Int 5)

'[My husband's] dad was 93 and he did have a good life, but the end he had wasn't that good [...] he was in hospital for months and we couldn't go and see him.' 'It was very very difficult not being able to go and see [my son] when he was in ICU [...] even though he was unconscious, they'd take the phone to his ear and I could speak to him you know to stimulate him.' (Sally, C1, Int 5)

'Well [winter] wasn't good. We were locked down again, I couldn't see my husband again [in the nursing home], and you know everywhere was just like miserable, but we've come out of it [...] I can sit close to him and hold his hand now, whereas last Summer I was able to see him in the garden but at a six foot distance.'

(Julie, C2, Int 5)

'Well the Winter lockdown was much worse than the Summer lockdown or the Autumn one. Because once it went dark that was it, you know, I didn't see anybody at all [...] Really quite depressing I found it [...] and much more time to reflect [...] I had a glimpse of what it was like to be old and housebound and on my own.'

(Bridget, C2, Int 5)

'Well I'm actually quite fit I think. My weight is coming down, I mean I was never overweight but I'm happier with my weight, I'm eating healthily, I'm certainly taking a lot of exercise [...] I'm feeling as fit as I ever have done you know within the limits of my age.'

(Joseph, C2, Int 3)

'[The pandemic] has made my ability
to walk and things worse because I've
stiffened up because I'm not doing the
things that I would normally be doing
and there's only so much walking you
can do in a flat.'
(Elizabeth, C1, Int 5)

Interviewer: What stopped you from going
[to the GP] do you think?

Participant: Well it was really the fact that
there was a chance of catching the virus, I
just wanted to delay as long as possible [...]
but it got that bad I just had to phone for
an ambulance.

(William, C1, Int 2)

'Well the biggest impact [the pandemic has had] on my life was when I got that depression, because I always thought I was so strong willed, that I was the kind of person that anything that happened I could just shrug off and it would go and it wouldn't bother me [...] I just couldn't handle the fact that there seemed to be no way out of it and that's what got me, it just got into the brain and kept churning over.'

(Charles, C2, Int 5)

'...we talk to everyone on Zoom at the moment [...] I'd never even heard of Zoom [...] Talk about a sharp learning curve.' (Joseph, C2, Int 5)

'I didn't feel as if I needed to talk to anybody [...] I had plenty of people to talk to as such [by phone] and Messenger, Facebook.' (Anne, C1, Int 5) 'I'd never even heard of Zoom before COVID-19, now I'm using it all the time.' (George, C1, Int 3)

'I have had much more time to read and discovered some wonderful writers – made possible by having technologies like Kindle and the web at home.' (Cynthia, C2, Int 5 follow-up email) 'I think I grew closer to my children. Strange, this, as we could obviously see far less of each other. But I think we were more able than usual to communicate about hopes and fears ...'

(Cynthia, C2, Int 5 follow-up email)

'...we've been having a **Zoom**dinner party once a week for
months, we'd all set the table
properly and cook a proper
meal and then eat it on Zoom
talking to each other.'
(Julie, C2, Int 5)

'...perhaps 20 of us have been

[meeting on Zoom] out of the choir of

45 and it's worked up to a point but I
don't enjoy it particularly because
you're not getting together with people
to sing, because you can't sing together
by Zoom because you're all at different
speeds on your internet and it's
impossible to coordinate the singing.'
(Edward, C2, Int5)

'[Using Zoom on Christmas day] one of the things we had was a pantomime which I had written [...] We also had just sort of intimate chats during the day when the children were asleep and I could talk to the girls and it just felt it was enough activity to keep us all engaged and enough down time so that you could reflect on what was happening and just chill in front of the telly.'

(Mary, C1, Int5)

'Christmas was OK, I sent my son a box of presents and then on Christmas morning he phoned me whilst he opened his presents. I mean this lad is 51 years old you know [laughter]!' (Frances, C1, Int 5) 'I've been learning how to Zoom, oh yes, now it's not always successful Sandra I have to tell you that but in the main it is, we have our Bible study on a Wednesday night which is done with Zoom and a week past Sunday I had read a story to the Sunday school [on Zoom].

(Elizabeth, C1, Int 2)

'I would feel a lot more happier if it wasn't for this new variant [...]

Every day I go onto my iPad and look at the figures and the hospital admissions have been going down and down and down and down, when I looked today they've gone up to 35, that's just in one day.'

