

# Coding manual for Fear Appeal Review

This manual explains how to use the coding form for the meta-analysis about Fear Appeals. Please read it carefully before starting to code.

## Concepts

A fear appeal is defined as a stimulus designed to achieve changes in cognition, affect (linked to a behaviour; not mood) or behaviour by inducing fear. A successful fear appeal is defined as a stimulus inducing fear (note: using this definition, it is possible for a successful fear appeal to fail in influencing cognition, affect, or behaviour). Fear is defined as an emotional reaction to a perceived threat, with threat being defined as the communication of the potential occurrence of a harmful event. Threats are considered to have two major parameters: severity (the potential harm the event can induce) and susceptibility (the likelihood that the event occurs). It follows from this that:

*If a manipulation communicates:*

information about potential aversive consequences of an event  
information about the likelihood of a person experiencing an event  
both information about potential aversive consequences *and*  
the likelihood of a person experiencing an event

*It manipulates:*

severity  
susceptibility  
threat

Efficacy (generic) is the estimated effectiveness, in terms of reducing or eliminating the likelihood that a given harmful event occurs, of attempts to perform a given behaviour. Such efficacy is considered to have two major parameters: response-efficacy (the perceived effectiveness of a behaviour in reducing the likelihood that the harmful event occurs) and self-efficacy (the extent to which a person believed that he/she is able to successfully perform the behaviour). It follows from this that:

*If a manipulation communicates:*

information about the effectiveness of a behaviour  
information about a person's ability to successfully perform a behaviour  
both information about a behaviour's effectiveness *and* the  
behaviour's effectiveness

*It manipulates:*

response-efficacy  
self-efficacy  
efficacy (generic)

## Generic instructions

Use one sheet per study (i.e. per experiment). Therefore, when one publication reports three studies, use three sheets. Number the studies within a publication consecutively.

When uncertain about anything you code, add a question mark in red, and add your certainty (0 = very uncertain, 1 = uncertain, 2 = a bit uncertain).

When coding an element, number it. Then add this number to the margin of the printed version of the paper, or, if you work using the PDFs, add it to the paper as a PDF comment.

If there are any deviations that you cannot code using the forms, attach another paper to the coding form and just write them down. Keep using the numbering system though.

In the text, indicate in the margin where the fear appeal manipulation is explained by writing down "FA", and indicate the page number in the paper (left column of 'methodology').

## Methods (front of form)

Number of conditions: in a factorial design, please denote this as customary (e.g. 2x3x2).

Number of levels of a condition: when a variable is either present or absent (0 or 1), a condition has two levels. When it's presented in either low, medium or high intensity, it has three levels.

Number of exposures: when the same stimulus is repeated 4 times, please write down: "4 X". When 3 different stimuli are presented 2 times each, please write down "2 X 3" (so, the number preceding the X always signifies the number of repetitions).

Duration(s) of exposures: if all exposures lasted equally long, just write down one number. If exposure times differed, please write down exposure times in chronological order. Repeated exposure times can be signified by preceding the duration by the amount of repetitions followed by an X (e.g. to code 3 repetitions of twenty minutes, followed by one repetition of half an hours, and then two more repetitions of 10 minutes, code "3 X 20min, 30min, 2 X 10min").

When indicating whether the experiment was randomized, if the sample was selected rather than randomly sampled, please indicate the selection criteria here.

## Results (back of form)

First check the variable for which you are coding the results. Then, indicate the magnitude (i.e. effect size) of the effect, the significance and the sample size upon which those statistics are based. If no effect sizes are available, code bivariate statistics. If no bivariate statistics are available (i.e. in the case of analysis of variance - if no bivariate associations are available and regression analyses are conducted, there is no meaningful indication of magnitude), please indicate the variation (SS), the error variation, and the total variation.

When filling in the significance level (p-value), when no exact p-value is provided, please write down the interval, if possible including both boundaries. For example, when the only information provided by the paper is " $< .05$ ", that text can be copied. However, when there are other effects in the same paper that have " $p < .01$ ", then the p-value of the first effect size must be larger than .01. Therefore, in that case, please write down " $.01 < p < .05$ ".

Abbreviations:  $r$  = Pearson's  $r$  (Note: make sure they're Pearson correlations (not Spearman (rank-order), partial, or semi-partial (part)); if not, indicate 'other').

$\omega^2$  = Omega<sup>2</sup>

OR = Odds Ratio

$\eta^2$  = Eta<sup>2</sup>

Prt.  $\eta^2$  = Partial Eta<sup>2</sup>

$d$  = Cohen's  $d$

**Sample & design:**

Nr. of publication:		Nr. of study: (if several)		Design:	<input type="checkbox"/> Within-subjects <input type="checkbox"/> Between-subjects	Nr. of factors (indep. vars):	
Was the study randomised:	<input type="radio"/> Yes (experimental) <input type="radio"/> Quasi-experimental <input type="radio"/> Matched			Initial sample size:		Remarks re: sample(s):	
<input type="checkbox"/> Participants were selected on (variable(s)):							
Participants:	<input type="radio"/> Students <input type="radio"/> General population <input type="radio"/> Unspecified			Mean age & SD (or median, range, etc):		Gender distribution: (% female)	
Country where study was conducted:				Year of study (note: not year of publication!):			

