Associations between the FFM of personality and hygienic behaviors during COVID-19 and time organization during lockdown

Maryyam Iqbal

Resumen

El presente estudio examino la relación entre el Modelo de Personalidad de los Cinco Factores y las conductas de protección sanitarias llevadas a cabo durante el COVID-19 (e.g., uso de gel hidroalcohólico o mantener distancia de seguridad), así como el tiempo dedicado de forma diaria a distintas actividades durante el confinamiento (e.g., higiene, deporte o sueño).

Para ello, 680 jóvenes adultos (74% mujeres, media de edad= 22.12 , DT = 4.49) rellenaron entre otras medidas, un cuestionario de personalidad, y dos cuestionarios sobre frecuencia de realización de diversas conductas higiénicas, así como el tiempo que dedicaban durante un día de confinamiento a cada una de las actividades propuestas, llevada a cabo tras los primeros 30 días de confinamiento.

Los resultados de los análisis de regresión mostraron que tanto la responsabilidad (C) como la apertura a la experiencia (O) se asociaban con una mayor frecuencia de taparse con el codo al estornudar (C, β=.11; O,β=.09; *p*<.05) y con mantener la distancia de seguridad (C, β=.14, *p*<.01; O,β=.10, *p*<.05). Además, la mayor responsabilidad se asoció a dedicar más horas al trabajo académico (β=.19, *p*<.001) y a hacer deporte (β=.15, *p*<.01), mientras que la menor responsabilidad se asoció con estar más horas sin hacer nada en especial (β=-.19, *p*<.001). La extraversión se asoció también con realizar deporte durante más tiempo (β=.10, *p*<.05), así como en dedicar más tiempo a las relaciones sociales a través de las redes sociales o dispositivos móviles (β=.13, *p*<.01).

Este estudio provee evidencias sobre el papel de la personalidad a la hora de adherirse a las medidas de protección sanitaria sugeridas por el gobierno, así como a la realización de actividades más o menos saludables durante el confinamiento.

Palabras claves: modelo de cinco factores, conductas de protección, COVID-19, actividades, pandemia

Abstract

The present study examines the relation between the Five Factors Personality Model and the health protection behaviors carried out during COVID-19 (e.g., using sanitizers or practicing social distancing), and the time spent daily to perform different activities during lockdown (e.g., hygiene, sport or sleep).

For this purpose, 680 young adults (74% women, mean age of 22.12, SD=4.49) filled out, among other measures, a personality questionnaire, and two questionnaires on the frequency of performing various hygiene behaviors and the time they spent on 1 day of confinement to perform each proposed activity carried out after the first 30 days of confinement.

The results of the regression analyses show that both Conscientiousness (C) and openness to experience (O) are associated with a higher frequency of elbow covering when sneezing (C, β = .11; O, β =. 09; p <.05) and practicing social distancing (C, β = .14, p <.01; O, β = .10, p <.05). More responsibility is associated with spending more hours on academic work (β = .19, p <.001) and doing sport (β = .15, p <.01), while less responsibility is associated with spending more hours doing nothing in particular (β = -. 19, p <.001). Extraversion is also associated with practicing sport longer (β = .10, p <.05) and spending more time on social relationships on social networks or with mobile devices (β = .13, p < .01).

This study evidence the role of personality in adhering to the sanitary protection measures suggested by the government, and in more or less carrying out healthy activities during confinement.

Keywords: Five-factor model, protective behaviors, COVID-19, activities, pandemic

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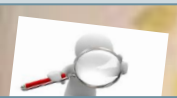
Maryyam Iqbal
Laura Mezquita

INTRODUCTION

Previous studies have shown that individual differences relate to different hygienic behaviors performed during COVID-19 and the restrictions suggested by the government. Specifically, studies about the associations of the Five Factor Model of Personality (a.k.a. Big Five) with these behaviors have shown that Openness to Experience (O), Conscientiousness (C), Agreeableness (A) and Emotional Stability (ES, also named low Neuroticism) are positively related to comply with norms of staying at home during lockdown, while higher Extraversion (E) is negatively related to staying at home during lockdown (Götz et al., 2020). Higher scores for C, O, A, E, and ES have been related to adhering to set rules and guidelines, and to taking a control and self-efficacy attitude (Bogg & Milad, 2020). Specifically, higher scores for A, C and ES relate to washing hands more frequently and avoiding crowds, using public transport less, restricting family gatherings and storing food or using leftovers (Bogg & Milad, 2020; Maak et al., 2021).

When exploring age and gender associations in relation to these behaviors, it seems that older individuals perform more behaviors like keeping an eye on the news, washing hands frequently, using public transport less, avoiding crowds, restrict meetings, buying more supplies, more insecurity in public places and expecting financial losses than youths (Asselmann et al., 2020). There is a difference between men and women's score for protective behaviors, it seems that women`s perform more preventive behavior, social distancing measures, reduced mobility and panic buying tan men (Perrotta et al., 2021).