(Jennifer, C1, Int 5)

'It gets more worrying as lockdown eases. Because you feel because you are allowed to do more you should be. I mean lockdown meant it was a kind of cocooning, do you know what I mean? Well there was no pressure on me to [do anything].'

(Joseph, C2, Int 2)

Conclusion



- Participants faced a number of challenges during the first year of the COVID-19 pandemic
- The use of technologies was one way in which participants negotiated these challenges
- This included learning new skills and learning these very quickly
- Participant were creative in the ways they adapted to life during this period of time
- These findings challenge the mainstream discourses of older adults during the pandemic



Thank you to everyone who took part in and supported the project





Longitudinal Changes in Resilience, Loneliness, and Mental Health: Impacts of Lockdowns and Pandemic Worries

DR. IAN GARNER

12:20-12:40



Introduction

COVID-19 and subsequent lockdowns have placed great strain on services available to older adults, with many having to close during the lockdown phases.

This has resulted in older adults having the manage during lockdown based on their own capabilities and resources, particularly when some may have depended on those services to manage everyday issues.

Whilst older adults have attempted to adapt to the situation to overcome issues faced, we do not know how well older adults have been able to adapt and manage their everyday issues, and the impact this has had on wellbeing.



Method

Participants

	UK	Spain	Total
Sample Size	50	21	71
Average Age	74.36 (70 - 85)	77.0 (62 - 85)	75.14 (62 – 85)
Male/Female	17/33	6/15	21/50
Socioeconomic Status	3.26 (1 - 7)	4.76 (1 - 8)	3.7 (1 - 8)



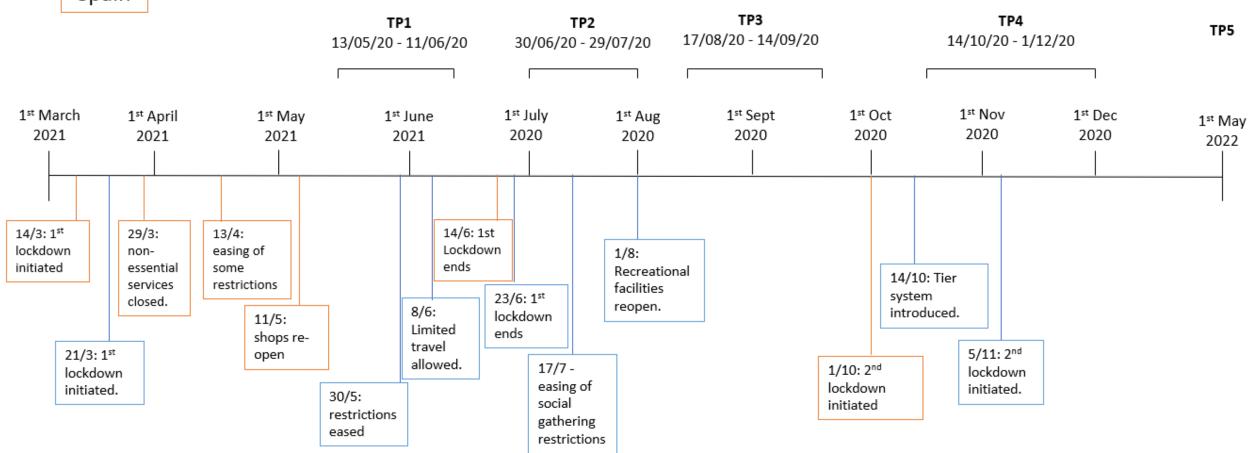
Method

Repeated-Measures ANOVA using 5 assessments over a 12-month period.

UK



Spain





Method

Repeated-Measures ANOVA using 5 assessments over a 12-month period.

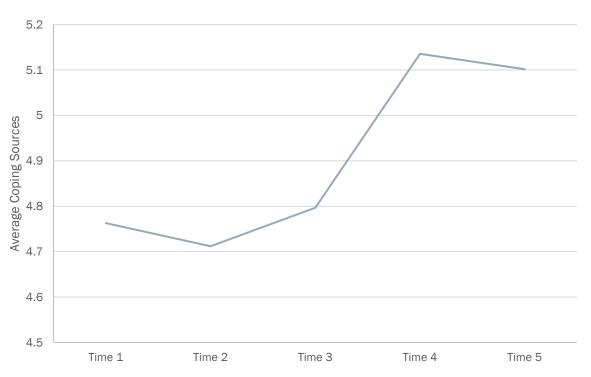
Paired-samples t-tests assessing for significant change across the assessment points.