**Independent variables (IV's - factors, i.e. fear, threat, efficacy, gender, sensation seeking, etc):**

Definition of fear appeal on page:		[DESCRIPTION] Does the manipulation aim to induce emotion, and does it use text/picture(s), audio, and/or video?					[JUDGEMENT] Does the manipulation aim to induce emotion, and does it use text/picture(s), audio, and/or video?					Quality of manipulation (1 = bad, 2 = decent, 3 = excellent)	Number of levels	Number of exposures	Duration of exposures	Short description of manipulation
Used accord. to authors	Used accord. to coder	Emotion	Text	Picture(s)	Audio	Video	Emotion	Text	Picture(s)	Audio	Video					
Threat (gen.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	.....	.....	.....	.....	.....
Susceptibility	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	.....	.....	.....	.....	.....
Severity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	.....	.....	.....	.....	.....
Efficacy (gen.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	.....	.....	.....	.....	.....
Self-efficacy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	.....	.....	.....	.....	.....
Resp. efficacy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	.....	.....	.....	.....	.....
<input type="checkbox"/> ..... (iv1)												.....	.....	.....	.....	.....
<input type="checkbox"/> ..... (iv2)												.....	.....	.....	.....	.....
<input type="checkbox"/> ..... (iv3)												.....	.....	.....	.....	.....

**Dependent variables (DV's - variables that are measured, not manipulated):**

Behaviour category (e.g. smoking, exercise): .....

Dependent variable:	Nr. of items:	Range (min-max):	Cronbach's alpha:	Interval manip.-measur.	Dependent variable:	Nr. of items:	Range (min-max):	Cronbach's alpha:	Interval manip.-measur.
<input type="checkbox"/> Attitude	.....	.....	.....	.....	<input type="checkbox"/> Intention:	.....	.....	.....	.....
<input type="checkbox"/> Fear	.....	.....	.....	.....	<input type="checkbox"/> .....	.....	.....	.....	.....
<input type="checkbox"/> Threat (generic)	.....	.....	.....	.....	<input type="checkbox"/> Behaviour:	.....	.....	.....	.....
<input type="checkbox"/> <input type="checkbox"/> Susceptibility	.....	.....	.....	.....	<input type="checkbox"/> .....	.....	.....	.....	.....
<input type="checkbox"/> <input type="checkbox"/> Severity	.....	.....	.....	.....	<input type="checkbox"/> .....	.....	.....	.....	.....
<input type="checkbox"/> Efficacy (generic):	.....	.....	.....	.....	<input type="checkbox"/> .....	.....	.....	.....	.....
<input type="checkbox"/> <input type="checkbox"/> Self-efficacy	.....	.....	.....	.....	<input type="checkbox"/> .....	.....	.....	.....	.....
<input type="checkbox"/> <input type="checkbox"/> Response efficacy	.....	.....	.....	.....	<input type="checkbox"/> .....	.....	.....	.....	.....

**Manipulation checks of the manipulated independent variables (i.e., means & SD's, t-value's, p-values, correlation coefficients - don't forget to indicate units!):**

Independent variable:	Sample Size:	Statistics (e.g. t, r, F, $\chi^2$ ), effect sizes (e.g. d, V, OR, r), significance levels (p-values), or raw data (e.g. means, SD's, Sses)
<input type="checkbox"/> Threat (generic)	.....	.....
<input type="checkbox"/> <input type="checkbox"/> Susceptibility	.....	.....
<input type="checkbox"/> <input type="checkbox"/> Severity	.....	.....
<input type="checkbox"/> Efficacy (generic)	.....	.....
<input type="checkbox"/> <input type="checkbox"/> Self-efficacy	.....	.....
<input type="checkbox"/> <input type="checkbox"/> Response efficacy	.....	.....
<input type="checkbox"/> ..... (iv1)	.....	.....
<input type="checkbox"/> ..... (iv2)	.....	.....
<input type="checkbox"/> ..... (iv3)	.....	.....



**Associations between independent and dependent variables**

Number of publication:		Number of study:	
<b>Association 1</b> (statistics (e.g. t, r, F, $\chi^2$ ), effect sizes (e.g. d, V, OR, r), significance levels (p-values), and/or raw data (e.g. means, SD's, SSes))			
Variable 1:		Variable 2:	Sample size:
<b>Association 2:</b> (statistics (e.g. t, r, F, $\chi^2$ ), effect sizes (e.g. d, V, OR, r), significance levels (p-values), and/or raw data (e.g. means, SD's, SSes))			
Variable 1:		Variable 2:	Sample size:
<b>Association 3:</b> (statistics (e.g. t, r, F, $\chi^2$ ), effect sizes (e.g. d, V, OR, r), significance levels (p-values), and/or raw data (e.g. means, SD's, SSes))			
Variable 1:		Variable 2:	Sample size:
<b>Association 4:</b> (statistics (e.g. t, r, F, $\chi^2$ ), effect sizes (e.g. d, V, OR, r), significance levels (p-values), and/or raw data (e.g. means, SD's, SSes))			
Variable 1:		Variable 2:	Sample size:
<b>Association 5:</b> (statistics (e.g. t, r, F, $\chi^2$ ), effect sizes (e.g. d, V, OR, r), significance levels (p-values), and/or raw data (e.g. means, SD's, SSes))			
Variable 1:		Variable 2:	Sample size:
<b>Association 6:</b> (statistics (e.g. t, r, F, $\chi^2$ ), effect sizes (e.g. d, V, OR, r), significance levels (p-values), and/or raw data (e.g. means, SD's, SSes))			
Variable 1:		Variable 2:	Sample size:
<b>Association 7:</b> (statistics (e.g. t, r, F, $\chi^2$ ), effect sizes (e.g. d, V, OR, r), significance levels (p-values), and/or raw data (e.g. means, SD's, SSes))			
Variable 1:		Variable 2:	Sample size: