WORKING DRAFT – NOT PEER-REVIEWED

Title

Anxiety and depression in the Republic of Ireland during the COVID-19 pandemic

Running Head

IRISH MENTAL HEALTH DURING COVID-19

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Abstract

Background: The COVID-19 pandemic in the Republic of Ireland precipitated the temporary closure of all non-essential services and a nationwide quarantine as of March 27th, 2020. This study represents the first assessment of the mental health of the nation during the initial phase of the COVID-19 response, as part of a multi-wave investigation into the social, behavioural, and psychological impact of the pandemic.

Aims: First, estimate prevalence rates of depression, generalized anxiety disorder, and combined anxiety and depression, and identify risk factors associated with screening positive for anxiety/depression. Second, determine if COVID-19-related anxiety was highest amongst those identified with the greatest mortality risk from the virus.

Method: Self-report data from a nationally representative Irish sample ($N = 1,041$) was collected online between March 31 and April 5; the first week of the Republic of Ireland's nationwide quarantine measures.

Results: A substantial proportion of people screened positive for depression (22.77%), generalized anxiety (20.00%), and anxiety/depression (27.67%). Screening positive for anxiety/depression was associated with younger age, female sex, loss of income due to COVID-19, COVID-19 infection, and higher perceived risk of COVID-19 infection. Citizens aged 65 and older reported significantly higher levels of COVID-19 anxiety than adults aged 18-34. Sex, underlying health conditions, and proximity to COVID-19 deaths were not associated with COVID-19 anxiety.

Conclusions: Government responses to the current pandemic should ensure that measures protect not only the population's physical health, but its mental health also, as an equally important component of health and wellbeing.

KEY WORDS: COVID-19, coronavirus, anxiety, depression, mental health.

Significant outcomes

- More than one-in-four (27.67%) people screened positive for generalized anxiety or depression during the first week of the strictest COVID-19 lockdown measures in Ireland.

- Risk-factors for anxiety/depression included younger age, female sex, loss of income due to COVID-19, COVID-19 infection, and higher perceived risk of COVID-19 infection.

- Anxiety specifically related to the COVID-19 pandemic was highest amongst citizens aged 65 years and older.

Limitations

- The sample is representative of the general population but does not reflect persons who are currently institutionalised or in care.

- Self-report measures were used to screen people for generalized anxiety and depression.

Anxiety and depression in the Republic of Ireland during the COVID-19 pandemic

The first case of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) – the virus that causes COVID-19 - on the island of Ireland was confirmed on the 27th of February 2020 in Northern Ireland, with the first case confirmed in the Republic of Ireland two days later. On the 12th of March, the government of the Republic of Ireland announced the closure of all schools, colleges, and childcare facilities, and banned all gatherings of more than 100 people. Many businesses, including bars and restaurants, voluntarily followed suit by shutting down their premises. Mandatory government measures followed on March 27th, with the temporary closure of all non-essential services and additional physical distancing measures including the stipulation that people were not to leave their homes except under necessary or exceptional circumstances. By comparison, the United Kingdom (UK) government postponed the closure of cafes, bars, and other recreational facilities until the 20th of March, three weeks after the World Health Organization had raised the COVID-19 alert to the highest level.[1] The instruction from the UK government for people not to leave their homes except under exceptional circumstances followed on March 23rd.

As of April 20, 2020, there have been 15,652 confirmed cases of COVID-19 in the Republic of Ireland, and 687 people have died.[2] While statistics fluctuate with daily updates, more women (~55%) than men are being infected by COVID-19, the median age of patients is approximately 48 years, and the majority of infections have occurred in the capital city, Dublin.[2] Regarding deaths due to COVID-19, more men (~59%) have died than women, the median age of those who have died stands at 83 years, 76% of those who have died lived in the east of the country where Dublin is located, and at least 70% of those who have died had a confirmed underlying health condition.[2]

Coinciding with the initiation of the quarantine measures enacted across both countries, we conducted parallel nationally representative surveys in the UK (England, Scotland, Wales, and Northern Ireland) and the Republic of Ireland using identical research protocols as part of a longitudinal study designed to assess the social and psychological impact of the pandemic. The first UK survey took place a week prior to the Irish survey[3] and found that 22.12% (95% CI = 20.31, 23.93) of people screened positive for depression, 21.63% (95% CI = 19.83, 23.42) screened positive for generalized anxiety, and 27.75% (95% CI = 25.80 - 29.71) screened positive for anxiety/depression. Furthermore, in a multivariate model, screening positive for anxiety/depression was associated with younger age, having more than one child in the home, reporting a lower levels of income in 2019, experiencing a loss of income due to the COVID-19 pandemic, having an underlying health condition (lung disease, heart disease, or diabetes), a loved one having an underlying health condition (lung disease, heart disease, or diabetes), having a confirmed or suspected infection of COVID-19, and having a high level of perceived risk of infection of COVID-19 over the next month.[4]

Aims of the study

The current complementary study had two research objectives. The first was to replicate our UK population study by determining (a) what proportion of the Irish population screened positive for depression, generalized anxiety, and anxiety/depression during the initial phase of the COVID-19 quarantine, and (b) if the sociodemographic risk factors associated with screening positive for anxiety/depression in the UK were also associated with screening positive for anxiety/depression in the Irish sample. The second was to determine if levels of COVID-19 pandemic-related anxiety were highest amongst those identified as most at-risk of death from COVID-19 within the Republic of Ireland; that is those who were aged 65 or older, those who were male, those with an underlying health condition (i.e., lung disease, heart disease, or diabetes), and those who lived in the east of the country.

Methods

Participants

Participants ($N = 1,041$) were recruited from an online research panel representative of the general adult population of the Republic of Ireland. Participants were recruited by the survey company Qualtrics using stratified quota sampling to ensure that the sample characteristics of sex, age, and region of Ireland matched known population parameters from the 2016 Irish census. Data collection started on 31st March 2020, 31 days after the first confirmed case of COVID-19 in the Republic of Ireland, 19 days after the first physical distancing measures were enacted (i.e., closure of all childcare and educational facilities), and two days after the Taoiseach (the Republic of Ireland's Prime Minister) announced that people were not to leave their homes. The survey was completed on the 5th of April 2020. Findings therefore reflect the state of the Irish population's mental health during the first week of the strictest quarantine measures ever implemented within the Republic of Ireland.

Participants had to be aged 18 years or older at the time of the survey and be able to complete the survey in English. Participants were contacted by the survey company via email and requested to participate. If consenting, participants completed the survey online (median time of completion = 37.52 minutes) and were reimbursed by the survey company for their time. Ethical approval for the study was granted by the ethical review board of the University of Sheffield and Ulster University. Participants were recruited from the four provinces of the Republic of Ireland, relative to their population size: Leinster, the east of the country including the capital city of Dublin ($n = 576$, 55.3%); Munster, the south of the country ($n = 284$, 27.3%); Connaught, the west of the country ($n = 125$, 12.0%); and Ulster, the north of the country (not including the six counties of Northern Ireland; $n = 56$, 5.4%).

The mean age of the sample was 44.97 years ($Mdn = 44.00$, $SD = 15.76$, range 18-88), and 51.5% ($n = 536$) were female, 48.2% male ($n = 502$), and 0.3% ($n = 3$) checked the transgender/prefer not to say/other option. Most participants reported having been born in the Republic of Ireland (70.7%, $n = 736$) and having grown up in Ireland up to the age of 16 (79.2%, $n = 824$). Participants reported their ethnicity as Irish ($n = 779$, 74.8%), Irish Traveller ($n = 3$, 0.3%), African ($n = 20$, 1.9%), any other Black background ($n = 3$, 0.3%), Chinese ($n = 4$, 0.4%), any other Asian background ($n = 33$, 3.2%), and other including mixed background ($n = 19$, 1.8%). Regarding highest level of educational achievement, 1.2% ($n = 12$) had no educational qualification, 6.4% ($n = 65$) completed the Junior/Inter Cert (i.e., end of mandatory education at age 15/16), 22.4% ($n = 223$) completed the Leaving Cert (i.e., end of formal secondary education at age 17/18), 22.5% ($n = 234$) completed an undergraduate degree, 19.8% ($n = 206$) completed a postgraduate degree, and 27.9% ($n = 291$) reported a post-Leaving Certificate diploma, technical qualification, or 'other' qualification. Regarding employment status, 43.3% were in full-time employment/self-employment ($n = 451$), 15.7% ($n = 163$) were in part-time employment/self-employment, 15.0% ($n = 156$) were retired, 6.3% ($n = 66$) were students, 8.4% ($n = 88$) were unemployed and seeking work, 5.7% ($n = 59$) were recently made unemployed due to the COVID-19 pandemic, and 5.6% ($n = 58$) indicated that they could not work due to disability, illness, or some other reason.