Measures assessed:

- Resilience
 - Total use of coping resources (higher score indicate more coping resources).
 - Social Isolation (higher scores indicate reduced feelings of social isolation).
- Mental wellbeing
 - Loneliness (higher scores indicate reduced feelings of loneliness).
 - Quality of life (higher scores indicate higher quality of life).



Results – Coping Sources

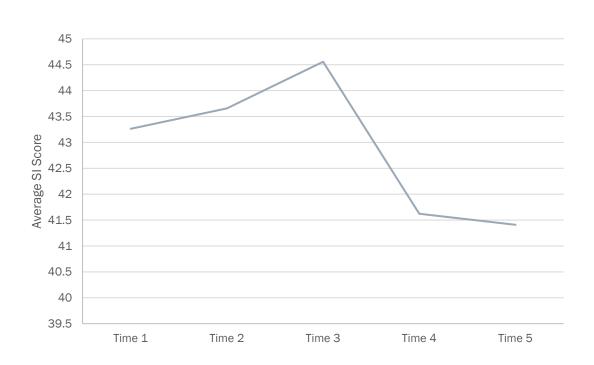


(F(2,232))	=1.392.	p = .240

Time	Time (2)	Significance
Time 1	Time 2	.423
Time 1	Time 3	.365
Time 1	Time 4	.065
Time 1	Time 5	.075
Time 2	Time 3	.313
Time 2	Time 4	.028*
Time 2	Time 5	.047*
Time 3	Time 4	.053
Time 3	Time 5	.145
Time 4	Time 5	.500



Results - Social Isolation

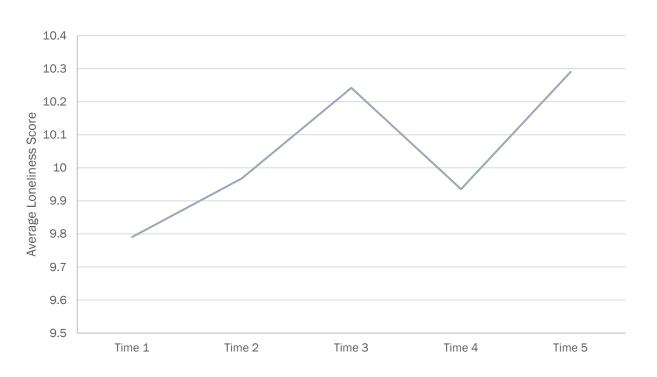


(F(4,240)=2.250, p=.074)

Time	Time (2)	Significance
Time 1	Time 2	.307
Time 1	Time 3	.146
Time 1	Time 4	.175
Time 1	Time 5	.090
Time 2	Time 3	.209
Time 2	Time 4	.067
Time 2	Time 5	.039*
Time 3	Time 4	.004*
Time 3	Time 5	.006*
Time 4	Time 5	.332



Results - Loneliness

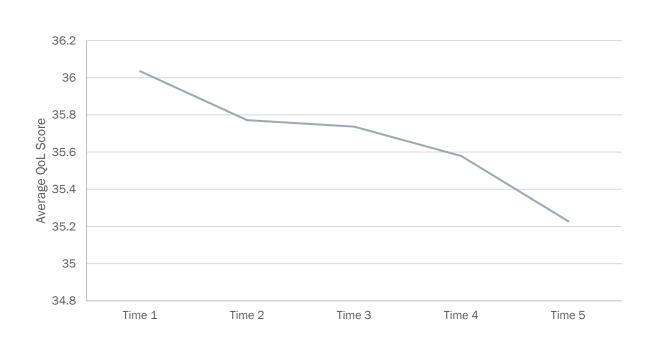


(F(4,244)=1.758, p=.138)

Time	Time (2)	Significance
Time 1	Time 2	.163
Time 1	Time 3	.043*
Time 1	Time 4	.371
Time 1	Time 5	.026*
Time 2	Time 3	.192
Time 2	Time 4	.389
Time 2	Time 5	.103
Time 3	Time 4	.045*
Time 3	Time 5	.417
Time 4	Time 5	.042*



Results – Quality of Life



Time	Time (2)	Significance
Time 1	Time 2	.380
Time 1	Time 3	.269
Time 1	Time 4	.095
Time 1	Time 5	.064
Time 2	Time 3	.414
Time 2	Time 4	.242
Time 2	Time 5	.257
Time 3	Time 4	.171
Time 3	Time 5	.248
Time 4	Time 5	.353



Results - Summary

- We saw a general increase in use of coping resources as lockdown continued.

