

Politics in Science Project: Pre-Registration Document for Gatekeepers Project

Authors: Domenico Viganola, Anna Dreber, Orly Eitan, Yoel Inbar, Magnus Johannesson, Thomas Pfeiffer, Stefan Thau, Eric Uhlmann

Do the politics of a conference abstract predict whether (and where) it is published? We are interested in whether the politics of an abstract (liberal or conservative) predicts whether or not it gets published, and in how prestigious a journal. We plan to test the following analyses separately for evaluative differences (are liberals or conservatives evaluated more positively) and for explanatory differences (are liberals or conservatives explained more, regardless of valence). In particular, letter “a” refers to evaluative differences; letter “b” to explanatory differences.

Our research questions are as follows:

- Do evaluative differences in abstracts predict whether an abstract is published or not?
- Do evaluative differences in abstracts predict the prestige of the journal the research eventually appears in?
- Do explanatory differences in abstracts predict whether an abstract is published or not?
- Do explanatory differences in abstracts predict the prestige of the journal the research eventually appears in?

Evaluative and explanatory differences in a sample of conference abstracts were rated in a prior data collection by a large sample of independent raters. For research questions 2a and 2b (as specified below), we operationalize a journal’s prestige as its impact factor (IF). With “Gatekeepers” we refer to reviewers and editors, i.e. the main decision makers involved in the publication process.

Research Questions 1a 1b

Do evaluative/explanatory differences in abstracts predict whether an abstract is published or not?

We employ a linear probability model with the indicator variable “published or not” as dependent variable and evaluative/exploratory bias as independent variable. Also, we control for the year of appearance of the poster abstract in the SPSP conference. The regression model we plan to estimate is the following:

$$(1) \quad y_i = \beta_0 + \beta_1 EB_i + Year_i + \varepsilon_i$$

where:

- y_i is the variable “published” taking value 1 if the abstract was published and 0 otherwise;
- EB_i is the evaluative (exploratory) bias of abstract i as rated by MTurkers;

- $Year_i$ refers to year fixed effects (i.e., year in which the abstract is posted in the SPSP conference¹);
- Regression (1) will be run separately for evaluative and explanatory bias.

Test: two-sided t-test on coefficient β_1 in equation (1), carried out on the 5% level (note that we have no hypothesis regarding the direction of this effect).

Research Questions 2a 2b

Do evaluative/explanatory differences in abstracts predict the prestige of the journal the research eventually appears in?

We employ a linear regression model using the impact factor of the journal in which the papers under analysis were published as dependent variable (note that papers not published will get a value of zero on the impact factor²). The independent variables are the same as those specified in previous research question. The regression model we plan to estimate is the following:

$$(2) \quad IF_i = \beta_0 + \beta_1 EB_i + Year_i + \varepsilon_i$$

where:

- IF_i is the variable identifying the impact factor³ of the journal in which the paper related to abstract i is published; EB_i and $Year_i$ as defined above;
- Regression (2) will be run separately for evaluative and explanatory bias.

Test: two-sided t-test on coefficient β_1 in equation (2), carried out on the 5% level (note that we have no hypothesis regarding the direction of this effect).

¹ We used abstracts from the SPSP annual conference between 2003 and 2013.

² In case there will be unpublished studies, we plan to run equation (2) using a Tobit model as a robustness check for hypotheses 2a/2b. Tobit model would control for the censoring at 0 of the variable IF. Also in this case, the relevant test will be a two-sided t-test on the coefficient of evaluative/explanatory bias variable in equation (2), carried out on the 5% level; to preserve consistency, also in this case we have no hypothesis on the direction of this effect.

³ Impact factor as evaluated at the time of the analysis.