

The Effects of Personality types on return-to-work anxiety post COVID-19 lockdown.

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Thesis Presented in Partial Fulfilment of the Requirements for the Bachelor of Arts (Hons)  
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## **Abstract**

**Aims:** The current study sought to provide a greater understanding of return-to-work anxiety post lockdown via introverted/extroverted personality types. This study examined the effect quarantine has have on remote working via anxiety levels.

**Method:** A questionnaire was administered to participants (n=120) through social media which consisted of questions regarding COVID-19 via the Covid Stress Scale (CSS), Personality types via Eysenck's personality questionnaire (EPQ-r) and anxiety levels via the Depression, Anxiety and Stress Scale (DASS).

**Results:** Results showed that introversion/extraversion were not significant in predicting return-to-work anxiety. Return-to-work anxiety was uniquely more by the CSS subscale relating to trauma i.e., worries and anxiety about COVID in general rather than any specific return-to-work fears relating to COVID.

**Conclusion:** Overriding fear and worry towards COVID-19 rather than an individual's personality type appears to be significant in predicting return-to-work anxiety as well as job types the person falls into. On a practical level, findings have important implications the role of reducing overall anxiety for the participants.

## Literature Review

### Introduction

COVID-19 has spread across the world with 57,274,018 confirmed cases as well as 1,368,000 confirmed deaths denoted in November's operational update <sup>i</sup> (WHO, 2020). The pandemic has affected everyone as individual behaviour such as hand washing, and social hygiene (social distancing, mask wearing) are the new norms with people instructed to minimise contact with others through self-isolation and restricted movements (Department of the Taoiseach, 2020)<sup>ii</sup>. People throughout the world have reported negative psychological feelings such as stress and irritability due to the pandemic conditions but also positive health outcomes with additional online resources have also been noted with increased public self-monitoring and education (Brooks et al., 2020; Caughers et al., 2020; Gonçalves et al., 2020). Ireland's approach has responded to COVID-19 with two separate lock downs, with essential businesses grocery stores, clinics and schools operating while movement is limited to a five-kilometres radius and restricted to essential trips and outdoor exercise (Department of the Taoiseach, 2020).

Remote working became normalised due to pandemic restrictions with 39% of people in Ireland (15 years and older) working from home. This age group (35-44 years) found increased challenges when compared to older age groups experiencing less struggle with the same family/work issues however, women reported more difficulties with family and work life than men (Central Statistics Office, 2020). There are 464,860 people in Ireland currently in receipt of a Pandemic Unemployment Payment (PUP) as of March 2021; a payment subsidy for temporary loss of position or reduction of working hours (Department of Social Protection, 2021). While there are government policies in place to address employment issues



which are beneficial such as the PUP there have also been negative effects for those employed during COVID.

According to Eurofound (2020) Irish participants reported increased working hours. As well as reporting that 54% worked from home prior to the pandemic while 46% now work from home as teleworkers. Ireland denoted 40% of employees aged 18–34 revealed, they were teleworking for the first time (Eurofound, 2020). Teleworking was regarded positively across EU employees during COVID, with a preference for mixed workplace and teleworking, however only a minority reported the want to telework exclusively (Eurofound, 2020). The Eurofound report highlighted some of the positive and negative aspects of working from home during the pandemic.

Public health concerns due to COVID-19 have generated many negative psychological and physiological aspects with the effects of quarantine affecting individuals such as stress, anxiety and depression (Brodeur et al., 2020; Brooks et al., 2020; Gonçalves et al., 2020).

### **Anxiety and Depression**

Anxiety can be described as constant worrying, fear avoidance and exhausting due the effects it has on the person experiencing them; these effects cause individuals' pain such as gastrointestinal issues, insomnia, and an inability to concentrate (Cattell, 1943; Varvel et al., 2004). Anxiety and depression are typical responses to sustained stress and often occur together (Cowden, Chapman & Houghtaling, 2020). Depression can be described as a consistent low mood with a lack of interest in social and personal event and a distressed sad disposition. Depression like anxiety and stress occur on a scale and this scale is dependent on a multitude of reasons however those who suffer trauma (global pandemic, job loss, abuse, grief) are more likely to develop anxiety and depression (Ranney, Bing-Canar, Paltell, Tran, Berenz, &

Vujanovic, 2020; Haynes, Crouch, Probst, Radcliff, Bennett, & Glover, 2020; Paul & Moser, 2009). What we experience and our exposure to trauma for e.g.: global pandemic can highlight issues with relation to typical responses to stress. This is further exasperated by our personality type as it conveys our typical behaviours.

### **Personality Type – Introversion/Extraversion**

Personality types are one way to understand human behaviour and how we typically act. Different theories can explain certain aspects of personalities such as motivations, early experiences, internal processes, social influences, personal ideals as well as trait theory (Costa & McCrae, 1992). Factor analysis is a scientific approach applied to personality trait analysis which condensed a large volume of traits to a concise amount (Eysenck, 1992). Many trait theories have applied this analysis to address personality types such as Cattell 16 personality factors, Myers Briggs personality types, O.C.E.A.N (Big-5) personality traits and Eysenck's extroversion/ introversion personality traits (Cattell, 1943; Varvel et al., 2004; Costa & McCrae, 1992; Eysenck, 1992).

Eysenck explored personality on a spectrum of introversion and extroversion which explains behaviours of people as more introverted than extroverted and vice versa (Eysenck, 1992). Although his approach to personality traits also explores neuroticism and psychopathy, his work on introversion and extroversion is useful as these qualities have been explored in other trait theories (Cattell, 1943; Varvel et al., 2004; Costa & McCrae, 1992; Eysenck, 1992).

Eysenck postulated that the introversion-extroversion spectrum was the degree to which a person is outgoing and interactive with others. The typical differentiators between

introverts and extraverts are where they draw their sources of energy from, internal and external respectively (Wei, 2020).

While introverts require less social engagement, extroverts require social interaction and the dichotomous style of personality may help ascertain the type of stressors each type suffer from. During this pandemic social interaction and working conditions have been moved from workplaces to home environments and Eysenck's introversion/extroversion personality type may help explain how stress is experienced due to personality style.

Studies such as those by Wei (2020) have found that introverts prefer less stimulating environments, however have also found that introverts struggle more with changes that affect day-to-day life, and adjustment problems in particular. This may inform some of the assumptions around how Introverts/Extraverts react to Covid-19.

### **Stress, Anxiety and Introversion/Extraversion**

According to the APA, stress and anxiety are both similar but also different and this distinction is important to identify and understand. They identify both as emotional responses but stress is a response to an external trigger e.g. exposure to someone you know has Covid, versus anxiety which is a worry without the presence of an actual stressor e.g. worry about being exposed to someone with COVID-19 (APA 2020). Both stress and anxiety have similar mental and physical symptoms however the trigger or lack thereof is the biggest difference.

Stressful events create the feeling of anxiety and physiologically it may feel that heart beats speed up which also may lead to perspiration in anticipation. Whether a person experiences a small or extreme stressor, stress impacts them physically and psychologically depending on the severity (Chrousos & Gold, 1992). The longer the exposure the higher the physiological and psychological response to stress which negatively impacts the individual. Cognitive decline and increased stress are positively correlated when exposure levels to stress

are continuous (Corrêa et al., 2019). This denotes the type of effect stress has on decision making and anxiety levels (Aldwin et al., 1996; Zou, Sun, Yang, Zeng, Chen, Yang, Zhou, Zhang, Liu, Li, Ao, & Cao, 2018; Scott et al., 2013, 2014; Stawski et al., 2008; American Psychological Association, 2007; American Psychiatric Association, 2013; Corrêa et al., 2019). How an individual interacts with anxiety or stress should be examined with reference to their personality type since personality encompasses an individual's attitude and typical patterns of behaviour (Heaton & Kruglanski, 1991; Nappo, 2020). Liu, Lithopoulos, Zhang, Garcia-Barrera, and Rhodes (2021) found that personality traits such as neuroticism, conscientiousness, and extroversion have strong associations with perceived stress. Extraversion in general is associated with lower levels of perceived stress.