- There was a general increase in feelings of social isolation as lockdown progressed.

- General decrease in feelings of loneliness as lockdown continued.

- General decrease in quality of life as lockdown progressed.



Discussion

We saw a general worsening in participant wellbeing as time progressed, shown through the increase in feelings of social isolation and reduced quality of life over time. Throughout this, we saw the use of coping resources stay fairly consistent (~5 per participant) despite this deterioration in wellbeing, suggesting perhaps some sources were unavailable to participants?

This suggests that although the coping sources utilised were likely to have a beneficial impact on participant's wellbeing, they were insufficient in maintaining wellbeing overall.



Discussion

We did, however, see feelings of loneliness decrease as lockdown(s) progressed. This may be attributed to older adults utilising technology more efficiently to speak to family and friends.

It is plausible this adaptation may have helped participants manage during lockdowns, and that without this contact, quality of life may have deteriorated more rapidly.

Finally, the easing and reinstating of lockdown appears to have had a negative impact on older adults wellbeing, as we see a worsening of social isolation and quality of life beyond levels shown before the easing of restrictions (Time 3).



Conclusions

We have highlighted some of the effects of lockdown(s) on older adults wellbeing, and how they attempt to adapt to the situation.

However, we also see that what is currently available to older adults is insufficient to adequately support mental wellbeing during lockdown, and that more support is needed in helping older adults manage during lockdown periods.

Governments should be cautious about easing restrictions in the event they need to be reinstated as that develops a stop-start approach to people's lives which has a negative impact on wellbeing.



Limitations

Analyses on 'total use of coping resources' does not consider their effectiveness.

UK and Spain had difference lockdown procedures and severities, which may impact results.

Six week difference in lockdown initiation between UK and Spain, so Spanish sample would have been in lockdown longer than the UK sample.

It is therefore likely that deterioration in wellbeing as a result of lockdown is more severe than shown in findings.

Thank you for listening.

Loneliness and quality of life among older UK residents under covid-19— The role of digital exclusion and income

Lancaster Town and Gown Event, 07 October 2021

Dr Steffi Doebler (Lancaster University)





Study Aims



- To explore associations between low income, financial worries & digital exclusion
- How common is digital exclusion among the British older population under covid-19?
- Explore links between digital exclusion and life satisfaction, loneliness & quality of relationships

Literature

- Social contact is important for wellbeing
- Well established link between lack of docial contact, loneliness, reduced wellbeing and poor mental health (Wenger et al 1996; Victor, Scambler & Bond 2009)
- Access to digital technologies can be important to enable contact (Olphert et al 2005, Musselwhite 2018)
- Digital inclusion is important especially under covid-19: 26% were selfisolating at some point pre June 2020, and 15% were self-isolating in April and May)

Data & Methods



- ELSA Covid-19 Study (April 2020) linked to financial variables from ELSA wave 9 (2019)
- N= 7,040 completed interviews (5,825 core members, 1,189 partners and 26 (sample type na)
- Crosstabulations by age (5 year & 10 year age bands)
- OLS and Logistic Regression and mediation modelling

Dependent Variables

Lacking relationships:

How often do you feel:

- Lack of companionship
- Left out
- Isolated from others
- lonely

Life satisfaction:

How satisfied are you with your life nowadays?

Likert-scale 0-10

CES-D Deprivation index:

 Please tell me if each of the following was true for you much

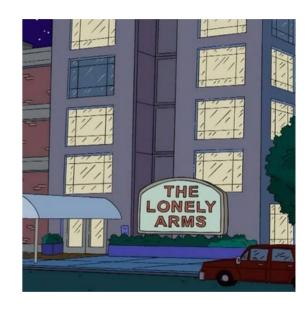
Change in Life satisfaction and loneliness over time:

46% of respondents aged 65 plus experienced a decline in their overall life satisfaction between 2019 (pre-pandemic) and 2020 (2 wave of the pandemic)

30% experienced an increase in loneliness & an increase in a sense of a general lack in of relationships since 2019.

