

A rapid review of the development and validation of instruments specifically designed to assess or measure 'COVID-19 fear'

Alison Dawson, Catherine Pemble, Tamara Brown, David Comerford, Olivia Olivarius, Elaine Douglas, Lesley McGregor, David Bell, Louise McCabe

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Review question

- 1) What instruments or scales have been developed and validated for the assessment or measurement of 'COVID-19 fear'?
- 2) What differences exist between the underlying conceptual bases for different instruments to assess or measure COVID-19 fear?
- 3) What differences exist between instruments to assess or measure COVID-19 fear in terms of when, where, how and with which sample populations the instrument was validated?
- 4) What differences exist between instruments to assess or measure COVID-19 fear in terms of key characteristics of the instrument, including number of items, sub-scales, etc.?
- 5) What differences exist between the respondent characteristics that have been found to be correlated with different instruments to assess or measure COVID-19 fear?
- 6) What respondent behaviours and external data have instruments to assess or measure COVID-19 fear been found to be able to predict?
- 3) Given that multiple instruments are now available for this purpose, what factors should be taken into account in deciding which is the most suitable to be used to assess or measure COVID-19 fear in future studies?

Searches

Sources to be searched:

i) Databases available via EBSCOhost

(AHFS Consumer Medication Information; OpenDissertations; Atla Religion Database; British Education Index; Business Source Complete; Child Development & Adolescent Studies; CINAHL Complete; Communication Source; Criminal Justice Abstracts with Full Text; eBook Collection (EBSCOhost); eBook Nursing Collection; EconLit; Education Abstracts (H.W. Wilson); Education Research Complete; Educational Administration Abstracts; ERIC; European Views of the Americas: 1493 to 1750; GreenFILE; Health Source: Nursing/Academic Edition; Historical Abstracts; Library, Information Science & Technology Abstracts; MathSciNet via EBSCOhost; MEDLINE; MLA Directory of Periodicals; MLA International Bibliography; Newswires; Political Science Complete; APA PsycArticles; APA PsycINFO; Public Affairs Index; Regional Business News; SocINDEX with Full Text; SPORTDiscus; Teacher Reference Center; Ebony Magazine Archive)

ii) ScienceDirect

iii) Databases available via Web of Science

(Web of Science Core Collection; BIOSIS Citation Index; Current Contents Connect; Data Citation Index; Derwent Innovations Index; KCI-Korean Journal Database; MEDLINE; Russian Science Citation Index; SciELO Citation Index; Zoological Record)

Restrictions:

English language publications

Published after 1 January 1991

Search by: Subject (for EBSCOhost) ("SU" - Searches for subject terms/codes in Descriptor, Descriptor Classification Code and Keywords fields); Title, abstract or author-specified keywords (for ScienceDirect); or Topic (for Web of Science) ("TS" - Searches Topic fields, including Titles, Abstracts, Keywords and Indexing fields such as Systematics, Taxonomic Terms and Descriptors)

Types of study to be included

Included:

Research which meets other inclusion criteria with any type of research design other than literature review

Excluded:

Reviews of published articles reporting primary research and meta-analyses

Condition or domain being studied

The proposed review concerns 'COVID-19 fear' and in particular identifying and illuminating differences in the development and validation of instruments designed to assess whether a person is experiencing COVID-19 fear and/or measure COVID-19 fear, for example by reference to clinical criteria or in terms of its impact on that person's behaviours.

Fear 'is a normal reaction to an evolving threat, preparing the individual, both physically and mentally, for an acute response to possible harm' (Pappas et al 2009:744). There is no agreed definition of COVID-19 fear which, according to the conceptual framework adopted, may include psychological responses to perceived threats associated with the disease COVID-19, with the SARS-CoV-2 virus which

causes COVID-19, and/or with measures taken to prevent or control transmission of the virus and spread of the disease and/or the perceived social, economic or health-related sequelae of such measures.

Participants/population

Included:

Studies where proposed COVID-19 fear measures are developed and/or validated with human adult sample populations, including studies limited to adult sub-populations, e.g. recent mothers, older adults.

Excluded:

Studies where proposed COVID-19 fear measures are developed and/or validated with animal populations of any kind; studies which look at COVID-19 fear at a sub-person level, e.g. cellular levels; studies where proposed COVID-19 fear measures are developed and/or validated with child sample populations or with young people, or where the sample population includes people under the age of 16.

Intervention(s), exposure(s)

Included :

Studies describing the development or validation of instruments intended for use with adults and designed to:

i) Assess the presence of a psychological state characterised by instrument authors as 'fear', 'worry', 'concern', 'anxiety' or other broadly synonymous descriptors

ii) Assess the experience of or measure that psychological state, e.g. by reference to clinical criteria or behavioural or other impacts Where that state has been precipitated by awareness of or perceptions related to:

i) the recent coronavirus pandemic

ii) 'severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)' virus

iii) COVID-19 disease, and/or

iv) the impact of public health measures to prevent or control transmission of the virus

Assess or measure such states:

i) in general or in unspecific situations, or

iii) in relation to specified contexts, e.g. health service use, employment, or specific activities, e.g. dental hygienist visits, meals in restaurants

Excluded:

Studies describing the development or validation of instruments

- Intended for use with populations including persons under 16 years

- Not assessing or measuring psychological states which could be characterised as above

- Combining assessment or measurement of fear with assessment or quantification of other personal characteristics, e.g. personality traits, health conditions

- Assessing or measuring psychological states prompted by any other events, infectious agents or diseases.