Akgun and Ture (2019) found that there was a significant difference between introverts/extroverts and perceived stress level. The study found a negative correlation between extraverted personality attribute and perceived stress level and a positive correlation between introverted personality attribute and perceived stress level. Liu, Lithopoulos, Zhang, Garcia-Barrera, and Rhodes (2021) reported that extroversion showed higher levels of stress during the pandemic and a greater increase in stress when compared to pre-pandemic levels. Extraversion and stress was not mediated by perceived threat, but it was suggested that it may be due to an inability to socialize.

In a study by Lakshmi (2008) introverts were 1.47 times more likely to suffer from high levels of anxiety and 3.44 times more subdued than extraverts. This study was limited to introverts and extraverts in an academic setting and may not account for a global 'event' such as a pandemic in which there is an overall heightened level of stress and anxiety across society.

## **Linking the research to COVID**

Since its wide-scale spread and effect on global society, much has been researched and written about COVID-19. Researching this from the perspective of the psychological effects of people we can split this into many different categories. This is obviously a rapidly evolving and broad topic and therefore this literature review will cover some specific elements of the ongoing research such as COVID-19 related stress and personality types.

It is a reasonable assumption based on the ways COVID-19 has affected society it may be a significant 'stressor' on individuals and a cause of anxiety and potentially even depression. As such the interaction between COVID-19 as a stressor and its effects on anxiety and depression is worthwhile to examine in greater detail. Specifically, examining research related to COVID-19 related stress and how the anxiety manifests itself in different individuals based on their personality types, gender, age etc.

## **COVID Related Stress**

Research performed by Taylor, Caeleigh, Paluszekb, Fergusc, McKayd and Asmundson (2020) has led to the development of COVID Stress Syndrome (CSS) scales. This was developed from existing scales such as the Patient Health-4, Short Health Anxiety Inventory and others. The 36 CSS questions on a scale of 0 to 4; 0 Being not-at-all and 4 being extremely likely, were split across five main categories: danger and contamination, socio-economic consequences, xenophobia and traumatic stress and compulsive checking questions. This analysis was further extended by Taylor, Caeleigh, Paluszekb, Fergusc, McKayd and Asmundson (2020b) by identifying that worry about the dangerousness of COVID-19 was the key feature of CSS. People with high scores on the total score on the CSS Scales were more likely to be concurrently anxious.

Once validated, further studies by Asmundson, Paluszek, Landry, Rachor, McKay, and Taylor (2020) also found that pre-existing anxiety disorders would score higher on the CSS. Montano and Acebes (2020) found no significant difference between men and women in the CSS and DASS scores, however this was contradicted by Mohammadpour, Ghorbani, Khoramnia, Ahmadi, Ghvami, and Maleki (2020) who found that men were less afraid of COVID and their less 'compassionate' behaviour (more infrequent hand-washing) reflected this.

Montano and Acebes (2020) found people in the Philippines were anxious about returning to work post-COVID and becoming contaminated. They found that the most significant predictor of covid related stress was (CSS) danger and contamination factors denoting worries of contracting the illness. The lowest score was around the Trauma subscale, which indicates that at least among respondents in the Philippines, general anxiety or intrusive thoughts around COVID-19 were not as prevalent.

### **Personality Types and COVID Related Stress**

Further delving into the levels of CSS, research is looking into perceived stress and personality types. Wei (2020) found that higher introversion (higher Introversion Scale scores) uniquely predicted higher depression through a review of the Introversion Scale developed by Richmond and McCroskey and the Patient Health Questionnaire 9 and the Generalized Anxiety Disorder Screener (GAD-7). Furthermore, Higher introversion also uniquely predicted loneliness, which is interesting as it would be expected that introverts would thrive at working from home given a study done by Rice and Markey (2009) who found that Introverts tended to be more anxious following a face-to-face interaction than after a computer mediated communication.

What this points to is that it is not straightforward to assume that introverts would be better suited to the work-from-home environment, given other COVID related stress-factors at play. Given that introverts may also seek to internalise their problems and coping mechanisms, they may suffer more when cut-off from support networks (Wei, 2020).

Liu, Lithopoulos, Zhang, Garcia-Barrera and Rhodes (2021, pp.1) reviewed personality types and the perceived stress and efficacy around the management of COVID and found that “individuals with high neuroticism and extroversion demonstrated higher levels of perceived stress during the pandemic well as a greater increase in stress relative to pre-pandemic”. Ultimately, they found that “personality traits could be an important factor in identifying stress-prone individuals during a pandemic”.

Tan, Hao, McIntyre, Jiang, Jiang, Zhang, Zhao, Zou, Hu, Luo, Zhang, Lai, Ho, Tran, Ho and Tam (2020) performed a study on the immediate psychological effects of Chinese workers return to work during COVID. They used the DASS and Impact of Event Scale-Revised as key measures. They found that the level of preparedness in returning to work i.e. awareness of handwashing, wearing masks, reduced anxiety. Being proactive about health made a difference in the level of anxiety in returning to work.

Quarantine requires people to interact with others virtually or from a safe distance. This has led to drastic changes to daily routines including how individuals work and maintain a living. Working from home has become normalised during lockdown moving individuals from a more traditional social environment to an at home on-line status. Apart from the physical toll quarantine has had on people, there are social and mental health issues lockdown has raised (Taylor, Caeleigh, Paluszekb, Fergusc, McKyd & Asmundson, 2020; Taylor, Caeleigh, Paluszekb, Fergusc, McKayd & Asmundson, 2020b; Asmundson, Paluszek, Landry, Rachor, McKay, & Taylor, 2020; Liu, Lithopoulos, Zhang, Garcia-Barrera &

Rhodes, 2021; Rice & Markey, 2009; Mohammadpour, Ghorbani, Khoramnia, Ahmadi, Ghvami, & Maleki, 2020; Montano & Acebes, 2020; Wei, 2020).

### **Limitations of the literature review**

It should be noted that all of the above studies are subject to the same key limitations in that the information was compiled through self-reported online surveys, rather than any assessment by professionals and as such there may be over or underestimations by the participants e.g. perceived levels of stress related to COVID. Furthermore, different cultural factors not identified in the research thus far may impact anxiety and attitudes towards COVID-19.

### **Conclusions**

The research indicates there may be a link between personality types and COVID-19 anxiety as well as the different ‘types’ of COVID-19 related anxiety experienced by different individuals. This may further extend to other aspects of COVID-19 anxiety such as the after-effects of returning to ‘normal’ life once lockdowns have ended. It should be noted that the situation we find ourselves in is fast-moving and uncertain and therefore new research may come to light quite rapidly with differing viewpoints and conclusions.



