Preregistration

(Re)Building Trust? Investigating the effects of open science badges on perceived trustworthiness of journal articles. [EXPANSION: Public Sample]

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Study Information

Title	(Re)Building Trust. Investigating the effects of open science badges on perceived trustworthiness of journal articles. [EXPANSION: Public Sample]
Description	This study is an expansion to (Schneider, Rosman, Kelava, & Merk, 2020), in which we investigated the effects of open science badges in journal articles on trust in scientists. Since college students are a population that engage with scientific studies on a regular basis, the sample of the first study focused on this population.

Among other results, the study revealed an effect of open science badges on trust in scientists.

In two expansion studies we investigate the robustness of the effects over other populations (external validity). This study expands the investigation to include a sample of the public in the United Kingdom.

Hypotheses

1. Confirmatory, H1: Visible OSP (vs. not visible vs. visibly non-OSP) influence the perceived trustworthiness (subscale integrity). Our assumption: The more openness, the more trustworthy with small to moderate effects: $\mu_1 < \mu_2 < \mu_3$. With the `bain` (Gu, Hoijtink, Mulder, & Lissa, 2019) package we will evaluate the following informative hypotheses using Bayes factors:
    1. $\mu_1 < \mu_2 < \mu_3$
    2. $\mu_1 = \mu_2 = \mu_3$
    3. $\mu_1 < \mu_2 = \mu_3$
    4. μ_1, μ_2, μ_3
2. Confirmatory, H2: The higher the topic specific multiplism, the lower the perceived trustworthiness (subscale integrity). Negative correlation.
3. Exploratory, H3: Topic specific multiplism moderates the effect of OSP on perceived trustworthiness (subscale integrity).
4. Exploratory, H4: Visible OSP (vs. not visible vs. visibly non-OSP) have a negative effect on topic specific multiplism.

Design Plan

Study type *Wording taken from OSF preregistration forms, since they are closed questions:*

Experiment. A researcher randomly assigns treatments to study subjects, this includes field or lab experiments. This is also known as an intervention experiment and includes randomized controlled trials.

Blinding *Wording taken from OSF preregistration forms, since they are closed questions:*

- For studies that involve human subjects, they will not know the treatment group to which they have been assigned.
- Personnel who interact directly with the study subjects (either human or non-human subjects) will not be aware of the assigned treatments.

Study design The design will include three conditions:

- colored open science badges (CB)
- grayed out open science badges (GB)
- control condition with no badges (CC).

Two of the (three) conditions are randomly chosen and randomized in their order within person. We use this planned missing design to prevent experimental leakage.

Randomization

- Randomization 1: Two of the three conditions will be randomly assigned to the participants.
- Randomization 2: The order of presentation will be randomized between the two conditions, within the participant.
- Randomization 3: Within each of the six combinations of randomization 1 & 2, we will randomize the order of the topic.

Sampling Plan

Existing data *Wording taken from OSF preregistration forms, since they are closed questions:*
Registration prior to collection of data

Explanation of existing data	None.
Data collection procedures	Our goal is to obtain a sample from the UK public population based on quota (target estimates taken from the latest UK Census in 2011). The online survey will be administered by the Leibniz Institute for Psychology Information and includes the following quota: • Biological sex – male – female • Age – 3 levels in range 16-79 • Education – 3 levels
Sample size rationale	We refer to the power analysis of the first study, as the design and hypotheses are the same. Preregistration see https://doi.org/10.17605/OSF.IO/YBS7F.
Stopping rule	Based on the power analysis we aim at N= 250.

Variables

Manipulated variables	**Conditions** Participants will be presented two translational abstracts (see APA guidance) addressing the topics "Moral Development" and "Acceptability of Robot-Assisted Therapy". We took these from the APA-guidance paper on translational abstracts indicating they are good-practice examples. The abstracts were integrated into a journal article style title page and will be presented as either: • CB condition: Subjects receive a title page of an empirical study (Title, Abstract, Keywords, Introduction, ...) together with three Open Science

badges. The badges are explained using hints in style of speech bubbles and indicate that the authors engaged in the OSP open data, open analysis script and open materials.

- GB condition: Subjects receive a title page of an empirical study (Title, Abstract, Keywords, Introduction, ...) together with three Open Science badges. The badges are explained using hints in style of speech bubbles and indicate that the authors did not engage in the OSP open data, open analysis script and open materials.

- CC: Subjects receive a title page of an empirical study (Title, Abstract, Keywords, Introduction, ...) with no further information on Open Science, reflecting a "standard" journal article. We used the same type of hints in style of speech bubbles to explain the general structure of title pages of scientific journal papers.

As participants are exposed to more than one condition, we create all three conditions for the two different empirical studies (topics). In doing so, we avoid participants to see one study topic twice under different conditions, which would undermine the blinding.

Order of topic

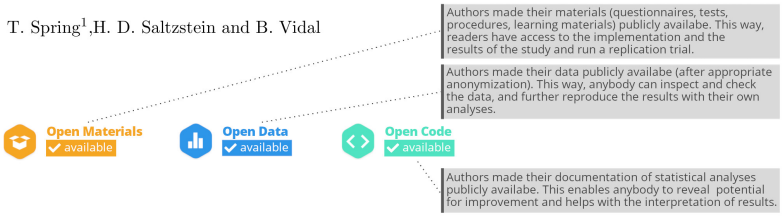
Randomly varied.

Conditions

ARCHIVES OF SCIENTIFIC PSYCHOLOGY — VOL. 3 (1)

A Moral Developmental Perspective on Children's Eyewitness Identification: Does Intent Matter?

T. Spring[1],H. D. Saltzstein and B. Vidal



ABSTRACT
These studies are based on the assumption that when adults, adolescents, or children identify someone as the "guilty" one (the person who committed the act), they are not only making an identification based on memory and thinking, but also a moral decision. This is because, by the act of identifying or not identifying someone, the eyewitness runs the risk of either convicting an innocent person (making a false-positive error) or letting a guilty person go free (a false-negative error). Our interest is less in the overall accuracy of their identifications and more in the balance of false-positive and false-negative errors. We have found in these and past studies that the balance of these 2 kinds of errors changes with age, and that this pattern may also depend on (a) the child's general understanding of the purpose of the task, which appears to be "lost" on 7- to 9-year-olds, the youngest group studied, and (b) for older children and adolescents, how the act is described; for example, intended or not. In this way, we can understand that the act of identifying the perpetrator as a moral decision and not simply an act of perception and memory.

KEYWORDS
children's eyewitness identification; moral decisions

1. Introduction

Children's eyewitness identification has been extensively studied from the point of view of memory, cognition, and suggestibility (e.g., Brewer, Weber,

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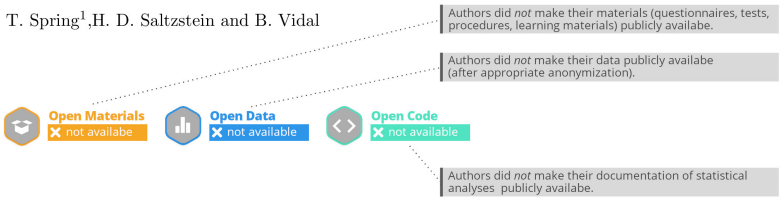

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Acceptability of Robot-Assisted Therapy for Disruptive Behavior Problems in Children

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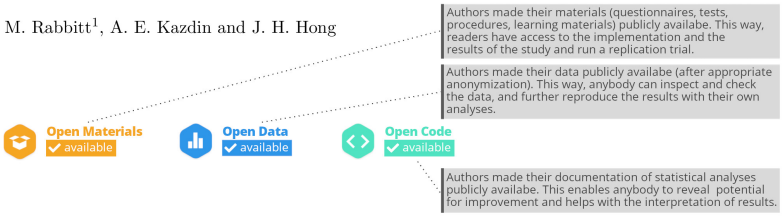