Comparator(s)/control

Not applicable

Context

Excluded types of publications:

Study protocols without reports of associated research; articles which do not report research; conference abstracts; theses; books or book chapters.

Main outcome(s)

Existing measures or scales from which items for final/validated COVID-19 fear instrument were drawn; Number of items included in final/validated COVID-19 fear instrument; number and descriptions of COVID-19 fear instrument sub-scales (if any); respondent characteristics to which COVID-19 fear as assessed by the instrument is correlated; respondent behaviours or other external data predicted by final/validated COVID fear instrument.

Additional outcome(s)

None

Data extraction (selection and coding)

Items will be selected for inclusion using a three-step process. Two reviewers provided in advance with the review inclusion and exclusion criteria will independently filter by title and then title and abstract to identify potentially relevant items. Full texts will be obtained for all items deemed potentially relevant by title and abstract. Each full text will be examined for relevance and conformance with review inclusion criteria and a final decision made with regard to inclusion.

A review-specific proforma built in Microsoft Forms will be used to extract a dataset for each publication included in the review that will include, where relevant:

Bibliographic details of included item;

Author's/authors' conclusions, recommendations, and any emerging issues;

Relevant PICO data (study population of interest and sample population, intervention/indicator, control/comparator, and outcome(s) of interest);

Country and/or geographic area in which COVID-19 fear instrument was validated;

Language in which COVID-19 fear instrument was validated;
Date of collection of COVID-19 fear instrument validation data.
Details of existing measures or scales from which items for final/validated COVID-19 fear instrument were drawn; Number of items included in final/validated COVID-19 fear instrument and statement of each item;
Number and descriptions of COVID-19 fear instrument sub-scales (if any);
Respondent characteristics to which COVID-19 fear as assessed by the instrument is correlated
Respondent behaviours or other external data predicted by final/validated COVID fear instrument.
Quality assessment of the included item based on the research design used in the research described in the publication.

Risk of bias (quality) assessment

Study characteristics considered in relation to risk of bias will vary depending on the design of the study described in the included publication. Quality assessment of the included item will be based on the research design used in the research described in the publication by reference to conformance with externally developed checklists for quality appraisal and quality assessment tools drawn from sources (Johanna Briggs Institute; National Institutes for Health (NIH); Hong et al's (2018) Mixed Methods Appraisal Tool (MMAT); Lewin et al's (2019) draft Ways of Evaluating Important and Relevant Data (WEIRD) Tool).

Strategy for data synthesis

We intend to compare and contrast the instruments for the assessment or measurement of COVID-19 fear described in the publications included in the review across a range of different dimensions in order to illuminate any differences, e.g. in their underlying concepts; whether they are designed to simply indicate presence/absence of COVID-19 fear or to quantify COVID-19 fear in some way. In particular, we intend to highlight and explain the potential significance of aspects of the development and validation processes for different COVID-19 fear instruments, e.g. the populations, locations, and periods during which validation data have been collected. The aim of our strategy for data synthesis is to help other researchers to decide which might be the most suited to their needs in future studies of the effects of the pandemic generally and COVID-19 fear in particular.

Analysis of subgroups or subsets

Not applicable.

Contact details for further information

Alison Dawson
a.s.f.dawson@stir.ac.uk

Organisational affiliation of the review

University of Stirling
<https://www.stir.ac.uk/>

Review team members and their organisational affiliations

Dr Alison Dawson. University of Stirling
Dr Catherine Pemble. University of Stirling
Dr Tamara Brown. University of Stirling
Dr David Comerford. University of Stirling
Olivia Olivarius. University of Stirling
Dr Elaine Douglas. University of Stirling
Dr Lesley McGregor. University of Stirling
Professor David Bell. University of Stirling
Dr Louise McCabe. University of Stirling

Type and method of review

Methodology, Narrative synthesis, Systematic review

Anticipated or actual start date

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Anticipated completion date

31 May 2021

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Grant number(s)

State the funder, grant or award number and the date of award

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Conflicts of interest

Language

English

Country

Scotland

Stage of review

Review Ongoing

Subject index terms status

Subject indexing assigned by CRD

Subject index terms

COVID-19; Fear; Humans; SARS-CoV-2; Surveys and Questionnaires

Date of registration in PROSPERO

22 April 2021

Date of first submission

21 April 2021

Stage of review at time of this submission

Stage	Started	Completed
Preliminary searches	Yes	Yes
Piloting of the study selection process	Yes	No
Formal screening of search results against eligibility criteria	Yes	No
Data extraction	No	No
Risk of bias (quality) assessment	No	No
Data analysis	No	No

The record owner confirms that the information they have supplied for this submission is accurate and complete and they understand that deliberate provision of inaccurate information or omission of data may be construed as scientific misconduct.

The record owner confirms that they will update the status of the review when it is completed and will add publication details in due course.

Versions

22 April 2021

PROSPERO

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