The percentage who reported feeling lonely "often during the week" has increased between 2019 and 2020 by **7%**

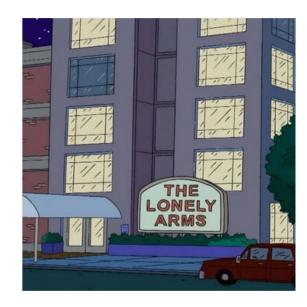
12% of the ELSA covid-study respondents were not lonely in 2019 (ELSA wave 9), but were lonely in 2020.



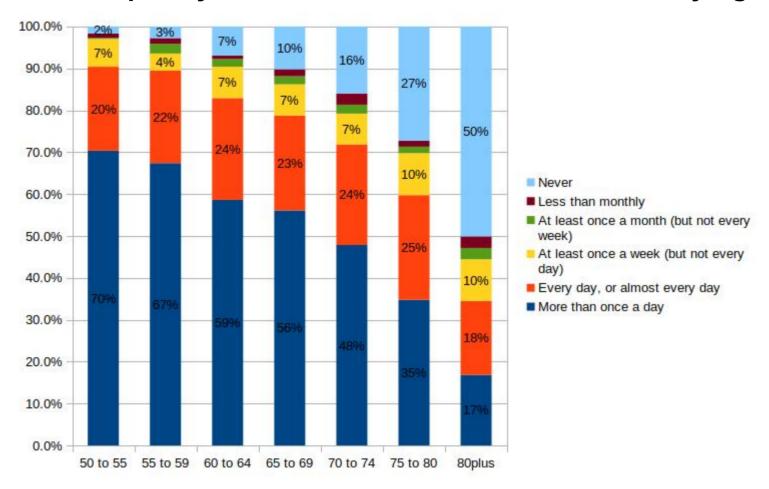
Change in Life satisfaction and loneliness over time:

Of those who had no internet access during the pandemic, **25%** often felt lonely (but hadn't before the pandemic), compared to **13%** among those who have internet access.

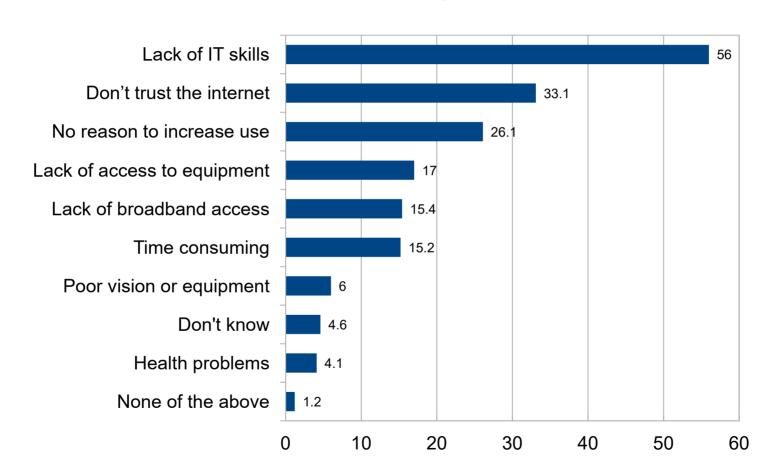
40% of those with no internet access saw a decrease in the quality of their relationships during the pandemic.



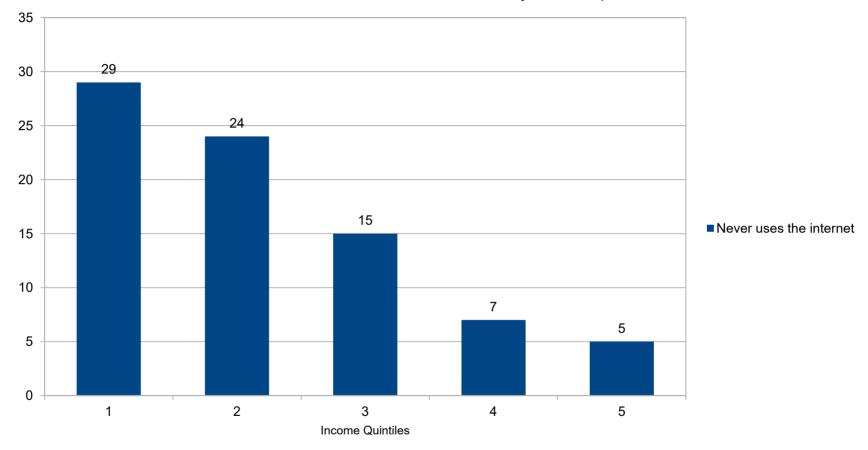
Internet frequency use since the coronavirus outbreak by Age Bands



