

*Research Paper*

## The Role of Introversion in Psychological Consequences Concerning Demographic Variables in Teleworking

Oreyzi, Hamidreza<sup>1</sup>; Barati, Hajar\*<sup>2</sup>

1. Professor in Psychology, Department of Psychology, Faculty of Education and Psychology, University of Isfahan, Isfahan, Iran, dr.oreyzi@edu.ui.ac.ir.

2. Corresponding Author: Assistant Professor in Psychology, Department of Psychology, Faculty of Education and Psychology, University of Isfahan, Isfahan, Iran, h.barati@edu.ui.ac.ir, dr.habarati@gmail.com.

### Abstract

This study aimed to investigate the role of introversion in psychological consequences according to demographic variables in teleworking during the corona period. The research method was correlational and the research sample was selected from 197 telework employees of a company by convenience sampling. Then they responded to research tools including the Beck Depression Inventory, Cognitive Failure Questionnaire (CFQ), Metacognition Questionnaire, Loneliness Scale, and Fear of evaluation Questionnaire. Correlation and regression analyzes were used to analyze the data. The results showed that demographic variables of age and life situation predict psychological consequences. After including introversion in the model, living with others was associated with more severe loneliness, cognitive failures, and fear of evaluation as a result of changes in the conditions by the Coronavirus. The coefficient  $\beta$  is negative about loneliness. Organizations are advised to pay attention to their personality when choosing employees to work remotely to reduce negative psychological consequences.

**Keywords:** Corona, introversion, psychological consequences, telework.

### Introduction

Following the corona pandemic, many organizations have been forced to use teleworking to maintain social distance to save the lives of their employees. Despite the benefits, teleworking has also some harm for the employees. Tele-working, due to its special characteristics such as creating social distance, can increase the risk of depression and lead to loneliness (Wei, 2020). Deprivation of social interaction decreases oxytocin levels and increases cortisol in the body, which increases the risk of various types of anxiety disorders, including fear of evaluation (Fullana et al., 2020) and causes cognitive failure (Wei, 2020).

It seems that the psychological effects of such changes in work and social life are experienced more strongly in some people than in others. It might be assumed that getting stuck at home without social interaction is not the worst thing for introverts, due to their tendency to reduce social relations (Tuovinen et al., 2020). However, this claim lacks empirical research and its theoretical background also seems contradictory. Introversion is associated with personality traits related to a tendency to experience more intense emotions and more difficulty in managing these emotions and psychosis (Fada et al., 2016). Although increasing solitude should be welcomed by introverts, these findings raise the question that what is the relationship between introversion and depression, fear of evaluation, a negative belief about uncontrollability, and the feeling of loneliness in teleworking during the Corona?

## Method

This research applies correlation as its method and the statistical population (n= 408) includes all employees of an organization in the city of Isfahan In 1399, who worked remotely. A sample of 197 available people was selected from among the members of the community.

**Eysenck Personality Questionnaire-Revised (EPQ-R) Short Scale:** Developed by Eysenck, et al. (1993). To measure introversion, 12 items related to this variable were used. A lower score indicates more introversion. The internal consistency of the total score for the present study was 0.79.

**The Beck Depression Inventory:** Developed by Beck, et al. (1996). This questionnaire consists of 21 groups of items. Each group has four options and is scored between 0 and 3. A higher score means more depression. The internal consistency of the total score for the present study was 0.81.

**The Cognitive Failure Questionnaire.** Developed by Bradbent, et al. (1982). This questionnaire has 25 items. Participants are asked to indicate the frequency of small slips, errors, or errors in perception, attention, memory, and motor activity on a five-scale scale (0 = never to 4 = always). A lower score indicates less failure. The internal consistency of the total score for the present study was 0.78.

**The Metacognition Questionnaire.** Developed by Cartwright-Hatton and Wells (1997). To measure uncontrollability and dangers, 15 items related to this variable were used. A lower score indicates less uncontrollability and dangers beliefs. The internal consistency of the total score for the present study was 0.71.

**The University of California Loneliness Scale (Third Edition).** Revised by Russell, et al. (1980). The scale consists of 20 items with 11 positive and 9 negative expressions. The minimum score indicates the absence of loneliness. The internal consistency of the total score for the present study was 0.86.

**The Fear of Evaluation Questionnaire.** Developed by Oreyzi and Ejehi (2018). This 10-item questionnaire is answered by respondents on a five-point Likert scale. A higher score means more fear of evaluation. The internal consistency of the total score for the present study was 0.78.

## Results

The results of hierarchical regression analysis are given in Table 1. Before regression analysis, its defaults including linearity, error tolerance, normality, and distribution homogeneity were checked and this analysis was performed considering that all of them were established. In the first step, the demographic variable of age and recent unemployment predict loneliness, and living condition predict cognitive failure and negative beliefs (Beta coefficient is positive). The demographic variable of gender is not able to predict any of the psychological variables. In the second step, the demographic variables of age and gender are not able to predict any of the psychological variables.

living condition predict loneliness, cognitive failure, fear of evaluation and depression. recent unemployment predicts loneliness, and introversion predicts loneliness, fear of evaluation, negative beliefs, and depression. After including introversion in the model, living with others (versus living alone), was more strongly associated with loneliness ( $\beta = -0.17$ ), cognitive failure

( $\beta = 0.22$ ) and fear of evaluation ( $\beta = 0.20$ ), as a consequence of changes accompanied with corona pandemic. Interestingly, the  $\beta$  coefficient is negative for the feeling of loneliness.

**Table 1 - Hierarchical regression analysis result**

Criterion variable	Depression		negative beliefs		Fear of evaluation		Cognitive Failure		loneliness		
	t	$\beta$	t	$\beta$	t	$\beta$	t	$\beta$	t	$\beta$	
Setep1 Predictive variable	age	-1.41	-0.13	-0.85	-0.02	0.24	0.14	0.19	0.01	2.69*	<b>0.19</b>
	gender	-0.65	-0.04	-0.35	-0.03	0.77	0.06	-0.25	0.02	-0.36	<b>-0.03</b>
	living condition	1.49	0.15	0.56	0.04	0.80	0.07	3.06*	0.20	-1.9	<b>-0.15</b>
	Recent unemployment	0.92	0.08	1.07	0.08	0.12	0.01	0.24	0.02	3.11*	<b>0.22</b>
<b><math>\Delta</math>change=8.54, <math>\Delta R^2=0.26</math>, <math>R^2=0.36^{**}</math>, <math>F=9.28^{**}</math></b>											
Setep2 Predictive variable	age	-1.43	-0.12	-0.92	-0.07	0.24	0.02	0.23	0.01	1.12*	<b>0.10</b>
	gender	-0.62	-0.04	-0.37	-0.03	0.78	0.06	-0.25	0.02	0.76	<b>0.06</b>
	living condition	0.70	0.05	1.73	0.14	2.91**	0.20	3.47**	0.22	2.29**	<b>-0.17</b>
	recent unemployment	0.96	0.08	1.11	0.08	0.07	0.01	0.22	0.01	0.65	<b>0.04</b>
	Introversion	2.36*	0.19	2.65*	0.20	2.84*	0.20	0.66	0.04	2.29*	<b>0.17</b>
<b><math>\Delta</math>change=6.72, <math>\Delta R^2=0.36</math>, <math>R^2=0.46^{**}</math>, <math>F=7.54^{**}</math></b>											

### Discussion and conclusion

In general, the findings show that more introversion is associated with more problems in cases such as social distance or teleworking, and in these situations, introverts also tend to social interaction. Accordingly, organizations are advised to pay attention to their employees' personalities when selecting a workforce to be assigned to teleworking at all times, especially during the corona pandemic. An introverted personality may not be appropriate for the situation, and it may be important to consider the demographic variable of life situation in these situations. For employees who live alone and have introverted personalities, teleworking may not be appropriate.

This research was limited to a specific sample of participants and therefore the generalization of its results to other populations and samples should be done with caution. Other researchers are advised to repeat this research on other samples.

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