

# HOW TO START A FINDINGS ARCHIVE ON A SUBJECT OTHER THAN HAPPINESS Using techniques developed for the World Database of Happiness

by Ruut Veenhoven, December 8, 2023

# **ABSTRACT**

A findings archive is a tool for supporting research synthesis. It involves standardized descriptions of research findings, both distributional findings and correlational findings. These descriptions serve as a preliminary step in research synthesis, for narrative reviews as well as for quantitative meta-analyses.

A findings-archive facilitates research synthesis in the following ways:

- 1) Continuous gathering research findings on a subject.
- 2) Comparable description of these findings on electronic 'finding pages' using a standard format and terminology.
- 3) Ordering of these findings by subject, research methods and populations.
- 4) Presentation of the findings in review papers using links to online findings pages on which readers find full detail.

The technique of a findings archive was developed for the synthesis of research on happiness. The method can also be used for other subjects. In this paper we describe how the software of the World Database of Happiness can be adjusted to other topics.

That software is Open Access. Ways to obtain to free copies of the software are described in this paper.

Keywords: Accumulation of knowledge, Research synthesis, Findings archive

# 1 THE TECHNIQUE

# 1.1 What is a 'Findings Archive'?

A finding archive is a support system for research synthesis. It consists of electronic 'finding pages' on which research findings are described in a standard format and terminology. An example of a findings page is given on Figure 1.

Finding pages can be sorted in several ways, such as on the people investigated (public, place and time) and the research methods used, such as the design of the study (longitudinal, experimental) and statistics used.

# A findings archive is

- NOT a 'bibliography', though it includes one. A findings archive does not list
  publications in the first place, but *findings* of empirical research, as reported in
  scientific publications.
- NOT a 'data archive'; it does not contain raw primary data but presents processed data such as means and correlations.
- NOT a collection of 'abstracts'; The archive contains descriptions of observations only, not conclusions based on these.

# 1.2 Functions of a Findings Archive

The technique of a findings archive supports research synthesis in the following ways.

### Gathering research findings

The technique supports the initial stages of research synthesis of *collecting* research findings on a particular topic. The system enables for *continuous* collection of research findings. When added to synthetic papers as an open source, it can be updated later by colleague scientists who build on your work on the subject. This will prevent that your research synthesis remains a one-time shot.

### Description of research findings

Research findings are described on electronic 'finding pages' in a *standard format* that provides information on 1) the people investigated, 2) the operationalization of the variables and 3) the observed association between these.

The descriptions use a *standard terminology* for denoting the variables involved as well as for technical terms. This is to avoid the terminological babel that typically hinders the accumulation of knowledge in the social sciences.

Observed means and correlations are transformed to comparable metrics as far as possible.

# Sorting of research findings

The finding pages are sorted in several ways, such as by subject, research methods used and populations investigated. The system allows for searches on several of these features together.

# Presentation of findings

The technique facilitates the *reporting* of research findings in review papers using links to the online electronic finding pages in the archive. This allows presentation of a lot of findings in an easy to overview tabular format. An example of such presentation is given on <u>Figure 2</u>.

The technique of a findings archive is particularly suited for keeping an overview in an expanding field of empirical research.

# 1.3 Building blocks of a findings archive

A finding archive consists of interlinked electronic *pages* which present information in a standardized format and terminology. There are pages on:

- 1. The publication in which an empirical study was reported
- 2. Design of that study
- 3. The measure(s) of the focal variable used in that study (such as happiness)
- 4. The observed scores on that measure in the study (distributional finding)
- 5. The observed association between focal variable and other variables (correlational finding)

The latter *finding pages* (4 and 5) contain links to the pages 1, 2 and 3.

These kinds of pages are gathered in *collections*, from which reports can be extracted, as depicted visually on <u>Figure 3</u>

### 1.4 Steps in harvesting research findings

The gathering of research findings on a particular subject involves the following steps.

# Collection of publications

A finding archive starts with a collection of publications in which research findings on a particular subject are reported. The system can handle any topic; objective variables, such as income or illness as well as subjective variables such as trust and political preference. Whatever the topic, meaningful gathering of research findings requires a sharp definition of the subject at hand. An illustrative delineation of the concept of happiness is found <a href="here">here</a>.

### Selection of studies

Publications are selected for 1) Report of findings that fit with the definition of the focal subject. Such fitting findings can be a side issue in the publication. 2) Use of

acceptable indicators of the focal subject and 3) Other inclusion criteria the investigator may choose, such as limitation to a particular population (e.g., elderly) or method (e.g., longitudinal).

