

Research Paper

Psychometric Properties of the Persian Version of the COVID-19 Phobia Scale



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ABSTRACT

Background and Objectives It is predicted that the negative effects of the novel coronavirus disease 2019 (COVID-19) pandemic will continue. These negative effects are not limited to psychological problems. Serious physiological and economic problems have also been observed. It is important to develop and standardize appropriate tools to assess its different effects. This study aims to investigate the psychometric properties of the Persian version of the COVID-19 Phobia Scale (C19P-S) in Iranian samples.

Methods In this study, participants were people aged 18-60 years in Iran from March to May 2022, who were selected by a convenience sampling method. In order to evaluate the convergent and discriminant validity, the second version of the acceptance and action questionnaire, the brief version of the difficulty in emotion regulation scale, and the fear of COVID-19 scale were used. The factor structure of the questionnaire was examined by confirmatory factor analysis. Reliability was examined using Cronbach's alpha coefficient and the test-retest method. The data were analyzed in SPSS version 25 and LISREL version 8.8.

Results The results of confirmatory factor analysis confirmed the four-factor structure the Persian C19P-S. Cronbach's alpha coefficient for the whole scale was 0.90; for the subscales of psychological, psychological, economic and social factors, it was 0.87, 0.88, 0.89, and 0.91, respectively. In addition, the test-retest reliability with a four-week interval for the whole scale was 0.86; for the subscales of psychological, psychological, economic and social factors, it was 0.83, 0.79, 0.82, and 0.88, respectively. The correlation coefficients indicated the favorable convergent and discriminant validity of the Persian C19P-S ($P < 0.001$).

Conclusion The Persian C19P-S is a reliable and valid scale for measuring coronaphobia in Iranian samples.

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Extended Abstract

Introduction

Coronavirus disease 2019 (COVID-19) was first identified in December 2019 in Wuhan, China. The symptoms of this disease include fever, cough, and mild to severe breathing problems [1]. The COVID-19 pandemic increased the risk of psychological disorders including schizophrenia, anxiety, depression, and acute stress disorder among healthcare providers and people [2-4]. Phobia is an anxiety disorder defined by a persistent and excessive fear of an object or a situation. It has three types: Social phobia, agoraphobia, and specific phobia. Five specific phobias listed in the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, include: Natural-environment, animal, blood-injection-injury (fear of injections, fear of blood, fear of injury, fear of medical procedure), situational, and others. The coronaphobia can be defined as a persistent and excessive fear of COVID-19, which can be considered as a new type of specific phobia [5]. Serious negative physiological, social, and economical effects of the COVID-19 pandemic have been observed in many countries. These negative effects can cause conditions such as stress, depression, psychosomatic, and psychosocial disorders. It is important to detect the early signs of coronaphobia to provide timely psychological support for affected individuals [6-8]. The American Psychiatric Association recommends the development of assessment tools adapted to DSM-V criteria for specific phobia disorders. However, since it is a relatively novel problem, no validated tool was found to assess the level of coronaphobia in Iranian samples. In other countries, several questionnaires have recently been developed for this purpose. One of these tools is the COVID-19 phobia scale (C19P-S), which was created by Arpacia et al. [9], but its Persian version has not been standardized yet. Therefore, this study aims to investigate the psychometric properties of the Persian version of C19P-S in Iranian population.

Methods

This is a descriptive correlational study. Participants were 291 people aged 18-60 years in Iran from March to May 2022, who were selected by a convenience sampling method. Inclusion criteria were consent to participate in the study, and no substance abuse. The exclusion criterion was the return of in-complete questionnaire. The following tools were used to collect data online:

C19P-S: This scale was developed by Arpacia et al. [9]. With 20 items to evaluate coronaphobia. The items are rated on a five-point Likert scale from 1= Strongly disagree to 5= Strongly agree. This scale has four subscales: Psychological, psychosomatic, economic, and social factors.

Fear of COVID-19 Scale (FCV-19S): This scale was created by Ahorsu et al. [10] to measure the fear of COVID-19.

Brief version of the difficulties in emotion regulation (DERS): The tool was developed by Bjureberg et al. [11] and has 16 items adapted from the 36-item DERS [12].

Acceptance and action questionnaire-second edition (AAQ-II): This questionnaire was developed by Bond et al. [13] adapted from the 10-item version of AAQ developed by Hayes. This questionnaire measures experiential avoidance/psychological flexibility. Higher scores indicate greater experiential avoidance/psychological flexibility.

Results

The mean scores of the C19P-S subscales of psychological factors, psychosomatic factors, economic factors and social factors were 22.87 ± 2.03 , 20.88 ± 1.99 , 22.72 ± 2.56 and 23.56 ± 2.40 , respectively. All extracted factor loads were greater than 0.3 and the distribution of items in the subscales was consistent with the main version.

Discussion

The purpose of this study was to assess the psychometric properties of the Persian version of C19P-S. The results of confirmatory factor analysis showed that 20 items had high factor loads with four components of psychological factors, psychosomatic factors, economic factors, and social factors. This is consistent with four-factor structure of the main version [9]. The internal consistency of the Persian C19P-S using Cronbach's alpha coefficient was also acceptable.

The Persian C19P-S with 20 items and four subscales, has acceptable validity and reliability. It can be used to measure coronaphobia in Iranian samples.

Ethical Considerations

Compliance with ethical guidelines

This article was taken from the approved research project of [University of Mohaghegh Ardabili](#) (Ethics Code: IR.UMA.REC.1401.006).

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Authors contributions

Conceptualization: Nader Hajloo; Methodology and Writing–Original Draft: Saeed Pourabdol; Investigation: Mahdi Beyki and Amir Mohsen Rahnejat; Writing–Review & Editing: Nader Hajloo and Saeed Pourabdol.

Conflicts of interest

The authors declared no conflict of interest.

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