

## METHODS

An initial selection of articles was made by conducting a search on Web of Science for any of the following terms related to the concept of mismatch: 'adaptive lag', 'cultural lag', 'developmental mismatch', 'DOHaD', 'environment of evolutionary adaptedness', 'evolutionary mismatch', 'evolutionary trap', 'fetal origins', 'fetal programming', 'ontogenetic mismatch', 'physiological mismatch', 'predictive adaptive response', 'thrifty genotype', and 'thrifty phenotype'. Terms such as 'stone age', 'caveman', 'prehistoric', 'paleolithic', and 'Pleistocene' were also included in the initial search if they occurred together with the word 'genes'. This search yielded 13,884 matches.

Restricting the search to require the word 'mismatch' narrowed the search to 591 results, and further restricting it to articles written prior to 2007 resulted in only 88 matches, the earliest of which was from 1988.

Additional searches were conducted for each of the following terms individually: 'adaptive lag', 'cultural lag', 'developmental mismatch', 'developmental origin of health and disease', 'environment of evolutionary adaptedness', 'evolutionary mismatch', 'evolutionary trap', 'fetal origins', 'fetal programming', 'predictive adaptive response', 'thrifty genotype', and 'thrifty phenotype'.

\* prior to 2006 due to large number of more recent papers containing the search term.

All databases from Web of Science were included (with the exception of the Business Collection (BC) and Electronics & Telecommunications Collection (EC)) using the 'Basic Search' for 'Topic' fields, which "include Titles, Abstracts, Keywords and Indexing fields such as Systematics, Taxonomic Terms and Descriptors". It is acknowledged that instances of the search terms not occurring in these specific fields would have been missed, however it is nonetheless instructive that the word 'mismatch' first appears as a technical term in the relevant sense in 1988, and only appears in relation to development in the relevant sense after 2004.

BibTeX files for the following searches are included in the supplementary materials:

### All

Web of Science, 13 Jan 2021

All Databases\*

Basic Search (Topic):

```
"adaptive lag" OR "cultural lag" OR "environment of evolutionary adaptedness" OR
"evolutionary mismatch" OR "evolutionary trap" OR "thrifty genotype" OR (((stone NEAR
age) OR caveman OR prehistoric OR paleolithic OR pleistocene) AND genes) OR
"developmental mismatch" OR "fetal origins" OR "fetal programming" OR "ontogenetic
mismatch" OR "predictive adaptive response" OR "thrifty phenotype" OR "DOHaD" OR
"physiological mismatch"
```

Timespan: 1864-

\*excluding Business Collection (BC) and Electronics & Telecommunications Collection (EC)

### **All including 'mismatch'**

Web of Science, 13 Jan 2021

All Databases\*

Basic Search (Topic):

("adaptive lag" OR "cultural lag" OR "environment of evolutionary adaptedness" OR "evolutionary mismatch" OR "evolutionary trap" OR "thrifty genotype" OR (((stone NEAR age) OR caveman OR prehistoric OR paleolithic OR pleistocene) AND genes) OR "developmental mismatch" OR "fetal origins" OR "fetal programming" OR "ontogenetic mismatch" OR "predictive adaptive response" OR "thrifty phenotype" OR "DOHaD" OR "physiological mismatch") AND mismatch

Timespan: 1864-

\*excluding Business Collection (BC) and Electronics & Telecommunications Collection (EC)

### **All including 'mismatch' prior to 2007**

Web of Science, 13 Jan 2021

All Databases\*

Basic Search (Topic):

("adaptive lag" OR "cultural lag" OR "environment of evolutionary adaptedness" OR "evolutionary mismatch" OR "evolutionary trap" OR "thrifty genotype" OR (((stone NEAR age) OR caveman OR prehistoric OR paleolithic OR pleistocene) AND genes) OR "developmental mismatch" OR "fetal origins" OR "fetal programming" OR "ontogenetic mismatch" OR "predictive adaptive response" OR "thrifty phenotype" OR "DOHaD" OR "physiological mismatch") AND mismatch