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Psychotherapy for children, adolescents, and adults increasingly draws on technology as reflected in treatments available on the Internet for all sorts of psychological problems (e.g., depression, anxiety). A relatively new technology is the use of social robots to teach specific skills that can reduce psychological and behavioral problems. The adoption of such treatments depends heavily on whether people find them acceptable and a reasonable approach to clinical problems. In this study, we had parents evaluate 3 strategies to treat disruptive behavioral problems in children. Our primary interest was seeing the extent to which parents would see robots as an acceptable form of treatment. Three treatment conditions were compared. The first strategy was a cognitively based treatment administered through a robot; the second was the same treatment administered through the Internet. A third condition was no treatment at all but seeing if parents viewed the other treatments as better than just waiting and seeing if the child grows out of the problem. In fact, most children experiencing psychological problems do not receive any treatment, so waiting and seeing if the child gets better is a common practice. Parents evaluated the treatments after learning how the treatments were applied to children with behavioral problems commonly seen in psychological services. The results indicated that social robots were very acceptable as a form of treatment for children. The more familiar use of technology through the Internet was viewed as more acceptable than the use of robotics. Both treatments were seen as more acceptable than waiting for the child to get better. As technology is increasingly applied to help with psychological problems, we will need to know more about the conditions that make them acceptable and how to ensure that treatments are seen as viable options when help is needed.

KEYWORDS
robot-assisted therapy; treatment acceptability; child treatment

1. Introduction

Unmet mental health care needs have been well documented in the United States and worldwide (Kessler & Wang, 2008; Kessler et al., 2009). Approximately 70% of

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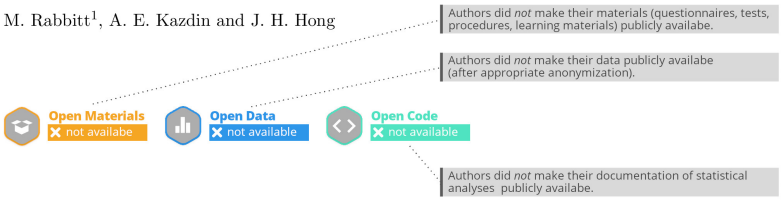

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Measured variables

- Trustworthiness: We apply the Muenster Epistemic Trustworthiness Inventory (Hendriks, Kienhues, & Bromme, 2015) with all three subscales. However as dependent variable we will only employ the subscale

integrity. The other two subscales may be used for further exploratory analyses.

- Topic-specific multiplism: We apply an established scale on the topic specific multiplism (Merk, Rosman, Rueß, Syring, & Schneider, 2017).
- Topic-specific consistency: We apply the stablished three item-measure (Merk et al., 2017)
- Treatment check (treatment-specific): We mesure the perceived openness/ transparency of the empirical study (Schneider et al., 2020).
- Treatment check (global): We assess whether participants evaluate explanations of badges to be comprehensible, whether participants read the explanations and whether they perceive the explanations had an effect on their evaluations of authors (Schneider et al., 2020).
- Additional small set of demographic variables will be assessed.

Indices We are going to built sum scores for the METI dimensions.

Analysis Plan

We will compute Approximate Adjusted Fractional Bayes Factors for informative Hypotheses (Gu et al., 2019).

Statistical models Parallel to first study (Schneider et al., 2020).

Transformations None planned.

Inference criteria $BF < \frac{1}{3}$ or $BF > 3$

Data exclusion	Implausible (consistent) responses and participants taking less than 5 minutes for the survey may be eliminated for the analyses. The reasoning and decision to eliminate these participants will be made prior to data analysis and reported in disseminations.
Missing data	Multiple imputation will be used.
Exploratory analyses (optional)	• Hypothesis 3: BF Moderation Analysis will be conducted with visible OSP (vs. not visible vs. visibly non-OSP) as predictor, topic specific multiplism as moderator and perceived trust (subscale integrity) as dependent variable • Hypothesis 4: BF analysis with visible OSP (vs. not visible vs. visibly non-OSP) as predictor and topic specific multiplism as dependent variable will be computed

Other

Other (Optional)	

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