# Description of findings

Research findings are described on electronic 'finding pages' using a standard format and terminology (cf. section 1.1). You can see <a href="here">here</a> how this is done in the World Database of Happiness.

# Sorting of findings

Two kinds of research findings are discerned 1) *distributional findings*, such as means and standard deviations and 2) *correlational findings*, such as differences in means and regression coefficients. In its application to happiness the distributional findings are about how happy people are and correlational findings about the things that go together with more or less happiness.

Distributional findings are further sorted into 1) *populations* where the findings have been observed, such as by public, place and, 2) the metrics with which the observed distributions are characterized, e.g., median and skew. Correlational findings are further classified by a) *subjects* and b) *research methods* used to quantify the association, such as sampling and statistical analysis.

This approach is depicted for the World Database of Happiness in <u>Figure 4</u>.

# 1.5 Layers in the software

The software consists of three apps. See Figure 5.

- 1. At the basis of the archive is a Microsoft-Access database, which can be assessed at any place in the world and to which several persons can add at the same time.
- 2. The contents of this database is uploaded to an Microsoft-Azure SQL database in the cloud from which
- 3. A website in Word Press is fed.

One could of course think of a two-step approach, in which the date is directly entered in an SQL database. Yet starting with a Microsoft-Access database has several advantages: a) Microsoft-Access involves many standard functionalities, is widely available and is likely to be kept up-to-date in the future by the Microsoft company. b) Microsoft-Access communicates well with Microsoft-Azure SQL database which is required for feeding the website and c) the Microsoft-Access can be used as a stand-alone source, as we will see in section 2.4.

### 1.6 Structure of the Access database on which data are entered

The make-up of this tool for the entry of research findings is depicted in the top of Figure 5 and mirrors the steps in harvesting research findings depicted in the flow-chart at the bottom part of Figure 5. Entry starts with a description of the **publications** in which studies on the focal subject are reported, next these **studies** are depicted globally and finally the observed **findings** are described in detail. Various **classifications** are used in these descriptions, such as a classification of people investigated and of statistics used.

# 1.7 Creators of this technique

The technique is a brainchild of Ruut Veenhoven, who developed it in a series of source books in the 1980s and early 1990s. These books were digitalized and included in a Microsoft-Access database by Henk DeHeer in the late 1990s, who subsequently made most of the findings available on an initial website that went live in 1998. After the death of Henk DeHeer in 2006, Fredrik Radema took over and further developed the Access database and the presentation of findings on a website. The website was renewed in the late 2010s with the help of the library of Erasmus University (Peter VanHuistede, Jos Westerbeke and Jasper OpdeCoul), the IT department of Erasmus University (Fery DeGroot, Philip Brands, Omar Gabriel-Teller, Rebecca Reehorst) and the Happiness Research Organization in Germany (Stephan Erdtmann). Ivonne Buijt refined the archive on several points.

# 2 WHY START A NEW FINDINGS ARCHIVE?

# 2.1 Why start a findings-archive in your field?

The number of research findings is growing exponentially in most fields of scientific inquiry and it becomes therefore increasingly difficult to oversee the available findings, even for specialists. As a result, many findings get lost. Accumulation of knowledge does not happen automatically on the academic forum but requires that all the available findings are brought together and be described in a comparable way. Though this requires considerable effort, it takes only a fraction of the time and money invested earlier for the production of the research findings that are 'harvested'.

# 2.2 Why use the software of the World Database of Happiness?

The World Database of Happiness started in 1984 as a sourcebook and was subsequently extended in a 5 volume book series in the 1990s. These books were digitalized and subsequently integrated in a Microsoft-Access database, which on its turn came to feed a website. To date (2023), the latest version is available at

https://worlddatabaseofhappiness.eur.nl

This development took some 45 years and a lot of work of several people. Though development of a new findings archive will now be much easier, you better not try to find out the wheel again. In my view, it is more efficient to build on the existing software of the World Database of Happiness and adjust that to your subject and situation.

# 3 HOW TO START A NEW FINDINGS ARCHIVE

# 3.1 Basic requirements

- 1. An account at an internet provider on which you can host the website, typically a scientific institute.
- 2. A subscription to Microsoft Azure: https://azure.microsoft.com/
- 3. A copy of the Microsoft Access database as used for entering data on happiness in an Azure SQL database. Using this Access database you can adjust and add tables to your topic.
- 4. A copy of the Microsoft Azure database with tables only; that is, data on happiness removed
- 5. A copy of the website in WordPress, which you may adjust to your topic.
- 6. A copy of the program to link the Azure database to the website in WordPress

7. Instructions for adding to the findings archive.

See <a href="https://worlddatabaseofhappiness.eur.nl/how-to-enter-findings-on-happiness/">https://worlddatabaseofhappiness.eur.nl/how-to-enter-findings-on-happiness/</a>

How to get the programs 3, 4, 5 and 6 is explained in section 4

# 3.2 What technical support do you need?

Though the software is not high-tech, you will need support of a professional who is acquainted with the following programs.