Timespan: 1864-2006

\*excluding Business Collection (BC) and Electronics & Telecommunications Collection (EC)

### **'Darwinian medicine' AND 'mismatch'**

Web of Science, 13 Jan 2021

All Databases\*

Basic Search (Topic):

"darwinian medicine" AND mismatch

Timespan: 1864-

\*excluding Business Collection (BC) and Electronics & Telecommunications Collection (EC)

### **'evolutionary medicine' AND 'mismatch'**

Web of Science, 13 Jan 2021

All Databases\*

Basic Search (Topic):

"evolutionary medicine" AND mismatch

Timespan: 1864-

\*excluding Business Collection (BC) and Electronics & Telecommunications Collection (EC)

### **'evolutionary psychology' AND 'mismatch'**

Web of Science, 13 Jan 2021

All Databases\*

Basic Search (Topic):

"evolutionary psychology" AND mismatch

Timespan: 1864-

\*excluding Business Collection (BC) and Electronics & Telecommunications Collection (EC)

### **'adaptive lag'**

Web of Science, 18 Jan 2021

All Databases\*

Basic Search (Topic):

"adaptive lag"

Timespan: 1864-

\*excluding Business Collection (BC) and Electronics & Telecommunications Collection (EC)

### **'cultural lag'**

Web of Science, 18 Jan 2021

All Databases\*

Basic Search (Topic):

"cultural lag"

Timespan: 1864-

\*excluding Business Collection (BC) and Electronics & Telecommunications Collection (EC)

### **'developmental mismatch'**

Web of Science, 18 Jan 2021

All Databases\*

Basic Search (Topic):

"developmental mismatch"

Timespan: 1864-

\*excluding Business Collection (BC) and Electronics & Telecommunications Collection (EC)

### **'developmental origins of health and disease'**

Web of Science, 18 Jan 2021

All Databases\*

Basic Search (Topic):

"developmental origins of health and disease"

Timespan: 1864-2005

\*excluding Business Collection (BC) and Electronics & Telecommunications Collection (EC)

### **'environment of evolutionary adaptedness'**

Web of Science, 18 Jan 2021

All Databases\*

Basic Search (Topic):

"environment of evolutionary adaptedness"

Timespan: 1864-

\*excluding Business Collection (BC) and Electronics & Telecommunications Collection (EC)

**'evolutionary mismatch'**

Web of Science, 18 Jan 2021

All Databases\*

Basic Search (Topic):

"evolutionary mismatch"

Timespan: 1864-

\*excluding Business Collection (BC) and Electronics & Telecommunications Collection (EC)

**'evolutionary trap'**

Web of Science, 18 Jan 2021

All Databases\*

Basic Search (Topic):

"evolutionary trap"

Timespan: 1864-

\*excluding Business Collection (BC) and Electronics & Telecommunications Collection (EC)

**'fetal origins'**

Web of Science, 18 Jan 2021

All Databases\*

Basic Search (Topic):

"fetal origins"

Timespan: 1864-2005

\*excluding Business Collection (BC) and Electronics & Telecommunications Collection (EC)

**'fetal programming'**

Web of Science, 18 Jan 2021

All Databases\*

Basic Search (Topic):

"fetal programming"

Timespan: 1864-2005

\*excluding Business Collection (BC) and Electronics & Telecommunications Collection (EC)

**'predictive adaptive response'**

Web of Science, 18 Jan 2021

All Databases\*

Basic Search (Topic):

"predictive adaptive response"

Timespan: 1864-

\*excluding Business Collection (BC) and Electronics & Telecommunications Collection (EC)

**'thrifty genotype'**

Web of Science, 18 Jan 2021

All Databases\*

Basic Search (Topic):

"thrifty genotype"

Timespan: 1864-

\*excluding Business Collection (BC) and Electronics & Telecommunications Collection (EC)

**'thrifty phenotype'**

Web of Science, 18 Jan 2021

All Databases\*

Basic Search (Topic):

"thrifty phenotype"

Timespan: 1864-2005

\*excluding Business Collection (BC) and Electronics & Telecommunications Collection (EC)