Measures

Demographics: The sex of the respondents was coded as 0 = Male and 1 = Female. Age was treated as a categorical variable for the regression analysis with six levels as per the quota sampling (18-24, 25-34, 35-44, 45-54, 55-64, and 65+).

Living location: Participants were asked "Do you consider yourself to live in" and were required to choose one of the following options provided: 'City', 'Suburb', 'Town', or 'Rural'.

Lone adult: Participants were asked "How many adults (18 years or above) live in your household (including yourself)?" and were provided with options ranging from '1' to '10 or more'. The data were recoded into a binary variable to represent living alone.

Children: Participants were asked "How many children (below the age of 18) live in your household?" and were provided with options ranging from '1' to '10 or more'. The scores were categorised into 4 groups (0, 1, 2, and 3 or more children).

2019 Income: Participants were asked "Please choose from the following options to indicate your approximate gross (before tax is taken away) income in 2019 (last year)" and were provided with 10 categories: '0-€19,999', '€20,000-€29,999', '€30,000-€39,999', '€40,000-€49,999', '€50,000-€59,999', '€60,000-€69,999', '€70,000-€79,999', '€80,000-€89,999', '€90,000-€99,999', and '€100,000 or more'.

Loss of income: Participants were asked "Some people have lost income because of the coronavirus COVID-19 pandemic, for example because they have not been able to work as much or because business contracts have been cancelled or delayed. Please indicate whether your household has been affected in this way". The response options were "My household has lost income because of the coronavirus COVID-19 pandemic", "My household has not lost income because of the coronavirus COVID-19 pandemic", "I do not know whether my household has lost income because of the coronavirus COVID-19 pandemic". The first option was considered as 'Yes – loss of income' (1) while the other options were collapsed to represent 'No' (0).

Underlying health conditions known to increase risk for severe outcomes in relation to COVID-19 (self and other): Participants were asked "Do you have diabetes, lung disease, or heart disease?" and the response options were 'Yes' (1) and 'No' (0). They were also asked "Do any of your immediate family have diabetes, lung disease, or heart disease?" and the response options were 'Yes' (1) and 'No' (0).

Covid-19 status, self and other: Participants were asked "Have you been infected by the coronavirus COVID-19?" and six responses were provided. These were collapsed into a binary variable representing 'Perceived infection status'. Positive perceived infection status was based on the selection of either, 'I have the symptoms of the COVID-19 virus and think I may have been infected' or 'I have been infected by the COVID-19 virus and this has been confirmed by a test'. Negative perceived infection status was based on the selection of either, 'No, I have been tested for COVID-19 and the test was negative', 'No, I do not have any symptoms of COVID-19', 'I have a few symptoms of cold or flu but I do not think I am infected with the COVID-19 virus' or 'I may have previously been infected by COVID-19 but this was not confirmed by a test and I have since recovered'. Positive status was coded '1' and negative status coded as '0'.

Participants were also asked "Has someone close to you (a family member or friend) been infected by the coronavirus COVID-19?" and four responses were provided. These were collapsed into a binary variable representing 'Perceived infection status – someone close'. Positive perceived infection status was based on the selection of either, 'Someone close to me has symptoms, and I suspect that person has been infected' or 'Someone who is close to me has had a COVID-19 virus infection confirmed by a doctor'. Negative perceived infection status was based on the selection of either, 'No' or 'Someone close to me has symptoms, but I am not sure if that person is infected'. Positive status (other) was coded '1' and negative status coded as '0'.

Perceived risk of COVID-19 infection: Participants were asked "What do you think is your personal percentage risk of being infected with the COVID-19 virus over the next month?" Participants were presented with a visual analogue (i.e. slider) scale with '0' and '100' at the left- and right-hand extremes respectively, shown in 10-point increments, and the labels 'No Risk', 'Moderate Risk' and 'Great Risk' shown on the left, middle and right-hand part of the scale, respectively. This produced a continuous score ranging from 0 to 100, with higher scores reflecting higher levels of perceived risk of being infected by COVID-19. The scores were recoded into 'Low' (0 - 33), 'Moderate' (34 - 67), and 'High' (68 - 100).

Depression: Nine symptoms of depression were measured using the *Patient Health Questionnaire-9* (PHQ-9).[5] Participants indicate how often they have been bothered by each symptom over the last two weeks using a four-point Likert scale ranging from 0 (*Not at all*) to 3 (*Nearly every day*). Possible scores range from 0 to 27, with higher scores indicative of higher levels of depression. To identify participants likely to meet the criteria for depressive disorder a cut-off score of $\geq$ 10 was used.[5] This cut-off produces adequate sensitivity (.85) and specificity (.89), corresponds to 'moderate' levels of depression, and is used to identify a level of depression that may require psychological intervention. The psychometric properties of the PHQ-9 scores have been widely supported,[6] and the reliability in the current sample was excellent (α = .91).

Generalized anxiety: Symptoms of generalized anxiety were measured using the *Generalized Anxiety Disorder 7-item Scale* (GAD-7).[7] Participants indicate how often they have been bothered by each symptom over the last two weeks on a four-point Likert scale (0 = *Not at all*, to 3 = *Nearly every day*). Possible scores range from 0 to 21 with higher scores indicative of higher levels of generalized anxiety. A cut-off score of $\geq$ 10 was used, and this has been shown to result in sensitivity of 89% and a specificity of 82%.[7] The GAD-7 has

been shown to produce reliable and valid scores in community studies,[8] and the reliability in the current sample was excellent ($\alpha = .94$).

Covid-19 related anxiety: The survey also included a question "How anxious are you about the coronavirus COVID-19 pandemic?". Participants were provided with a visual analogue (i.e. slider) scale to indicate their degree of anxiety with '0' and '100' at the left and right-hand extremes respectively, and 10-point increments. This produced continuous scores ranging from 0 to 100 with higher scores reflecting higher levels of COVID-19 related anxiety.

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

Results

Rates of depression and anxiety

Based on the cut-off scores of $\geq$ 10 on the PHQ-9 and the GAD-7, 22.77% (95% CI = 20.22, 25.32) screened positive for depression, and 20.00% (95% CI = 17.55, 22.41) screened positive for generalized anxiety. Using the established cut-off score of $\geq$ 20 for the combined scores on the PHQ-9 and GAD-7 scales,[5] 27.67% (95% CI = 24.94, 30.39) screened positive for generalized anxiety or depression (i.e., anxiety/depression). Women had higher rates of depression (26.3% vs. 18.9%, χ^2 (1) = 8.04, p = .005, OR = 1.53 [95% CI = 1.14, 2.05]), generalized anxiety (22.4% vs. 17.5%, χ^2 (1) = 3.82, p = .051, OR = 1.36 [95% CI = 1.00, 1.85]), and anxiety/depression (32.8% vs. 22.1%, χ^2 (1) = 14.91, p < .001, OR = 1.72 [95% CI = 1.31, 2.27]) than men.

Correlates of screening positive for anxiety/depression

Table 1 includes (i) the proportion of people who screened positive for anxiety/depression stratified by the different levels of each predictor variable, (ii) the bivariate associations between each predictor variable and screening positive for anxiety/depression as unadjusted odds ratios (OR), and (iii) the multivariate associations between each predictor variable and screening positive for anxiety/depression as adjusted odds ratios (AOR).

Table 1 here

The binary logistic regression model of anxiety/depression was statistically significant (χ^2 (24) = 213.404, p < .001), and screening positive for anxiety/depression was significantly associated with younger age, being female, experiencing a loss of income due to the COVID-19 pandemic, having a confirmed/suspected COVID-19 infection, knowing a loved one with a confirmed/suspected COVID-19 infection, and higher levels of perceived risk of COVID-19 infection within the next month.

COVID-19 anxiety

The mean level of COVID-19 anxiety was 71.59 (*Mdn* = 77.00, SD = 24.42, range = 0-100). There was a statistically significant main effect for age (F (5, 1035) = 7.29, *p* < .001, η^2 = .03) with those aged 65 and older reporting the highest levels of COVID-19 anxiety (*M* = 77.83, *SD* = 22.23) (see Figure 1). Post-hoc analyses using the Tukey HSD test showed that those aged 65 and older had significantly (*p* < .05) higher levels of COVID-19 anxiety than those aged 18-24 (*M* = 61.06, *SD* = 28.50) and 25-34 (*M* = 69.83, *SD* = 25.59).