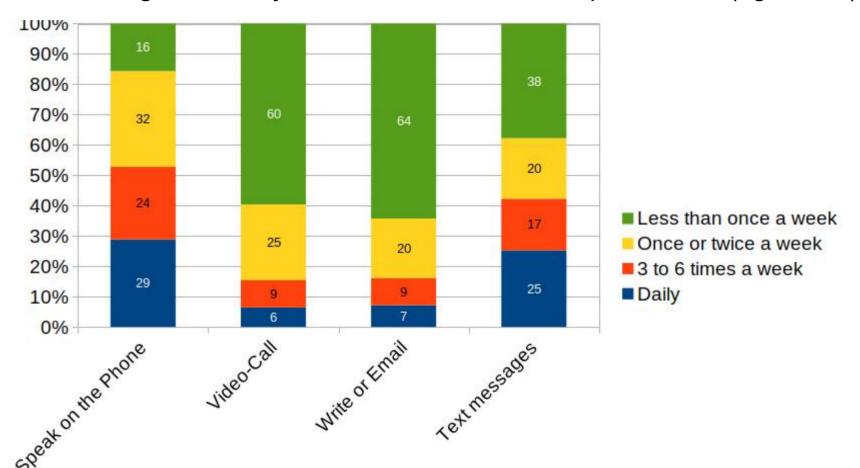
Reasons for not using the internet more:



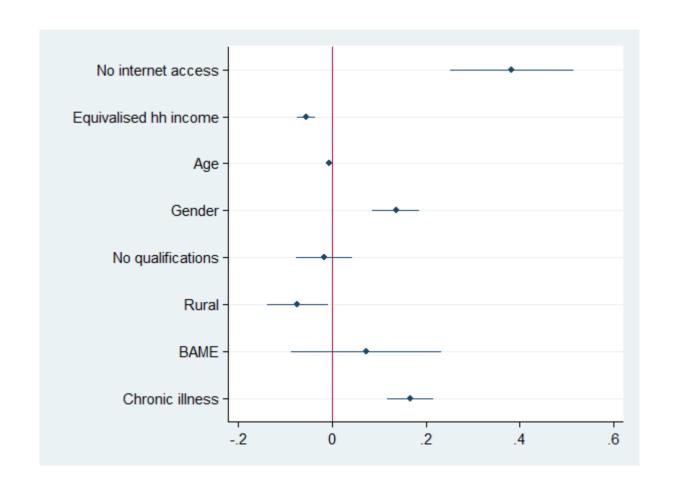
Percent who never used the internet by income quintile



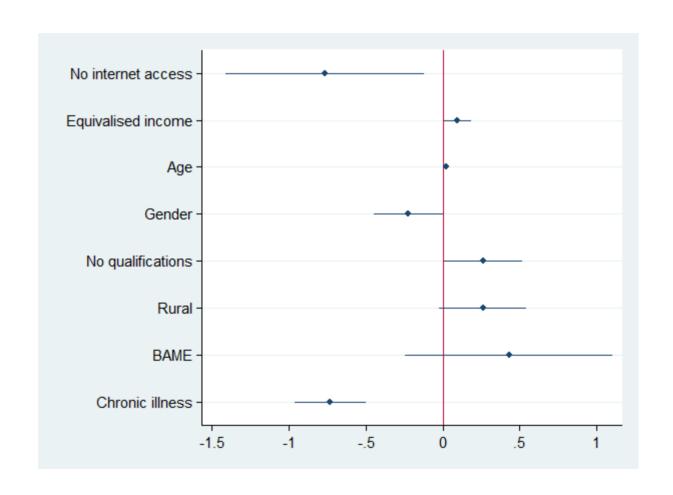
Communicating with family via different media in the past month (aged 65+)