- Microsoft-Access: the standard database in Microsoft-Office
- Visual Basic for Applications (VBA) for Office, a simple but powerful programming language that you can use to extend Office applications
- Microsoft-Azure SQL database.
- WordPress: a much used and user-friendly website manager.

Without such expertise you will get lost.

# 3.3 How to adjust the database to your topic

Maintain the basic structure as given in the but remove features that are particular to the subject of happiness. Add features required for your topic.

### Remove happiness specific features

Looking into the Microsoft-Access version of the World Database of Happiness, you will see many *classifications* that are particular to the subject of happiness. For instance, the <u>collection of 'measures of happiness'</u> is quite detailed and involves close to a thousand variants. You may need less than a dozen measures of your core concept. In that case you can suffice with one table on which you describe these few measures and delete all the sub-classifications made for the subject of happiness.

### Keep/adjust features that fit your topic

Some of the features in the database may fit your topic equally well as the subject of happiness. For instance, the classification of nations may be useful for your purpose if you want to chart differences across cultures. Likewise, the classification of sampling methods may fit your topic as well as the classification of statistics. Since research method evolve over time, you may add new methods presented in the studies you review.

### Add features particular to your topic

Your topic may require special features; for example, if your aim is to take stock of the research findings on the effects of rehabilitation of criminals, you will need classifications of crimes, sentences and possibly family background. Going through the detailed classifications of the World Database of Happiness may alert you to relevant topics.

Classifications evolve over time anyway when you meet new topics in the findings you enter. The continuous extension and re-organization of the classifications is an essential part in the process of

research synthesis. The id-numbers in the classifications tell you what features have been added lastly.

# 3.4 How to name your version

I advise to use the term *findings archive* and the *subject* in the name; e.g., 'Finding archive on home-ownership'. Note the time span of findings gathered (e.g., 'since the 1960s) and the populations in which the findings were gathered (e.g., 'Families in developed nations')

Consider making a link to a description of the findings-archive technique on the start page, such as to <a href="http://journalijisr.com/sites/default/files/issues-pdf/IJISRR-728.pdf">http://journalijisr.com/sites/default/files/issues-pdf/IJISRR-728.pdf</a>

# 3.5 How to refer to the work on which you build

If you use the World Database of Happiness as a whole
Cite as: Veenhoven, R. World Database of Happiness: Version 1, Erasmus
University Rotterdam, Netherlands. https://worlddatabaaseofhappiness.eur.nl

If you continue on one of these sources

Mention a version number, e.g., Findings Archive on Home Ownership 'Version 2 by XX (your name and affiliation), building on Version X by YY (name and affiliation of your predecessor). This will allow continued accumulation of knowledge on the topic after your time.

To allow identification of your additions, add a page with the ID numbers of the collections with which you started; that is, the *highest Id* in the lists of

- publications in the Bibliography
- measures of the core subject
- distributional findings
- correlational findings
- statistics

# 4 WHERE TO GET COPIES OF THE FILES

As mentioned above in section 3.1, you need copies of the following files

- A copy of the Microsoft Access database as used for entering data on happiness in an Azure SQL database.
- A copy of the Microsoft Azure database with tables only; that is, data on happiness removed.
- A copy of the website in WordPress, which you may adjust to your topic.

Copies are available at the Library of Erasmus University Rotterdam at ????????

# 5 HOW TO CITE THE ORIGINALS

Cite the application of this technique on the subject of happiness as: Veenhoven, R. World Database of Happiness: Archive of research findings on the subjective enjoyment of life. Version 1. Erasmus Happiness Economics Research Organization, Erasmus University Rotterdam, Netherlands.

Available at: https://worlddatabaseofhappiness.eur.nl

Cite the technique of a findings archive as:

Veenhoven, R., Buijt, I. & Burger, M. (2022) <u>On-line 'findings archive': A new tool for research synthesis.</u> International Journal of Innovation Scientific Research and Review, 4 (5) 2774-2784

# **6 WHERE TO CALL FOR FURTHER INFORMATION**

Though there is much information to be found in the software and in verbal descriptions of the technique, you may need more information to start a new findings-archive. In that case, you can knock the following doors.