## **Method**

### **Participants**

The sample of this study consisted of 120 (Males:  $n = 39$ ; Females:  $n = 81$ ) working adults in the Republic of Ireland. This was calculated using Tabachnick and Fidell (2013) formula for calculating sample size for multiple regression analysis therefore my minimum sample size had to be at least  $n = 114$ . Participants were recruited online only due to pandemic restrictions. Participants ranged in age from 23 to 69 years. Convenience sampling strategy was used to recruit participants online. Due to COVID restrictions this was the safest way to collect data.

### **Measures/materials**

Google Forms was the questionnaire used to collect data on participant demographics such as age, sex, job type (education, office worker, healthcare worker, manufacturing/ construction, retail/ hospitality, finance) commute to work (private, public), working from home status (Do you work from home since lockdown?) and prior working from home (Did you work from home prior to lockdown?). Utilized also was a questionnaire on COVID-19 stress which examined fears around the virus (danger, contamination, trauma, compulsive checking and fear or return to work). A questionnaire about depression, anxiety and stress helped gather participant information regarding negative symptoms and emotions and a personality questionnaire was also used rate the level of extroversion/introversion in the sample selected. These questionnaires are further explained below.

## **COVID Stress Syndrome (CSS)**

COVID Stress Syndrome (CSS) developed by Taylor et al. (2020) was utilised to understand COVID-19 related stress. The 36 CSS questions (on a scale of 0 to 4. 0 Being not-at-all and 4 being extremely likely) were split across five main categories – danger, contamination, traumatic-stress, compulsive checking and with this study’s own return-to-work fear specific questions. The CSS is a questionnaire that is easily adaptable for different criteria; xenophobia and socio-economic subscales were removed as they were deemed not relevant for the current study. Each score of the subscales is added up to give an overall CSS score. People with high scores on the total score on the CSS Scales were more likely to be concurrently anxious. Cronbach’s alpha was between 0.83 – 0.94 (Taylor et al; 2020b).

## **Depression, Anxiety and Stress Scale (DASS)**

The DASS was constructed by Lovibond and Lovibond (1995) and is a 42 question self-report survey, with three components: depression, anxiety and stress.

Participants were asked to rate statements between 0- 3 ( 0= ‘Did not apply to me’ ‘ 1= Applied to me to some degree or some of the time’, 2=‘Applied to me a considerable degree, or a good part of the time’ , 3= ‘Applied to me very much or most of the time’) over the previous 7 days. Scores were added to give the total for all criteria with anxiety scores from < 20. The subscale anxiety was of importance in this study and will be examined in isolation. According to Crawford and Henry (2003) Cronbach’s alpha for the depression, anxiety and stress scales were .91, .84 and .90.

### **Short Scale Eysenck's Personality Questionnaire (EPQ-r)**

The EPQ-R S produced by Eysenck, Eysenck, and Barrett (1985) is a 48-self-report questionnaire which evaluates personality types (neuroticism, extraversion, psychoticism). The EPQ-R Short Scale is built on Eysenck's theory of personality, and is a revised edition of more commonly used scales EPQ and EPQ-R (Alexopoulos & Kalaitzidis, 2004).

For the current study, extraversion will be explored to understand the role of introversion and extroversion as an important predictive indicator for anxiety levels with higher levels of extroversion denoting lower levels of anxiety with returning to work. The extraversion/introversion specific questions from the EPQ-r will be isolated to give a score from 0-12, with the higher the score indicating a higher level of extraversion/introversion. Introverts should show higher levels of anxiety.

### **Design**

The design will be cross sectional and will be a snapshot of the 'Anxiety of returning to work' and Personality types at a point in time. There will be no intervention on the part of the researcher and only correlational inferences will be made on findings.

The sampling methodology will be convenience sampling based on specific factors i.e. being part of the working age population 18 – 64 and having an online presence i.e. email or Facebook/ Instagram / WhatsApp.

The criterion variable will be return-to-work anxiety and the predictor variables will be personality type (introversion/ extroversion), COVID-19 Fears (1. Danger 2. contamination fears, 2. compulsive checking and reassurance seeking, 3. traumatic stress symptoms about COVID-19 and 4. Fears of returning to work) with demographic factors (age, gender, job type

(education, office worker, healthcare worker, retail/ hospitality, manufacturing/ constructions, finance), commute type (private/ public) working from home, prior work from home).

The modified CSS (discussed below), DASS and Introversion/Extraversion Questionnaires will be sent out online to the population in question in who can access the survey easily simply by clicking on the link. This will then forward the participants to the questions once they tick the consent box which allows them to understand their rights as participants with the right to withdraw for the study without penalty at any point.

For this study the research question was: to what extent does personality type i.e. (introversion/extroversion) influence anxiety levels in individuals physically returning to the workplace post the COVID 19 lockdown? From this question the research aim developed into: the evaluation of the impact of introversion/extraversion on anxiety when returning to work after COVID-19 lockdown. The research objective and hypotheses developed below:

**Research Objective:** To assess whether introversion/extraversion is a statistically significant variable in return-to-work anxiety.

**H0:** Personality Type will not affect anxiety levels when returning to the workplace

**H1:** Personality Type will affect anxiety levels when returning to the workplace

Anxiety levels will be the dependent variable which will be examined to see if there is an significant relationship between extroverted individuals and upon their return to work. If extroversion/introversion is significant with relations to anxiety levels than the null hypothesis will be rejected meaning that anxiety levels about returning the workplace significantly correlate with these personality types which could stress different approaches to managing individuals and their safe return to work during times of a pandemic.

## **Procedure**

Given that COVID has affected most of the population in some way e.g. general anxiety of COVID, loss of employment (temporary or permanent), family or friends affected by COVID, mental-health issues due to isolation etc. filling out the questionnaire and participating in the research may cause some distress for the participants in that they are actively thinking about COVID and their anxiety.

The study utilizes information about depression, anxiety, and stress (DASS, CSS) which may highlight psychological distress for participants if they suffer from any of these mental health issues or believe that they now may need to address these highlighted issues. Therefore, a participant information sheet (appendix 6) conveys a participants right to withdraw at any time without penalty. Their confidentiality and anonymity are of the strictest priority and will not be shared or accessed by anyone outside of the researcher. For any participant who becomes distressed as a result of their participation in the study, helplines are available in the debriefing sheet for individuals to talk to a professional who can help them deal with their distress.

An online questionnaire will only be accessed by participants who click the ‘consent’ box which states that they understand what is expected of them and that they can withdraw from the study at any time without any consequences.

## **Analysis**

### **Inferential Analysis**

Hierarchical regression was performed to investigate return-to-work anxiety by looking at the following extroverted/introverted personality types as predictor variables, after controlling for COVID stress (danger, contamination, trauma, compulsive checking and fear of returning to work) and demographics (age, sex, job category, travel commute, work from home, prior work from home). The variable for job category has 7 different levels where 1 = education, 2 = office worker, 3 = healthcare worker, 4 = manufacturing/ construction, 5 = retail/ hospitality. However, this variable is not an ordinal variable and needs to be treated as a nominal one for the purpose of multiple linear regression. As such, each category is translated into its own variable which takes a value of 1 if the individual works in that industry and 0 otherwise. This is only done for 6 of the possible categories as a baseline is required for comparison purposes (in this case, the job category = Other was selected as the baseline).

Preliminary analyses were conducted to ensure no violation of the assumptions of normality, linearity, and homoscedasticity. Additionally, the correlations amongst the predictor variables (Age, sex, job type, travel type, work from home, prior work from home, danger, contamination, trauma, compulsive checking and fear of returning to work, and fear of returning to work, extroversion) were examined and these are presented in Table 1. Tests for multicollinearity also indicated that there was no violation of the assumption of multicollinearity and that the data was suitable for multiple linear regression analysis.