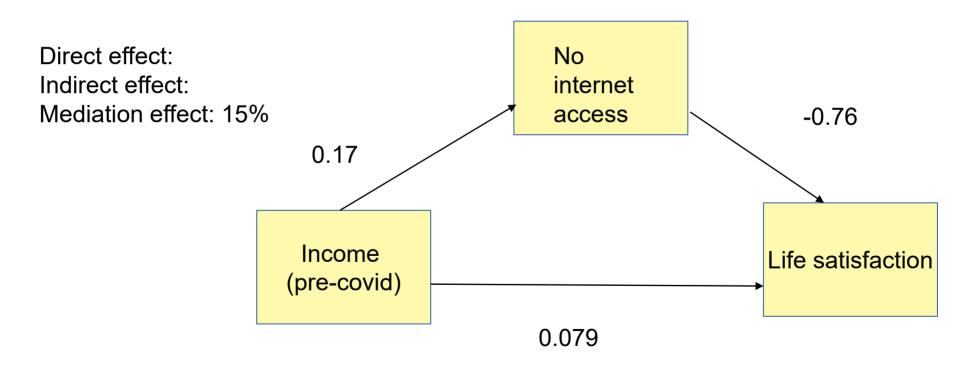
Regression Analysis: Lacking relationships on digital exclusion & controls



Regression Analysis: Life satisfaction on digital exclusion & controls



Mediation: Income (T), digital contact (M) & life satisfaction (Y)



Note: The model controls for gender, age, rural residence, BAME status, and chronic illness.

Summary

- Lacking contact to family & friends via the internet, phone and digital devices (digital exclusion):
- Was very common under covid
- Is strongly linked to low income and perceived financial struggles
- Strong direct effects of both on self perceived lacking relationships to others, low life

Thank you for listening!



Maintaining Learning in Lockdown

Continuing Learning Group
Centre For Ageing Research
Lancaster University

Presented by Janet Ross-Mills

Email:seniorlearners@lancaster.ac.uk



The first lockdown came at the end of the Spring Term 2020 so we put our heads together during the Easter break and decided to try and keep going using Zoom as our meeting place until campus reopened.

We have a plan!

When it became clear that there would be no live lectures on campus during the summer term we decided to try and keep going by utilising a mix of Zoom sessions, recordings and archived materials.

The first week of the summer term we invited our members to a get together on Zoom to introduce the technology, smooth out any issues with connecting and say 'hello'

Most of us had never heard of Zoom before





We held our first live lecture on 29th April 2020. None of us had used it before but it seemed to work pretty well.

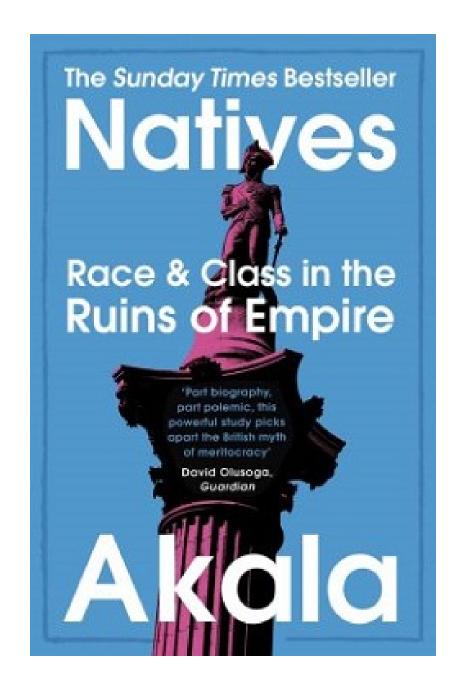
We used recorded lectures made available on the Lancaster University You Tube Channel

 Mike Berners Lee-There is no Planet B

Dr Sarah Perry-Curiosity Cabinet

- ...and we raided other universities offerings:
- Prof Karen Douglas-Secrets and Lies: The Psychology of Conspiracy Theories
- Dr Ralph Percy-Lions of the North: The Percys and Alnwick Castle

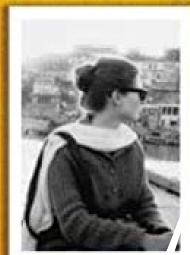
We teamed up with the librarian for author events and had a book to read each term followed by a discussion



Mary Searle-Chatterjee

Dancing to an Indian Tune

An Education in India



We held a launch event for one of our members who had published her memoirs.

Staying Connected

 We kept in touch over the summer break by having informal meet ups and shared some drawing activity and Zoom training to make us more familiar with the technology and try to improve the experience if people were finding it difficult to hear clearly.



We used Zoom and Teams to participate in events

- We took part in Festival of Social Sciences by attending a lecture on Alternative Explanations of Disability in Africa and the C4AR Town and Gown events.
- Some of us developed our use of Zoom to host an international music event and raised over £3000 for local charities.

We support research

We kept in touch with researchers and are about to help a surgeon take his project to the next phase as new funding has been awarded