As similar studies performed with the Spanish population are lacking, the present study aims to explore the association of personality traits, age and gender with frequency of performing hygienic behaviors and with organizing time during lockdown (i.e., time spent playing sports, doing homework, etc.).



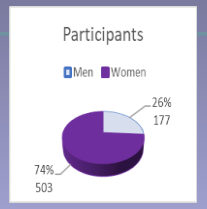
Objective: To study the relation between aspects of personality and behaviors performed during the pandemic

- H1 ↑O & ↑ ES ⇒ ↑ COVID-19 rules. (Abdelrahman, 2020; Blagov, 2020).
- H2 ↑A ⇒ ↑ Physical sport (Stephan et al., 2020)
- H4 ↑C ⇒ ↑ Academic tasks (Yu, 2021)
- H5 ↑ E ⇒ ↑Social life by phone (Pfund et al., 2021).
- H6 ↑Women ⇏ ↓men washing hands (Perrotta et al., 2021).

METHOD

Procedure

- Correlational cross-sectional
- Data collection from all adults aged over 18 years from the university community
- Design of survey in Qualtrics



Instruments

- Ad- hoc questionnaire Safety behaviors
- Ad hoc questionnaire about Activities during lockdown
- (Ortet, 2017).

Total: 680
Age: 22,12
SD: 4.49

Statistical analyses

SPSS version 27 was employed to perform the regression analysis. Age, gender and the five personality traits were introduced as independent variables, while each hygienic behavior and hours spent on different behaviors during lockdown were introduced as dependent variables.

RESULTS

0 Men 1 Women

<0.05* <0.01** <0.001***

	 β	 β	 β	 β	Hygiene β	Housework β	Alimentation β	Academic task β	Telework β	Care of people in my ------ β	Talks with people I live with β	Do not do anything ------ β	By Physical sport β	Social life (by phone, skype) β	Use of internet not ------ β	Other activities β
Age	-.04	-.01	-.00	-.01	-.09	.17	-.12	-.08	.21	.17	-.00	-.10	-.06	-.09	.08	-.02
Sex	.13	.14	.05	.06	.13	.03	.15	.00	.01	-.02	.13	-.00	-.04	-.08	-.11	-.17
O	.02	.03	.09	.10	.07	-.05	-.03	-.01	-.02	.04	.05	.09	-.04	-.06	.05	.07
E	.03	.06	-.00	-.04	.01	.05	-.00	-.02	.02	-.04	.05	-.06	.10	.13	-.05	-.08
A	.06	.06	.03	-.06	.03	-.02	.02	-.02	-.06	-.05	.06	-.04	-.00	.05	-.12	-.01
C	.05	-.01	.11	.14	.06	.06	-.09	.19	.03	.00	-.03	-.19	.15	-.07	-.03	-.10
ES	.05	.01	.03	.05	.04	-.05	.08	-.13	-.00	-.04	-.01	.09	.08	-.03	-.00	.02
R^2	.04	.03	.04	.04	.04	.03	.04	.05	.04	.04	.03	.05	.05	.03	.05	.05

DISCUSSION

Previous studies have found that higher ES and O relate to obeying protection measures (Abdelrahman, 2020; Blagov, 2020). In the same vein, our study shows that O is related to the higher frequency of covering faces and noses when sneezing or coughing with a tissue or elbow and keeping a safe physical distance of at least 2 m, in a sample of Spanish youths. However, the present study also finds that C (rather than ES) is related to covering faces and keeping a distance. Discrepancies between studies might be due to sample characteristics (e.g., age, norms implemented by the government, etc.).

Similarly, to previous studies, E is related to spending more hours on social life (Pfund et al., 2021) but, in this case, with mobile phones, and C is related to spending much more time doing academic tasks (Yu, 2021). Additionally, both traits, rather than A (Stephan et al., 2020), show a protective factor for the time spent practicing sports. Other minor although significant associations that are not hypostatized are found (i.e., Internet use with A, not doing anything special with C, food with age and gender). Thus, future research should conduct replication studies to explore if these associations are robust or spurious.

Previous studies have found that older individuals perform more hygienic behavior (Asselmann et al., 2020). Our study shows that age is not related to hygienic behavior, but significant associations appear with the time spent on different activities. Specifically, being older is related to spending more time on homework, teleworking and taking care of others, while being younger is related to spending more time on academic tasks, not doing anything special, social life and food. Finally, a protective gender role appears for hygienic behavior. A different gender role is seen for distributing time throughout the day during lockdown. These results suggest a different role for both age and gender in relation to previously studied different behaviors

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