# 6.1 Organizations

The World Database of Happiness is currently (2024) a project of the Erasmus Happiness Economics Research Organization <u>EHERO</u>. Email: ehero@eur.nl

If EHERO does not exist anymore or lacks the expertise to help you out, you can contact the <u>Foundation for the study of Happiness</u>, the aim of which is to keep the World Database of Happiness and its underlying technique available. The website of the Foundation is <a href="https://stichtingstudiegeluk.site">https://stichtingstudiegeluk.site</a>. Email of the chair jorisveenhoven@hotmail.com

# 6.2 Developers of the Finding Archive

You can also contact the people involved in the development of this tool, as mentioned below.

Developers of the Microsoft-Access database

This basic database was initially designed by the late Henk DeHeer and was further developed by Fredrik Radema, who can be contacted at <a href="mailto:radema@ese.eur.nl">radema@ese.eur.nl</a> or privately at <a href="mailto:radema30@gmail.com">radema30@gmail.com</a>

Ivonne Buijt is also knowledgeable about this database and can be contacted at <a href="mailto:buijt@ese.eur.nl">buijt@ese.eur.nl</a> or privately at <a href="mailto:buijt@kpnplanet.nl">ibuijt@kpnplanet.nl</a>

Developers of the storage in a Microsoft Azure database
The above-mentioned Fredrik Radema together with Jos Westerbeke:
jos.westerbeke@eur.nl and Jasper OpdeCoul jasper.opdecoul@eur.nl

Developers of the website

The website in WordPress and link to that using Microsoft-Azure was developed with the help of <u>Erasmus IT Services</u>, section Web and App Development, the following staff members in particular:

- Philip Brands: <a href="mailto:philip.brands@eur.nl">philip.brands@eur.nl</a>
- Ferry de Groot: ferrrydegroot@eur.nl
- Omar Gabriel-Tellers: omar.tellers@eur.nl

### 6.3 Storage at Erasmus University library

Dr. Peter van Huisstede: peter.vanhuisstede@eur.nland Jos Westerbeke:

jos.westerbeke@eur.nl

# REFERENCES

Veenhoven, R. (2009)

World Database of Happiness: Tool for dealing with the 'data-deluge

Psychological Topics (special issue on Positive Psychology) 18: 221-246

Veenhoven, R. (2011)

World Database of Happiness: Example of a focused 'Findings Archive'

Working paper No. 169, German Data Forum RatSWD, February 2011

Veenhoven, R., Buijt, I. & Burger, M. (2022)

On-line 'findings archive': A new tool for research synthesis

International Journal of Innovation Scientific Research and Review, 4 (5) 2774-2784. Open Access

Also published as **EHERO working paper 2021-5** 

# **FIGURES**

# Figure 1

# Example of an electronic 'Finding page'

# Study Sacks et al. (2010): study ZZ World samples 2005

Public: 18+ aged general public, 131 nations 2005-2008

Survey name: INT-Gallup World Poll combined waves

Sample:

Respondents: N = 291383

Non Response:

Assessment: Multiple assesment methods

CATI in developed nations, mostly face-to-face in developing nations

Correlate

Authors's Label GDP/capita

Our Classification NATION: ECONOMY >> ••• >> Purchasing power (`real' GNP pc)

Remarks Data World Bank

Operationalization Real GDP/capita (log)

# Observed Relation with Happiness

Happiness Measure	Statistics	Elaboration / Remarks
C-BW-c-sq-I-11-a	<u>b</u> = +.36 p < .01	INDIVIDUAL happiness by GNP per capita in nation B without controls
C-BW-c-sq-l-11-a	<u>b</u> = +.38 p < .01	b controled for: - age - sexe
C-BW-c-sq-l-11-a	<u>b</u> = +.34 p < .01	AVERAGE happiness by GDP pc in nation

# Figure 2 Example of a presentation of research findings using links to online finding pages

24 Research findings in correlation between economic growth and change of average happiness in nations

+1	
+0.9	
+0.8	
+0.7	
+0.6	3
+0.5	18
+0.4	11
+0.3	1 4
+0,2	0134
+0,1	7
+0.0	<u>01 01 01 01 02 02</u> 03 05 06 08 <u>1 7</u> <b>8</b>
-0.1	
-0,2	
-0,3	
-0.4	
-0.5	
-0.6	
-0,7	
-0.8	
-0.9	
-1,0	

Each sign represents a correlational finding reported in the World Database of Happiness. Use Control+click to see the details.

All **blue** numbers link to findings that are significant at the 5%-level. Orange findings are not significant at the 5%-level.

Further examples of summary presentations are found <a href="here">here</a>.

Figure 3 **Building blocks of a finding archive** 

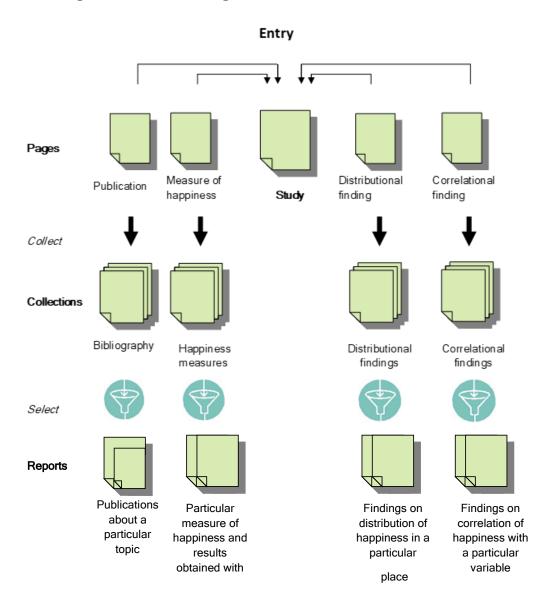
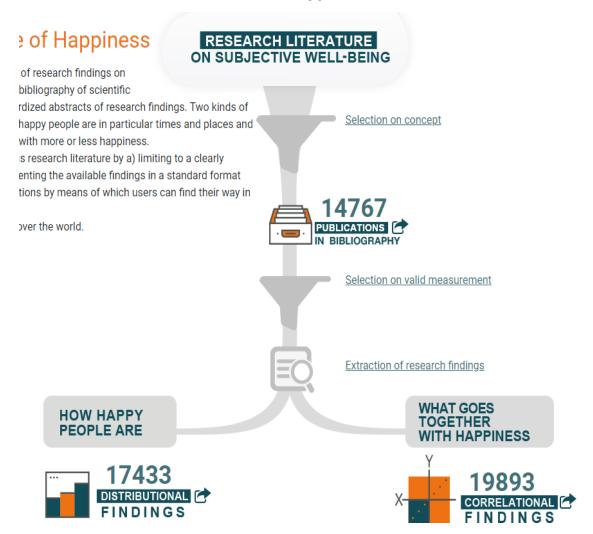


Figure 4
Structure of the World Database of Happiness

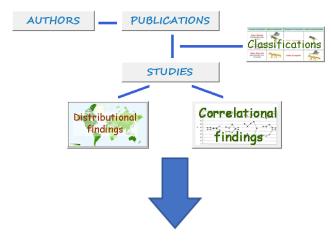


# Figure 5 Layering of the software

# Entering findings

# **Ms-Access database**





Preparation for website

# Ms-Azure SQL database





Presentation on internet

# Website build in WordPress





# **APPENDICES**

# Appendix A

# **Tables in World Database of Happiness**

In Azure SQL Database and its use in MS Access

By Fredrik Radema<sup>1</sup>, April 6, 2023

The purpose of this appendix is to describe the relationship between the front-end and the back-end of the World Database of Happiness. All data is stored in a database that is managed via the MS Azure SQL Database service. All management (entry, change, deletion) of the data is done in a MS Access app.

Think of the WDH-Access app as a database filled with forms. When the WDH-Access app is opened, the connection to the WDH-Azure app is established at that time. When the 'Main Form' appears, as shown in the screenshot below, there is also a connection with WDH-Azure. If a list of publications appears via the 'Publications' button, then that data has been retrieved from the WDH-Azure app at that time.

Tables can be described in the following way

- Definition of the table in SQL language
- Why does this table exist?
- Columns of the table

Below is such a description for the table 'Publictions' with which you will start
A similar description of all tables in the World Database of Happiness is available at XXXXXXX

# **Example table for PUBLICATIONS**

Definition of the table in SQL language

CREATE TABLE [dbo].[Publication] (

[Pub\_Id] INT IDENTITY (1, 1) NOT NULL,

[TITLE] NVARCHAR (255) NULL,

[Author\_Id] INT DEFAULT ((0)) NOT NULL, [OK\_pub] BIT DEFAULT ((0)) NULL,

[Authors] NVARCHAR (255) NULL, [Authors\_ref] NVARCHAR (100) NULL,

<sup>&</sup>lt;sup>1</sup> Developer and manager since 2008 of the software components specific to the World Database of Happiness (WDH), consisting of an app based on MS Access, an app for the storage of data managed as a service in MS Azure SQL Database and the website in use until early 2023.