Figure 1 here

There were no statistically significant differences in the mean levels of COVID-19 anxiety between the sexes (t (1036) = 1.43, *p* = .152, d = .09), between those with and

without an underlying health condition (t (1039) = 0.71, p = .475, d = .06), or across the four regions of Ireland (F (3, 1037) = 0.63, p = .596, η^2 = .002).

Discussion

Findings from the current study offer initial insights into the Irish adult population's mental health during the early period of the COVID-19 quarantine measures, the factors associated with screening positive for mental health problems, and the extent to which these findings align with results from a parallel survey conducted one week earlier in the UK. Rates of depression, generalized anxiety, and anxiety/depression closely mirrored those found in the UK[4] with over one-in-four Irish adults screening positive for depression or generalized anxiety. The rates of anxiety and depression found in this study do not differ markedly from those reported in previous national prevalence studies in the UK.[9] We propose that the current findings can be used as a national baseline through which to identify potential changes in depression and generalized anxiety throughout the duration of the pandemic in the Republic of Ireland.

Screening positive for anxiety/depression in this study was significantly associated with younger age, female sex, reporting a loss of income due to the COVID-19 pandemic, having a confirmed/suspected COVID-19 infection, a loved one having a confirmed/suspected COVID-19 infection, as well as moderate and high levels of perceived risk of COVID-19 infection within the next month. Four of these variables – younger age, lost income due to the COVID-19 pandemic, a confirmed/suspected infection of COVID-19 in oneself, and increased perceived risk of COVID-19 infection in the next month – were also associated with screening positive for anxiety/depression in the UK.[4] It would seem, therefore, that these are risk factors for mental health problems irrespective of culture or nationality.

Some unique correlates of anxiety/depression did emerge across the two studies. In Ireland, females were significantly more likely to screen positive for anxiety/depression, and having a loved one with a suspected/confirmed case of COVID-19 was also associated with increased risk of anxiety/depression. Contrastingly, in the UK people with multiple children in the home, those with a lower income in 2019, those with an underlying health condition, and those with a loved one with an underlying health condition were more likely to screen positive for anxiety/depression. These findings suggest that although there are likely to be common factors across nations associated with risk for mental health problems, unique contextual risk factors are also likely to exist. For example, the latest Organization for Economic Cooperation and Development (OECD) figures show that the Republic of Ireland's GDP per capita is nearly twice that of the UK, the national net income in Ireland is approximately 20% higher than in the UK, and Ireland's social welfare provisions are substantially higher than the UK's.[10,11] The greater wealth and social services enjoyed in Ireland may help to explain why lower income was associated with anxiety/depression in the UK but not in Ireland. Additionally, the death rate from COVID-19 in the UK is nearly twice as high as in Ireland (236.57 per 1 million vs. 123.54 per 1 million),[12,13] which may account for why the presence of an underlying health condition associated with elevated risk of death from COVID-19 was associated with anxiety/depression in the UK, but not in Ireland.

Elevated levels of COVID-19-related anxiety were found for those aged 65 and older, consistent with early government reports and the early identification of this age group as being particularly vulnerable to COVID-19 related mortality.[14,15] These findings show that the importance of providing mental health supports to the elderly, in addition to offering accurate information and appropriate material supplies, including food, clothes, and accommodation conducive to physical distancing. These could include increased support for community outreach activities that make use of low-intensity psychological interventions,[16]

safe-distancing forms of exercise, technology-supported social activities, and videoconferencing solutions for the delivery of mental health care services.[17] This is considered especially important given the 30% increase in suicide among those aged 65 years and older observed during the severe acute respiratory syndrome epidemic in 2003.[18] Notably, at the onset of the lockdown measures the Irish government initiated a programme of 'cocooning' the elderly – and other persons deemed extremely medically vulnerable – with due attention paid to ensuring their psychological wellbeing.[19]

Current findings are also consistent with the results of a recent rapid review of the literature on the psychological effects of quarantine which found that poorer psychological responses were associated with a heightened fear of infection and loss of income due to quarantine measures.[20] Mitigating the impact of these factors may include clear and accurate health communication and financial assistance for those who have experienced financial loss as a result of the pandemic. The Irish and British governments have both put in place financial support measures for workers and business owners affected by the pandemic, however, loss of income was nonetheless associated with higher risk of anxiety/depression in the two countries.

The current study contributes towards answering a wider, international call for a multi-disciplinary approach to better understand the social, psychological, and neurological impact of COVID-19 as an immediate research priority.[21] Specifically, a recent position paper published in the *Lancet Psychiatry* calls for immediate improved monitoring of the reported rates of anxiety, depression, and other outcomes including self-harm and suicide, across the general population in order to better inform global responses to pandemics. Likewise, the paper stresses a need to identify the mechanisms that can help explain differential psychological outcomes including a better understanding of the factors that exacerbate and protect against the effects of quarantine measures on psychological health. Results from a

longitudinal survey conducted across 190 Chinese cities, for example, found that a high level of confidence in doctors, perceived likelihood of survival and low risk of contracting COVID-19, satisfaction with health information, and personal precautionary measures all protected against increased stress, depression, and anxiety during the COVID-19 response in China.[22]

The current study is not without limitations. First, while the sample is representative of the general adult population as per the 2016 census across a number of key demographic indicators, the study is prone to a number of sampling biases. Excluded from the sample were individuals within institutionalised care, including prisons, direct provision centres, and inpatient care, all of whom are known to be at higher risk of psychological distress.[23,24] Second, the self-report nature of the survey differs from clinically administered interviews, and may have resulted in an over-estimation of the prevalence rates for both anxiety and depression measures.

Taken together, and consistent with those found in a parallel study in the UK, the results of this study support the need to better understand how the physical distancing and quarantine measures implemented to ensure our physical safety during a pandemic may incur unintended, negative consequences for our psychological well-being. This is considered particularly important in light of the results of another recent general population survey in the UK which found greater concern among respondents for the social and psychological impacts of the pandemic, compared to the physical impact of COVID-19.[25] The current study establishes a national baseline to facilitate such work.

Table 1. Bivariate and multivariate binary logistic regression results predicting anxiety/depression.

	N	Anxiety/Depression N (%)	Unadjusted OR	Adjusted OR
Age				
18-24	116	65 (56.0%)	-	-
25-34	200	83 (41.5%)	.557 (.351 - .884)*	.508 (.306 - .846)**
35-44	214	60 (28.0%)	.306 (.191 - .490)***	.279 (.165 - .472)***
45-54	165	37 (22.4%)	.227 (.135 - .381)***	.202 (.113 - .362)***
55-64	219	31 (14.2%)	.129 (.076 - .219)***	.107 (.059 - .193)***
65+	127	12 (9.4%)	.082 (.041-.165)***	.087 (.041 - .185)***
Sex				
Male	502	111 (22.1%)		-
Female	536	176 (32.8%)	1.722 (1.305 - 2.273)***	1.486 (1.085 - 2.037)*
Living location				
City	255	86 (33.7%)	1.641 (1.132 - 2.381)**	1.125 (.728 - 1.739)
Suburb	188	55 (29.3%)	1.334 (.884 - 2.013)	1.324 (.829 - 2.113)
Town	298	76 (25.5%)	1.104 (.761 - 1.602)	.928 (.609 - 1.413)
Rural	300	71 (23.7%)	-	-
Lone Adult				
No	849	235 (27.7%)	-	-
Yes	192	53 (27.6%)	.996 (.702 - 1.414)	1.357 (.896 - 2.055)
Number of children				
0	628	153 (24.4%)	-	-
1	194	68 (35.1%)	1.68 (1.19, 2.37)**	.938 (.623 - 1.414)
2	165	55 (33.3%)	1.55 (1.07, 2.25)*	1.079 (.697 - 1.672)
3+	54	12 (22.2%)	0.89 (0.46, 1.73)	.851 (.401 - 1.807)
2019 Income				

€0 - €19,999	478	143 (29.9%)	1.547 (.691 - 3.467)	1.369 (.540 - 3.474)
€20,000 - €29,999	335	87 (26.0%)	1.272 (.560 - 2.887)	1.300 (.509 - 3.323)
€30,000 - €39,999	129	35 (27.1%)	1.350 (.563 - 3.233)	1.407 (.516 - 3.837)
€40,000 - €49,999	62	15 (24.2%)	1.157 (.436 - 3.067)	.826 (.262 - 2.608)
€50,000 or more	37	8 (21.6%)	-	
Lost income				
Not lost income	596	126 (21.1%)	-	
Lost Income	445	162 (36.4%)	2.135 (1.621 - 2.813)***	1.612 (1.179 - 2.204)**
Pre-existing health condition				
Self				
No	876	235 (26.8%)	-	-
Yes	165	53 (32.1%)	1.291 (.901 - 1.849)	1.302 (.834 - 2.030)
Someone close				
No	741	192 (25.9%)	-	-
Yes	300	96 (32.0%)	1.346 (1.004 - 1.804)*	.940 (.659 - 1.339)
Covid-19 Self				
No	997	257 (25.8%)	-	-
Yes	44	31 (70.5%)	6.866 (3.538 - 13.324)***	4.481 (2.092 - 9.600)***
Covid-19 Close				
No	971	246 (25.3%)	-	-
Yes	70	42 (60.0%)	4.421 (2.682 - 7.285)***	3.377 (1.862 - 6.125)***
Personal Risk 1month				
Low	374	71 (19.0%)	-	-
Moderate	448	128 (28.6%)	1.707 (1.227 - 2.374)**	2.009 (1.389 - 2.905)***
High	219	89 (40.6%)	2.922 (2.011 - 4.245)***	2.800 (1.837 - 4.267)***

* p <.05, ** p <.01, ***p <.001.

Figure 1. Mean levels of COVID-19 anxiety across the different age categories.
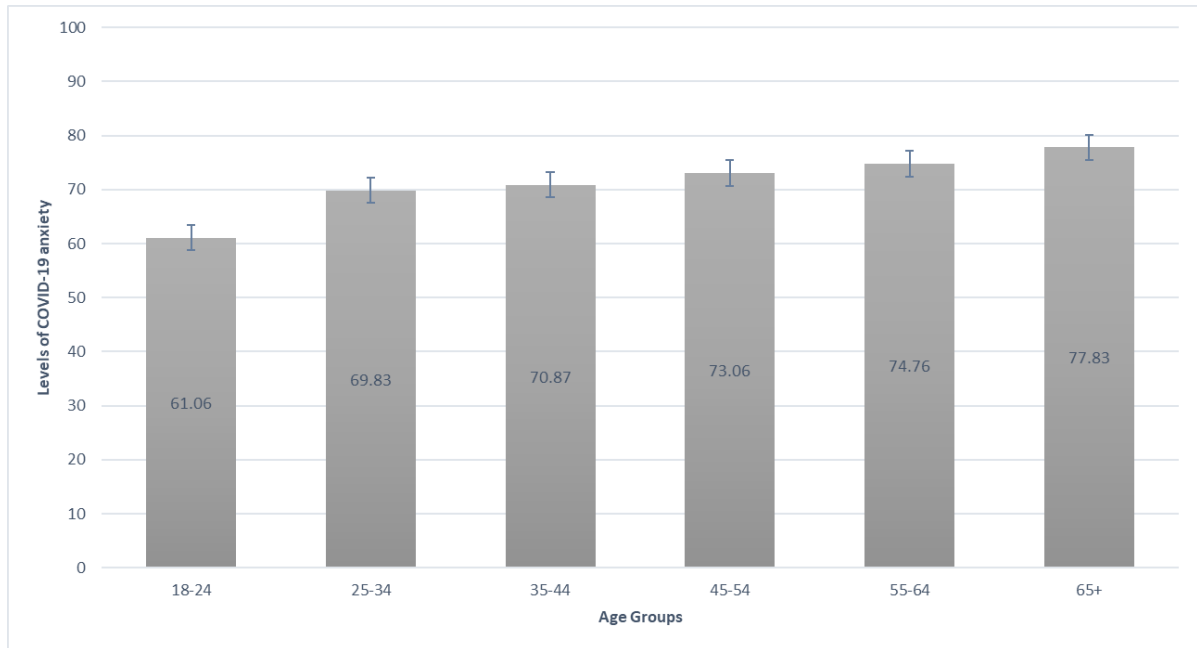
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