Studies show that the constructs of anxiety, depression, and stress are influenced by one another of the three variables in our dataset which represent these constructs. Given the need for variables to be independent of one another, it is important to investigate the

correlation (Crawford & Henry, 2003). Appendix 8 reveals that there is a strong positive correlation between the three variables which supports the literature. In fact, all are statistically significant to be correlated at a 5% level. Given the desire to model anxiety as the dependent variable, we exclude the variables representing stress and depression from any further analyses to avoid any issues of multicollinearity.

## **Results**

The variables are assigned into three blocks. Block 1 consists of the variables (danger, contamination, trauma, compulsive checking and fear of returning to work) which represent the quantitative scores of each individual's feelings to the various risks associated with COVID-19 and returning back to work and is viewed as a 'feelings' block. Block two consists of a single variable (extroversion) which is treated as a 'personality' block. Block 3 is made up of the various demographic variables (age, sex, job category, travel commute, work from home, prior work from home). When running the hierarchical regression, block 1 is used first as, based on the literature, the each individual's feelings towards the virus appears to be a key driver to one's fear to returning to work, as well as quantitative output being one of the key findings of the survey. It seems logical to allow block 3 to be added last given that the demographic information consists of more qualitative information about an individual which has a weaker psychological affiliation than one's emotions and feelings towards COVID-19 and the potential anxiety in returning back to work. The inclusion of block 2 in the hierarchical regression in between the block 1 and block 3 is rationalised by the influence of one's personality on their feelings in general, and as such, carries a greater importance than the demographic block at face value.

In the first step of hierarchical multiple regression, five indicators were entered: CSS danger, contamination, trauma, compulsive checking and fear of return to work anxiety. The model was statistically significant  $F(5, 114) = 35.14; p < .001$  and explained 60% of the

variance in return to work anxiety (see Table 2 for full details). After the entry of extroversion at Step 2 the total variance explained by the model was 61% ( $F(1, 113) = 3.48$ ;  $p < .064$ ). The introduction of extroversion explained an additional 1% variance in return to work anxiety scores, after controlling for danger, contamination, trauma, compulsive checking and fear of returning to work; there was not a statistically significant change ( $R^2 \text{ change} = .010$ ;  $F(6, 113) = 30.50$ ;  $p = .000$ ).

In the final model, trauma, educational work, office work and healthcare work predicted return to work anxiety to statistically significant degree. All four variables were predictors of return to work anxiety with trauma ( $\beta = 1.05$ ,  $p = .001$ ) as the strongest predictor followed by job categories, education ( $\beta = -11.5$ ,  $p = .001$ ), office work ( $\beta = -10.1$ ,  $p = .004$ ), healthcare work ( $\beta = -11.5$ ,  $p = .003$ ), (see Table 2 for full results)



Table 1

*The Pearson product-moment correlation coefficient of variables*

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
1 Total anxiety subscale DASS	-																		
2 CSS total score for items 1 to 6 on danger	0.290	-																	
3 CSS total score for items 13 to 18 on Contam	0.318	0.749	-																
4 CSS total score for items 19 to 24 on TraumaS	0.767	0.449	0.483	-															
5 CSS total score for items 25 to 30 on CC	0.569	0.406	0.356	0.636	-														
6 CSS total score for items 31 to 36 on FRW	0.423	0.602	0.577	0.559	0.546	-													
7 Total scores for extroversion EPQ	-0.257	-0.022	-0.003	-0.221	0.015	-0.042	-												
8 Participant age	-0.230	-0.101	-0.123	-0.259	-0.240	-0.193	0.049	-											
9 Participant sex	-0.318	-0.388	-0.264	-0.391	-0.358	-0.408	0.041	0.104	-										
10 Education	0.128	0.209	0.147	0.267	0.312	0.357	0.033	-0.146	-0.312	-									
11 Office Worker	-0.259	-0.219	-0.173	-0.279	-0.322	-0.291	0.003	0.128	0.237	-0.529	-								
12 Healthcare Worker	0.102	0.154	0.158	0.167	0.044	0.060	-0.125	-0.093	-0.220	-0.229	-0.233	-							
13 Manufacturing/ Construction	0.090	0.086	0.097	0.045	0.023	-0.015	-0.052	-0.033	0.208	-0.205	-0.209	-0.090	-						
14 Retail/ Hospitality	-0.094	-0.090	-0.083	-0.135	-0.067	-0.138	-0.009	0.185	0.004	-0.165	-0.168	-0.073	-0.065	-					
15 Finance	-0.016	-0.150	-0.132	-0.110	0.003	-0.121	0.141	-0.041	0.207	-0.179	-0.183	-0.079	-0.071	-0.057	-				
16 How did you commute to work	0.057	-0.010	0.040	0.060	0.041	-0.056	-0.057	0.211	0.084	0.144	-0.245	0.056	0.096	0.048	-0.097	-			
17 Do you work from home	-0.353	-0.224	-0.033	-0.377	-0.249	-0.024	0.248	0.192	0.122	-0.035	0.232	-0.178	-0.177	-0.143	0.116	-0.014	-		
18 Did you work from home before lockdown	-0.136	-0.238	-0.247	-0.225	-0.093	-0.162	0.089	0.131	0.065	-0.182	0.105	-0.106	-0.095	0.051	0.154	-0.057	0.196	-	

Note: Statistical significance =  $p < .01$

Table 2

*Hierarchical multiple regression for CSS, EPQ and Demographics*

Variable	<i>R</i>	<i>R</i> <sup>2</sup>	<i>R</i> <sup>2</sup> Change	<i>B</i>	<i>SE</i>	$\beta$	<i>T</i>	<i>P</i>
<b>Block 1</b>	.78	.60						
Danger				-.11	.15	-.07	-.76	.447
Contamination				-.04	.14	-.02	-.30	.760
Trauma				1.05	.12	.71	8.6	.000** *
Compulsive checking				.22	.11	.15	1.9	.059
Fear of return to work				-.002	.14	-.01	-.014	.989
<b>Block 2</b>	.78	.61	.012					
Extraversion				-.41	.22	-.11	-1.8	.64
<b>Block 3</b>	.67	.61	.053					
Age				-.02	.07	-.02	-.03	.698
Sex				-1.7	1.4	-.08	-1.1	.251

Education	-11.5	3.3	-.56	-3.45	.001**
					*
Office Work	-10.1	3.3	-.49	-2.98	.004**
					*
Healthcare Worker	-11.	3.7	-.34	-3.07	.003**
					*
Manufacturing/ Construction	-8.0	3.8	-.21	-2.07	.040
Retail/ Hospitality	-10.	4.1	-.23	-2.54	.012
Finance	-6.6	4.0	-.16	-1.67	.098
Commute	.17	1.4	.008	.125	.901
Work from home	-1.3	1.49	-.068	-.923	.358
Prior work from home	-1.1	2.04	-.03	-.55	.577

*Note:* Statistical significance: \*p <.05; \*\*p <.01; \*\*\*p <.001

## Discussion

The hypothesis aimed to address extroversion/ introversion personality types as significant predictors of return-to-work anxiety post lockdown. The research question was initially formulated in the first lockdown and the data collection commenced into the second lockdown, anxiety levels may have varied for participants from first to second lockdown.

Extroversion did not uniquely predict return-to-work anxiety during COVID-19. Extroversion might normally show greater significance in other events and stressors such as

anxiety however, the overriding event of COVID-19 supersedes personality types given the fact that fear of returning to work was not a significant factor of return-to-work anxiety.

The findings here were not consistent with findings by Liu, Lithopoulos, Zhang, Garcia-Barrera and Rhodes (2021) who predicted greater stress in extroverts, this was not supported here. However, they focused primarily on stressors rather than overall anxiety, and while the two may be correlated, the different focus may account for some of the variance.

The study is supported by the work Taylor, Caeleigh, Paluszekb, Fergusc, McKayd and Asmundson (2020b) performed that worry about the dangerousness of COVID-19 was the key feature of CSS. This is somewhat logical, given the fact that as restrictions ease and people go back to work, people will be interacting more frequently with each other and have a higher probability of contracting the disease. The jobs most predictive of anxiety were roles within education, office work and healthcare which could signifies that increased social interaction, shared environments with various age groups increases the chance of encountering the virus upon returning to work. Therefore the role that individual employers/organisations have in reducing this anxiety could be an important in the overall mental health of their employees returning to work.

People demonstrated more worry about trauma “I had trouble concentrating because I kept thinking about the virus”, “Reminders of the virus caused me to have physical reactions, such as sweating or a pounding heart” on the CSS. This signifies that people may be more worried about COVID-19 regardless of personality type given the significance of the pandemic and its overall and overriding effect on behaviour and thinking. People may be worried about the virus in general rather than specifically showing greater anxiety for returning to work. It is interesting as people in the Philippines showed the lowest scores in

relation to trauma which may demonstrate different cultural perspectives as shown by Montano and Acebes (2020).

Montano and Acebes (2020), found that the danger questions relating to the efficacy of healthcare and guidelines and in protecting people from the virus specifically around the healthcare system's ability to help individuals and their families, was the key concern. This may imply there is a cultural element at play in how the CSS is answered, in that different countries may produce different results in the individual CSS subscales based on what their biggest societal fears are around COVID.

Tan (2020) conveyed in a Chinese study that people who felt that they were proactive with safety measures (washing hands, social distancing), were not worried about returning to work. While this study looked at the DASS and Impact of Event Scale-Revised as key measures instead of the CSS, it still related the reduction of anxiety with preparedness and proactive measures and can explain the element of trauma and insecurity people are experiencing. Investigating the perception of the population of how the Government is handling the crisis would be valuable in determining whether the anxiety is affected by any perceived mistrust or mishandling that the Government can deal with the crisis effectively.

The global pandemic has affected normal routines worldwide and has demonstrated that people are worried about the virus in general and this is not affected by personality type, wherever on the scale of extroversion a person falls. General anxiety (trauma) seems to be the variable most important to people due to the overall uncertainty. Again, this is consistent with the view that anxiety is stress without the stress (APA 2020). People displaying general anxiety about COVID may be expected to have increased levels of overall anxiety.

## **Limitations**

There are limitations to the current study which should be addressed. There is an imbalance with regards to gender. Twice the number of women compared to men participated in the questionnaire. This may be addressed with a bigger size sample or with an another study however, this should be noted as a limitation of the study as it may not generalise to the wider population.

Job categories may have limited what was represented in the study in that other kinds of work could have also contributed to the analysis of the return to work anxiety. As social distancing and quarantine measures have changed the employment landscape for many, it may have been interesting to include members of the public employed who primarily worked from home prior to COVID. According to Labor Statistics (2021) increased levels of people with disabilities (within the U.S) have thrived with remote working in 2020 compared to 2019 which signifies that working from home has had a positive impact although there could be cultural differences here in Ireland.

While the main personality type in the study was extroversion, expanding other personality types e.g.: conscientiousness, openness, neuroticism may have alluded to other important variables that could have uniquely impacted on return to work anxiety. With further expansion on personality types, more in depth analysis would be required, although time consuming it could show interesting results for further studies. It would be interesting to see similar approaches towards understanding personality types and return to work anxiety post COVID-19 for new and prior tele-workers to expand on other areas of personality and ability to work. A recent study explored “anxious extraverts” and how social anxiety not shyness affects extroverts (Costache, Frick, Månsson, Engman, Faria, Hjorth, Hoppe,

Gingnell, Frans, Björkstrand, Rosén, Alaie, Åhs, Linnman, Wahlstedt, Tillfors, Marteinsdottir, Fredrikson & Furmark, 2020). While trauma within this current study was significant, the idea that introversion and social anxiety could be a factor may have highlighted other limitations of the study since COVID might have impacted extroverted people with higher social anxiety.

As perception and fears relating to COVID have shown significance in this study it might have been worth adding questions regarding social hygiene to capture further information regarding COVID related issue. Questions such as “How do you feel about people who do not wear face coverings/ masks?” or “Does it matter to you if others do not follow social distancing regulations?” would encapsulate particular fears regarding their personal safety. Good social hygiene is one of the main reasons people felt more at ease returning to work therefore looking at the link between particular COVID safety measures and anxiety levels could have predicted or mediated anxiety results (Tan et al., 2020).

Vaccination is another factor that could have been considered. Since the vaccine roll out in Ireland it was not factored into the questionnaire (Department of Health, 2020b). Feelings and attitudes towards vaccine hesitation and acceptance could have also given a distinctive perspective towards COVID fears and return to work anxiety given that vaccines have staggered time lines with categories who are high risk and prioritized first (Department of Health, 2020a). Depending on the health category an individual fell into might have impacted anxiety levels with returning to the workplace.

## **Conclusions**

The spread of COVID-19 has affected work and home environments as well as social interactions worldwide. Understanding return-to-work anxiety could have been explained via different personality styles given differing social approaches and trait styles, it accounted for

1% additional variance when added to the model in this study. The CSS was the most significant addition to the model in block 1, denoting trauma as the most significant factor relating to return-to-work anxiety. Trauma may reflect general anxiety towards the virus and does not uphold the hypothesis that extroversion scores would have decreased anxiety scores upon physically returning to the workplace as with an increase for introversion. Overriding fear and worry towards COVID-19 rather than an individual's personality type appears to be significant in predicting return-to-work anxiety as well as job types the person falls into.

Given the overall effect of anxiety on individuals and COVID, thoughts on how to assuage these concerns need to be addressed both by employers and at Government level to reduce the mental health-impact of the anxiety people are suffering from as a result of COVID.



## Appendices

### Appendix 1 - DASS

<h1>DASS</h1>		<i>Name:</i>	<i>Date:</i>
<p>Please read each statement and circle a number 0, 1, 2 or 3 which indicates how much the statement applied to you <i>over the past week</i>. There are no right or wrong answers. Do not spend too much time on any statement.</p> <p><i>The rating scale is as follows:</i></p> <p>0 Did not apply to me at all            1 Applied to me to some degree, or some of the time            2 Applied to me to a considerable degree, or a good part of time            3 Applied to me very much, or most of the time</p>			
1	I found myself getting upset by quite trivial things	0	1 2 3
2	I was aware of dryness of my mouth	0	1 2 3
3	I couldn't seem to experience any positive feeling at all	0	1 2 3
4	I experienced breathing difficulty (eg, excessively rapid breathing, breathlessness in the absence of physical exertion)	0	1 2 3
5	I just couldn't seem to get going	0	1 2 3
6	I tended to over-react to situations	0	1 2 3
7	I had a feeling of shakiness (eg, legs going to give way)	0	1 2 3
8	I found it difficult to relax	0	1 2 3
9	I found myself in situations that made me so anxious I was most relieved when they ended	0	1 2 3
10	I felt that I had nothing to look forward to	0	1 2 3
11	I found myself getting upset rather easily	0	1 2 3
12	I felt that I was using a lot of nervous energy	0	1 2 3
13	I felt sad and depressed	0	1 2 3
14	I found myself getting impatient when I was delayed in any way (eg, elevators, traffic lights, being kept waiting)	0	1 2 3
15	I had a feeling of faintness	0	1 2 3
16	I felt that I had lost interest in just about everything	0	1 2 3
17	I felt I wasn't worth much as a person	0	1 2 3
18	I felt that I was rather touchy	0	1 2 3
19	I perspired noticeably (eg, hands sweaty) in the absence of high temperatures or physical exertion	0	1 2 3
20	I felt scared without any good reason	0	1 2 3
21	I felt that life wasn't worthwhile	0	1 2 3

*Please turn the page* ☞

*Reminder of rating scale:*

0 Did not apply to me at all

1 Applied to me to some degree, or some of the time

2 Applied to me to a considerable degree, or a good part of time

3 Applied to me very much, or most of the time

22	I found it hard to wind down	0	1	2	3
23	I had difficulty in swallowing	0	1	2	3
24	I couldn't seem to get any enjoyment out of the things I did	0	1	2	3
25	I was aware of the action of my heart in the absence of physical exertion (eg, sense of heart rate increase, heart missing a beat)	0	1	2	3
26	I felt down-hearted and blue	0	1	2	3
27	I found that I was very irritable	0	1	2	3
28	I felt I was close to panic	0	1	2	3
29	I found it hard to calm down after something upset me	0	1	2	3
30	I feared that I would be "thrown" by some trivial but unfamiliar task	0	1	2	3
31	I was unable to become enthusiastic about anything	0	1	2	3
32	I found it difficult to tolerate interruptions to what I was doing	0	1	2	3
33	I was in a state of nervous tension	0	1	2	3
34	I felt I was pretty worthless	0	1	2	3
35	I was intolerant of anything that kept me from getting on with what I was doing	0	1	2	3
36	I felt terrified	0	1	2	3
37	I could see nothing in the future to be hopeful about	0	1	2	3
38	I felt that life was meaningless	0	1	2	3
39	I found myself getting agitated	0	1	2	3
40	I was worried about situations in which I might panic and make a fool of myself	0	1	2	3
41	I experienced trembling (eg, in the hands)	0	1	2	3
42	I found it difficult to work up the initiative to do things	0	1	2	3

Source: Lovibond and Lovibond (1995)

## Appendix 2 – CSS

		Not at-all					Extremely
		0	1	2	3	4	
1	Danger	I am worried about catching the virus					
2		I am worried that I can't keep my family safe from the virus					
3		I am worried that our healthcare system won't be able to protect my loved ones					
4		I am worried that our healthcare system is unable to keep me safe from the virus					
5		I am worried that basic hygiene (e.g., handwashing) is not enough to keep me safe from the virus					
6		I am worried that social distancing is not enough to keep me safe from the virus					
7	Socio-economic	I am worried about grocery stores running out of food					
8		I am worried that grocery stores will close down					
9		I am worried about grocery stores running out of cleaning or disinfectant supplies					
10		I am worried about grocery stores running out of cold or flu remedies					
11		I am worried about grocery stores running out of water					
12		I am worried about pharmacies running out of prescription medicines					
13	Xenophobia	I am worried that foreigners are spreading the virus in my country					
14		If I went to a restaurant that specialized in foreign foods, I'd be worried about catching the virus					
15		I am worried about coming into contact with foreigners because they might have the virus					
16		If I met a person from a foreign country, I'd be worried that they might have the virus					
17		If I was in an elevator with a group of foreigners, I'd be worried that they're infected with the virus					
18		I am worried that foreigners are spreading the virus because they're not as clean as we are					
19	Contamination	I am worried that if I touched something in a public space (e.g., handrail, door handle), I would catch the virus					
20		I am worried that if someone coughed or sneezed near me, I would catch the virus					
21		I am worried that people around me will infect me with the virus					
22		I am worried about taking change in cash transactions					
23		I am worried that I might catch the virus from handling money or using a debit machine					
24		I am worried that my mail has been contaminated by mail handlers					
25	Traumatic Stress	I had trouble concentrating because I kept thinking about the virus					
26		Disturbing mental images about the virus popped into my mind against my will					
27		I had trouble sleeping because I worried about the virus					
28		I thought about the virus when I didn't mean to					
29		Reminders of the virus caused me to have physical reactions, such as sweating or a pounding heart					
30		I had bad dreams about the virus					
31	Compulsive Checking	Searched the Internet for treatments for COVID-19					
32		Asking health professionals (e.g., doctors or pharmacists) for advice about COVID-19					
33		YouTube videos about COVID-19					
34		Checking your own body for signs of infection (e.g., taking your temperature)					
35		Seeking reassurance from friends or family about COVID-19					
36		Social media posts concerning COVID-19					

This is the full CSS developed by Taylor, Caeleigh, Paluszekb, Fergusc, McKayd and Asmundson (2020), however my proposal will remove the socio-economic and xenophobia questions and replace them with 6 questions around fear of returning to work (as I would not consider these to be as relevant for the study in question). Each section has 6 questions and to remain consistent, 6 questions were developed by the researcher regarding – Fear of Returning to Work.

The modified questions are as follows:

- 1) I am worried about returning to work post-lockdown
- 2) I am worried I will catch COVID on my daily commute
- 3) I am worried about infecting my family once I return to work
- 4) I am worried that social distancing and self-isolation will be normalised even once I return to work
- 5) I am worried there will be another lockdown once people start returning to work
- 6) I am worried about not returning to work and continuing to work from home

## Appendix 3 – EPQ-R

### Short-scale Eysenck Personality Questionnaire--Revised

#### Items

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1. Does your mood often go up and down?
2. Do you take much notice of what people think?
3. Are you a talkative person?
4. If you say you will do something, do you always keep your promise no matter how inconvenient it might be?
5. Do you ever feel 'just miserable' for no reason?
6. Would being in debt worry you?
7. Are you rather lively?
8. Were you ever greedy by helping yourself to more than your share of anything?
9. Are you an irritable person?
10. Would you take drugs which may have strange or dangerous effects?
11. Do you enjoy meeting new people?
12. Have you ever blamed someone for doing something you knew was really your fault?
13. Are your feelings easily hurt?
14. Do you prefer to go your own way rather than act by the rules?
15. Can you usually let yourself go and enjoy yourself at a lively party?
16. Are *all* your habits good and desirable ones?
17. Do you often feel 'fed-up'?
18. Do good manners and cleanliness matter much to you?
19. Do you usually take the initiative in making new friends?
20. Have you ever taken anything (even a pin or button) that belonged to someone else?
21. Would you call yourself a nervous person?
22. Do you think marriage is old-fashioned and should be done away with?
23. Can you easily get some life into a rather dull party?
24. Have you ever broken or lost something belonging to someone else?
25. Are you a worrier?
26. Do you enjoy co-operating with others?
27. Do you tend to keep in the background on social occasions?
28. Does it worry you if you know there are mistakes in your work?
29. Have you ever said anything bad or nasty about anyone?
30. Would you call yourself tense or 'highly-strung'?
31. Do you think people spend too much time safeguarding their future with savings and insurances?
32. Do you like mixing with people?
33. As a child were you ever cheeky to your parents?
34. Do you worry too long after an embarrassing experience?
35. Do you try not to be rude to people?
36. Do you like plenty of bustle and excitement around you?
37. Have you ever cheated at a game?

## Short-scale Eysenck Personality Questionnaire--Revised

### Items

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38. Do you suffer from 'nerves'?
39. Would you like other people to be afraid of you?
40. Have you ever taken advantage of someone?
41. Are you mostly quiet when you are with other people?
42. Do you often feel lonely?
43. Is it better to follow society's rules than go your own way?
44. Do other people think of you as being very lively?
45. Do you always practice what you preach?
46. Are you often troubled about feelings of guilt?
47. Do you sometimes put off until tomorrow what you ought to do today?
48. Can you get a party going?

## **Appendix 4 – Debriefing Sheet**

Debriefing Sheet

PROJECT TITLE

The Effects of Personality types on return to work stress post COVID-19 lockdown.

### **INVITATION**

You are being asked to take part in a research study on Introversion and extroversion personality types as influential with returning to work anxiety post COVID-19 lockdown. The aims of this study are to examine how a person's preference for working from home or working at their employer premises increase or decrease anxiety for people who are introverted and extroverted. I am a fourth year Psychology student at National College of Ireland (NCI) completing my final year project. Once my project is approved by the NCI research ethics committee, my project will commence.

### **WHAT WILL HAPPEN**

In this study, you will be asked to complete some questionnaires

1. Eysenck's personality Inventory (EPI); introversion, extroversion
2. Depression, anxiety, and stress scale (DASS)
3. COVID stress syndrome (CSS)
4. Demographic information: Age, working status, gender

Before starting the study, you will be fully informed of the study details (see informed consent appendix) with what to expect, your right to withdraw participation and your right to privacy and confidentiality. Any clinical assessments used are not for diagnostic purposes and will keep individual information strictly confidential with the sole intention for the purpose of this study. You must sign the informed consent form giving your permission to take part in the study. A consent box will be utilized for an online questionnaire before participants can proceed with the questionnaire. Any questions you have can be addressed at that time with full explanation of what happens, when it happens and your rights to leave the study:

## **TIME COMMITMENT**

The study typically takes 30 minutes for the session including informed consent and debriefing afterwards.

## **PARTICIPANTS' RIGHTS**

1. You may decide to stop being a part of the research study at any time without explanation. You have the right to ask that any data you have supplied to that point be withdrawn/destroyed. The study is not paid.
2. You have the right to omit or refuse to answer or respond to any question that is asked of you appropriately, and without penalty.
3. You have the right to have your questions about the procedures answered. If you have any questions as a result of reading this information sheet, you should ask the researcher before the study begins.

## **BENEFITS AND RISKS**

Participation in this study involves completion of some standardised tests [DASS, CSS] which are routinely used as preliminary screens for clinical conditions involving depression, anxiety and stress/ COVID Stress Syndrome of which you may not be aware. Scores from these tests would not be sufficient basis for clinical decisions or diagnosis, contain substantial margins of error, and are not used for diagnostic purposes in this study. Though it is not possible to provide feedback of individual scores to participants, these scores might hint at health problems that some people would want to discuss with an appropriate health professional.

## **COST, REIMBURSEMENT AND COMPENSATION**

Your participation in this study is voluntary and will not be reimbursed for participation.

## **CONFIDENTIALITY/ANONYMITY**

The data we collect do not contain any personal information about you except age, gender, and employment status. No one will link the data you provided to the identifying information you supplied (e.g., name, address, email).

The data collecting in this study is intended for a final year project with no intention for secondary data analysis.

After the study, you will be debriefed in full (see debriefing sheet appendix) using the debriefing information that is provided:

### **FOR FURTHER INFORMATION**

I (Martina Preston- the researcher) will be glad to answer your questions about this study at any time. You may contact me via email at [fypncistudentresearch@gmail.com](mailto:fypncistudentresearch@gmail.com) or via phone 0851511496.

If you want to find out about the final results of this study, you should contact the above email.

If Participation in the study has caused any personal distress, please contact one of the any helplines available to help you:

- 999/112 – Emergency Services: if you or someone else is in immediate danger
- 116 123- Samaritans: or email : [jo@samaritans.org](mailto:jo@samaritans.org) to talk to someone
- 1800 80 48 48 - Aware Support: call for anxiety, worry and a need to talk
- **50808 - Free-text 'HELLO' For free 24/7 support in a crisis**
- 1850 24 1850 - Covid-19 helpline: Guidance and support for those during COVID-19



## **Appendix 5 – Participant Information Sheet**



### **Participant Information Sheet**

#### **TITLE:**

**The Effects of Personality types on return to work stress post COVID-19 lockdown.**

I would like your participation in the above-mentioned research study. To understand what to expect please read the information below carefully and take time to consider if you would like to participate.

#### **WHO I AM AND WHAT THIS STUDY IS ABOUT?**

My name is Martina Preston, and I am conducting research as part of my final year project at National College of Ireland (NCI) for my dissertation. This research aims to investigate how personality types and anxiety levels relate to COVID. Upon ethical approval by the ethical committee of NCI, my research will commence.

#### **WHAT WILL TAKING PART INVOLVE?**

Participation in this study will involve answering a questionnaire with three areas of interest: personality type, COVID fear and anxiety. You are required to tick the consent box to access the questionnaire by agreeing to take part in the research study. You will be asked questions and you must select the answer most relevant to you. The questionnaire should take you 30 minutes in total to complete. Your participation is greatly appreciated and welcomed especially during lockdown.

#### **DO YOU HAVE TO TAKE PART?**

Participation in this research is completely voluntary and you can withdraw at any time without consequences; you have the right to refuse any questions also.

#### **WHAT ARE THE POSSIBLE RISKS AND BENEFITS OF TAKING PART?**

Participating in this research will benefit further research into anxiety related to COVID. During such a time, researching topics related to mental health and COVID can give some insight into the effect lockdown had on the public. The questionnaire will ask questions related to mental health and COVID which may cause some people distress. Multiple helplines are available should you need to talk:

**999/112** (Emergency Services) if you or someone else is in immediate danger; **116 123** (Samaritans) or email : [jo@samaritans.org](mailto:jo@samaritans.org) to talk to someone; **1800 80 48 48** (Aware Support) for anxiety, worry and a need to talk; **50808** (support in a crisis) **Free-text 'HELLO'** For free 24/7; **1850 24 1850** (Covid-19 helpline) Guidance and support for those during COVID-19.

#### **WILL TAKING PART BE CONFIDENTIAL?**

This study will be confidential; no identifiable information you share will link you to this study such as names, email addresses or home addresses. This information will not be asked or stored.

#### **HOW WILL INFORMATION YOU PROVIDE BE RECORDED, STORED AND PROTECTED?**

Information from the study will be utilised via a survey platform. The information you give here is securely protected and data collected will be saved for 5 years as outlined in NCI data retention policy.

#### **WHAT WILL HAPPEN TO THE RESULTS OF THE STUDY?**

This research only is for the purpose of submitting my dissertation.

#### **WHO SHOULD YOU CONTACT FOR FURTHER INFORMATION?**

I (Martina Preston - the researcher) will be glad to answer your questions about this study at any time. You may contact me via email at [fypncistudentresearch@gmail.com](mailto:fypncistudentresearch@gmail.com) or via phone 0851511496.

Thank you

## Appendix 6 – Informed Consent Form

### INFORMED CONSENT FORM

The Effects of Personality types on return to work stress post COVID-19 lockdown.

You are being asked to take part in a research study on Introversion and extroversion personality types as influential with returning to work anxiety post COVID-19 lockdown. The aims of this study are to examine how a person's preference for working from home or working at their employer premises increase or decrease anxiety for people who are introverted and extroverted. I am a fourth year Psychology student at National College of Ireland (NCI) completing my final year project.

By signing below, you are agreeing that: (1) you have read and understood the Participant Information Sheet, (2) questions about your participation in this study have been answered satisfactorily, (3) you are aware of the potential risks (if any), and (4) you are taking part in this research study voluntarily (without coercion).

In order to participate with the questionnaire online, it is necessary to tick a consent box which states that you consent to taking part and understand that you will not be penalized if you decide to withdraw from the study at any stage without repercussions. After giving your consent you can start your questionnaire.

---

Participant's Name (Printed)\*

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Participant's signature\*

---

Date

---

Name of person obtaining consent (Printed)

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Signature of person obtaining consent

*\*Participants wishing to preserve some degree of anonymity may use their initials (from the British Psychological Society Guidelines for Minimal Standards of Ethical Approval in Psychological Research)*

I am aware that participation in this study involves completion of some standardised tests such as the depression, anxiety and stress scale (DASS), COVID stress Syndrome (CSS) scale about fear of COVID-19 which are routinely used as preliminary screens for clinical conditions/impairments of which I might not be aware. I understand that these assessments are not sufficient for diagnostic purposes, nor will they be used in this manner in this study. I also understand that the researchers cannot inform participants of individual test scores, but in the event that I produce scores of potential clinical concern, researchers should (check one and provide relevant contact information):

\_\_\_\_\_ Contact me at: \_\_\_\_\_

\_\_\_\_\_ Contact my GP at \_\_\_\_\_

\_\_\_\_\_ Do nothing. I absolve the researchers of any obligation to contact me about this.

## Appendix 7 – SPSS Extracts

### Correlations

		Total depression subscale DASS	Total anxiety subscale DASS	Total stress subscale DASS		
Total depression subscale DASS	Pearson Correlation	1	.885**	.883**		
	Sig. (2-tailed)		.000	.000		
	N	120	120	120		
	Bootstrap <sup>b</sup>	Bias	0	.001	.000	
		Std. Error	0	.027	.027	
		95% Confidence Interval	Lower	1	.826	.823
			Upper	1	.933	.932
Total anxiety subscale DASS	Pearson Correlation	.885**	1	.932**		
	Sig. (2-tailed)	.000		.000		
	N	120	120	120		
	Bootstrap <sup>b</sup>	Bias	.001	0	-.001	
		Std. Error	.027	0	.015	
		95% Confidence Interval	Lower	.826	1	.897
			Upper	.933	1	.957
Total stress subscale DASS	Pearson Correlation	.883**	.932**	1		
	Sig. (2-tailed)	.000	.000			
	N	120	120	120		
	Bootstrap <sup>b</sup>	Bias	.000	-.001	0	
		Std. Error	.027	.015	0	
		95% Confidence Interval	Lower	.823	.897	1
			Upper	.932	.957	1

\*\* . Correlation is significant at the 0.01 level (2-tailed).

b. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

## Appendix 8 – SPSS Extracts

	Name	Type	Width	Decimals	Label	Values	Missing	Columns
1	ID	Numeric	8	0	Participant Identification	None	None	8
2	Timestamp	Date	10	0	time data was submitted	None	None	11
3	Iconsenttop...	String	3	0	Participants consent	None	None	12
4	Sex	Numeric	6	0	Participant sex	{0, Female}...	None	12
5	Age	Numeric	2	0	Participant age	None	None	12
6	JobCategory	Numeric	38	0	What is your job category	{1, Educatio...}	None	15
7	Edu_jobCat	Numeric	8	0	Education	None	None	8
8	OffWork_job...	Numeric	8	0	Office Worker	None	None	8
9	HCwork_job...	Numeric	8	0	Healthcare Worker	None	None	8
10	ManConstr_...	Numeric	8	0	Manufacturing/ Construction	None	None	8
11	RetailHosp_...	Numeric	8	0	Retail/ Hospitality	None	None	8
12	Fin_jobCat	Numeric	8	0	Finance	None	None	8
13	Commute	Numeric	17	0	How did you commute to work	{0, Public}...	None	17
14	Work_home	Numeric	3	0	Do you work from home	{1, Yes}...	None	7
15	Work_before	Numeric	3	0	Did you work from home before lockdown	{1, Yes}...	None	6
16	Danger_1	Numeric	1	0	I am worried that I can't keep my family safe from the virus	{1, Danger1}...	None	12
17	Danger_2	Numeric	1	0	I am worried that our healthcare system won't be able to protect my loved ones	{1, Danger1}...	None	12
18	Danger_3	Numeric	1	0	I am worried that our healthcare system is unable to keep me safe from the virus	{1, Danger1}...	None	12
19	Danger_4	Numeric	1	0	I am worried that basic hygiene (e.g., handwashing) is not enough to keep me safe from the virus	{1, Danger1}...	None	12
20	Danger_5	Numeric	1	0	I am worried about catching the virus	{1, Danger1}...	None	12
21	Danger_6	Numeric	1	0	I am worried that social distancing is not enough to keep me safe from the virus	{1, Danger1}...	None	12
22	Contaminati...	Numeric	1	0	I am worried that if I touched something in a public space (e.g., handrail, door handle), I would catch the virus	{1, Contam1}...	None	12

Figure 1. Histogram of Regression Standardized Residuals of Total Anxiety

Figure 2. P-P Plot of Regression Standardized Residuals Dependent Variable: Total Anxiety

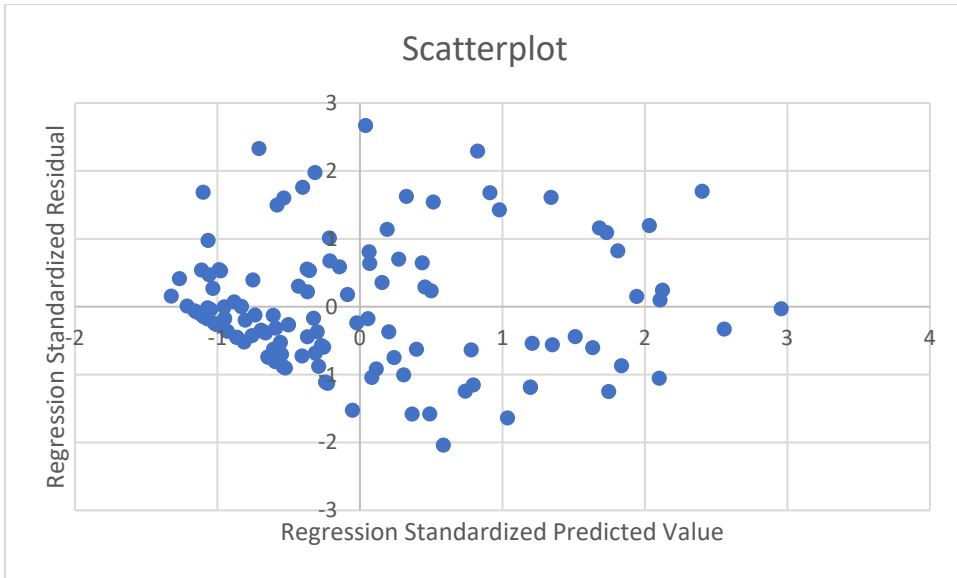


Figure 3. Scatterplot of Regression Standardized Values and Residuals

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