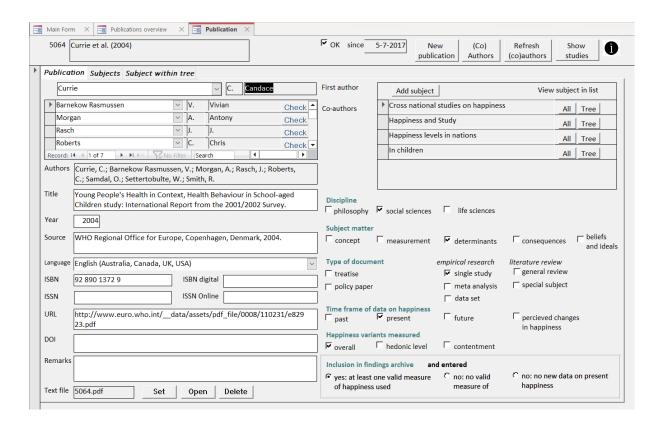
Email radema@ese.eur.nl radema30@gmail.com

```
[Seqnr_authors_ref] INT
                               DEFAULT ((0)) NULL,
  [YR]
              SMALLINT
                           DEFAULT ((0)) NULL,
                INT
                          DEFAULT (NULL) NOT NULL,
  [Lang_Id]
  [SOURCE]
                 NVARCHAR (255) NULL,
  [ISBN]
               NVARCHAR (20) NULL,
  [ISBN e]
                NVARCHAR (20) NULL,
  [ISSN]
              NVARCHAR (9) NULL,
  [ISSN online]
                  NVARCHAR (9) NULL,
  [SW_urlok]
                 BIT
                          DEFAULT ((0)) NULL,
  [URL]
              NVARCHAR (255) NULL,
  [DOI]
              NVARCHAR (255) NULL,
  [textfile]
               NVARCHAR (18) NULL,
  [BREVDATE]
                  DATETIME2 (0) DEFAULT
(CONVERT([datetime],CONVERT([varchar],getdate(),(1)),(1))) NOT NULL,
                 NVARCHAR (MAX) NULL,
  [Remarks]
  [PHIL]
              BIT
                        DEFAULT ((0)) NULL,
  [SOCS]
               BIT
                        DEFAULT ((0)) NULL,
  [LIFE SC]
                BIT
                         DEFAULT ((0)) NULL,
  [CONC]
                         DEFAULT ((0)) NULL,
                BIT
  [MEAS]
                BIT
                         DEFAULT ((0)) NULL,
               BIT
                        DEFAULT ((0)) NULL,
  [DETE]
               BIT
                         DEFAULT ((0)) NULL,
  [RESU]
  [BELI]
              BIT
                        DEFAULT ((0)) NULL,
  [TREA]
               BIT
                         DEFAULT ((0)) NULL,
  [POLICY]
                BIT
                         DEFAULT ((0)) NULL,
  [GENE]
                BIT
                         DEFAULT ((0)) NULL,
  [SPEC]
               BIT
                        DEFAULT ((0)) NULL,
                BIT
                         DEFAULT ((0)) NULL,
  [DATAS]
  [META]
                BIT
                         DEFAULT ((0)) NULL,
               BIT
  [EMPI]
                         DEFAULT ((0)) NULL,
               BIT
                        DEFAULT ((0)) NULL,
  [EARL]
  [PRES]
               BIT
                        DEFAULT ((0)) NULL,
  [FUTU]
               BIT
                         DEFAULT ((0)) NULL,
  [ALTE]
               BIT
                        DEFAULT ((0)) NULL,
                BIT
  [OVER]
                         DEFAULT ((0)) NULL,
  [HEDO]
                BIT
                         DEFAULT ((0)) NULL,
  [CONT]
                BIT
                         DEFAULT ((0)) NULL,
  [CCJA]
               BIT
                        DEFAULT ((0)) NULL,
  [NATJA]
                BIT
                         DEFAULT ((0)) NULL,
  [Eligible]
               SMALLINT
                            DEFAULT ((2)) NULL,
                BIT
  [Entered]
                         DEFAULT ((0)) NULL,
  [SSMA TimeStamp] ROWVERSION NOT NULL,
  CONSTRAINT [Publication$PrimaryKey] PRIMARY KEY CLUSTERED ([Pub_Id] ASC),
  CONSTRAINT [Publication$LanguagePublication] FOREIGN KEY ([Lang_Id]) REFERENCES
[dbo].[Language] ([Lang id]),
  CONSTRAINT [Publication$AuthorPublication] FOREIGN KEY ([Author_Id]) REFERENCES
[dbo].[Author] ([Author Id]),
  CONSTRAINT [SSMA CC$Publication$TITLE$disallow zero length] CHECK (len([TITLE])>(0)),
```

```
CONSTRAINT [SSMA_CC$Publication$SOURCE$disallow_zero_length] CHECK (len([SOURCE])>(0)),
  CONSTRAINT [SSMA CC$Publication$ISBN$disallow zero length] CHECK (len([ISBN])>(0)),
  CONSTRAINT [SSMA CC$Publication$ISSN$disallow zero length] CHECK (len([ISSN])>(0)),
  CONSTRAINT [SSMA_CC$Publication$ISSN_online$disallow_zero_length] CHECK
(len([ISSN online])>(0)),
  CONSTRAINT [SSMA CC$Publication$URL$disallow zero length] CHECK (len([URL])>(0))
);
GO
CREATE NONCLUSTERED INDEX [Publication$Author_Id]
  ON [dbo].[Publication]([Author_Id] ASC);
GO
CREATE NONCLUSTERED INDEX [Publication$AuthorPublication]
  ON [dbo].[Publication]([Author_Id] ASC);
GO
CREATE NONCLUSTERED INDEX [Publication$Authors]
  ON [dbo].[Publication]([Authors] ASC, [YR] DESC, [TITLE] ASC);
GO
CREATE NONCLUSTERED INDEX [Publication$Authors_ref]
  ON [dbo].[Publication]([Authors_ref] ASC);
GO
CREATE NONCLUSTERED INDEX [Publication$Lang_Id]
  ON [dbo].[Publication]([Lang_Id] ASC);
GO
CREATE NONCLUSTERED INDEX [Publication$LanguagePublication]
  ON [dbo].[Publication]([Lang_Id] ASC);
```

# Why does this table exist (date: summer 2022)

The data on happiness included in the WDH are derived from publications, the table contains the collection of publications. Selection criteria for inclusion: scientific publications on happiness, defined as the subjective enjoyment of one's life-as-a-whole. See for more information the website: <a href="https://worlddatabaseofhappiness.eur.nl/collections/bibliography/what-is-this-bibliography-of-happiness/">https://worlddatabaseofhappiness.eur.nl/collections/bibliography/what-is-this-bibliography-of-happiness/</a>



# Columns of the table

### Pub Id

The ID of the publication, automatically assigned upon entry.

### TITLE

The title of the publication, manually entered.

# Author\_Id

The ID of the first/main author with the collection in the table 'Author'; automatically included when choosing first author from a drop-down list.

### OK pub

A Yes/No data type; if a study is approved by manually ticking it, the value becomes 'yes'.

### **Authors**

List of authors, surname and initials, this is generated automatically and starts with the 1st author and then the other authors sorted alphabetically by surname and initials.

### Authors\_ref

The label by which the publication is recognizable, unique within the collection of publications included in the WDH. The label is compiled automatically. Examples:

Barragan (2015)

Bahadir & Certel (2013)

Singh et al. (2014a)

### Seqnr\_authors\_ref

Automatically assigned serial number that is included in the label of the publication as a consecutive letter after the year, if the other constituent parts are identical to a previously recorded publication.

### YR

The manually entered four-digit calendar year in which the publication was issued.

### Lang\_Id

The ID of the language used in the publication, with the collection in the table 'Language'; automatically included when choosing the language from a drop-down list.

### **SOURCE**

The source of the publication, manually entered.

### **ISBN**

International Standard Book Number, if available manually entered.

### ISBN e

International Standard Book Number for eBooks, if available manually entered.

### **ISSN**

International Standard Serial Number (ISSN) is a unique identification number for serially published works, including periodical publications. If available manually entered.

### ISSN online

The ISSN for online publications. If available manually entered.

### SW urlok

A Yes/No data type; currently not in use.

### URL

A URL is an address that shows where a particular page can be found on the World Wide Web. URL is an abbreviation for `Uniform Resource Locator'. If available manually entered.

### DOI

Digital Object Identifer: a unique series of numbers attached to a piece of digital information such as a website, file, or online article. If available manually entered.

### Textfile

The name of the file containing the electronic version of the publication in the so-called PDF format. By using the 'Set' button, the name is included in the publication. The use of the 'Open' button will only succeed if the agreed folder contains a file whose name is equal to the ID of the publication followed by the extension '.pdf'.

### **BREVDATE**

The automatically recorded date when the publication was approved.

### Remarks

Manually entered comments.

### PHIL

A Yes/No data type; if it is manually checked, then the 'philosophy' label applies.

### SOCS

A Yes/No data type; if it is manually checked, then the 'social sciences' label applies.

# LIFE\_SC

A Yes/No data type; if it is manually checked, then the 'life sciences' label applies.

### CONC

A Yes/No data type; if it is manually checked, then the 'concept' label applies.

### **MEAS**

A Yes/No data type; if it is manually checked, then the 'measurement' label applies.

### DETE

A Yes/No data type; if it is manually checked, then the 'determinants' label applies.

### **RESU**

A Yes/No data type; if it is manually checked, then the 'consequences' label applies.

### BELI

A Yes/No data type; if it is manually checked, then the 'beliefs and ideals' label applies.

### TRFA

A Yes/No data type; if it is manually checked, then the 'treatise' label applies.

### **POLICY**

A Yes/No data type; if it is manually checked, then the 'policy paper' label applies.

### **GENE**

A Yes/No data type; if it is manually checked, then the 'general review' label applies.

### SPFC

A Yes/No data type; if it is manually checked, then the 'special subject' label applies.

### **DATAS**

A Yes/No data type; if it is manually checked, then the 'data set' label applies.

### **META**

A Yes/No data type; if it is manually checked, then the 'meta analysis' label applies.

### **FMPI**

A Yes/No data type; if it is manually checked, then the 'single study' label applies.

### **EARL**

A Yes/No data type; if it is manually checked, then the 'past' label applies.

### **PRES**

A Yes/No data type; if it is manually checked, then the 'present' label applies.

### **FUTU**

A Yes/No data type; if it is manually checked, then the 'future' label applies.

### ALTE

A Yes/No data type; if it is manually checked, then the 'percieved changes in happiness' label applies.

### **OVER**

A Yes/No data type; if it is manually checked, then the 'overall' label applies.

### **HEDO**

A Yes/No data type; if it is manually checked, then the 'hedonic level' label applies.

### CONT

A Yes/No data type; if it is manually checked, then the 'contentment' label applies.

### CCJA

A Yes/No data type; currently not in use.

### NATJA

A Yes/No data type; currently not in use.

### Eligible

Automatically assigned number value based on three choice options:

Inclusion in findings archive?

0 = yes: at least one valid measure of happiness used

1 = no: no valid measure of happiness used

2 = no: no new data on present happiness

### **Entered**

A Yes/No data type; automatically assigned 'yes' if a study based on the publication is approved.

# Appendix B

# **VIEWS and STORED PROCEDURES**

### Appendix C

# HOW TO INSTALL ELEMENTS OF THE WORLD DATABASE OF HAPPINESS

# If you want to install the complete set

- If you want to continue at Erasmus University Rotterdam, you must have an account there, either because you are employed at Erasmus University or have a hospitality agreement. You can apply for a hospitality agreement with the Erasmus Happiness Economics Research Organization EHERO, e-mail: <a href="mailto:ehero@eur.nl">ehero@eur.nl</a>. Erasmus University charges € 1000 a year for a hospitality agreement and there will be additional costs for hosting your new version, which EHERO can negotiate for you.
  Once account and costs are settled, ask your system administrator to create a
  - Once account and costs are settled, ask your system administrator to create a file for you (suggested name WDoH2) and copy the three element to that file, each with adding '2' to the name.
- If you want to host your version elsewhere, such as your own university of
  institute, ask your system administrator to create a file and proceed as above.
  In that case, download the three elements of the database as described in
  section 3 of this paper.

# Appendix D

# HOW TO ADD TO THE WORLD DATABASE OF HAPPINESS

An instruction manual is available at <a href="https://worlddatabaseofhappiness.eur.nl/how-to-enter-findings-on-happiness/">https://worlddatabaseofhappiness.eur.nl/how-to-enter-findings-on-happiness/</a>

The following steps are described in that document.

- 1. How to gather scientific publications on happiness
- 2. How to select these publications
- 3. How to log in to the Access database at Erasmus University Rotterdam
- 4. How to enter publications in that database
- 5. How to enter findings in that database
- 6. How to check with author
- 7. How to upload to the website

Instructions for the steps 4 and 5 are also provided in the Access database, behind the icons at the right top of the screens.