Preregistration

Regulatory Fit in Online Dating

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Study Information

Title Regulatory Fit in Online Dating

Research questions

1) What is the factor structure of regulatory fit outcome measure? We will examine the measurement model of the regulatory fit outcome we created in our previous study (https://osf.io/3ynht/). In the previous study, we conducted a factor analysis to examine whether the factor structure corresponds to our proposed structure (pre-registration form: https://osf.io/8w2rg/) and made few revisions to improve its structural validity. We will conduct a confirmatory factor analysis of the revised measurement model with a new sample.

2) Do people experience regulatory fit when using a profile browsing strategy that matches their chronic regulatory focus? That is, does using a compatible strategy increase engagement and ease of online dating, which in turn increase perceived future success and positive evaluation of potential partners in online dating?

Hypotheses

1) The measurement model for regulatory fit indices and outcomes as four latent variables (i.e., engagement, ease, perceived future success, & positive partner evaluation) will have a good fit.

2) When using a compatible strategy, regulatory focus will predict the levels of engagement and ease of browsing profiles, which in turn predict perceived success of using online dating.
   2a) In desirable condition, promotion focus will positively predict perceived success.
   2b) In undesirable condition, prevention focus will positively predict perceived success and partner evaluation.

3) The associations between regulatory focus and regulatory fit outcomes (i.e., perceived success and partner evaluation) will be mediated by the indirect effects through engagement and ease.
   3a) In desirable condition, promotion focus will be associated with engagement and ease, which in turn predict perceived success and partner evaluation.
   3b) In undesirable condition, prevention focus will be associated with engagement and ease, which in turn predict perceived success and partner evaluation.

Sampling Plan

Existing data **Registration prior to creation of data**. As of the date of submission of this research plan for preregistration, the data have not yet been collected, created, or realized.

Explanation of existing data N/A

Data collection procedures

Data will be collected through a crowd-sourcing website, Prolific. Participants will receive a payment of $3 for their participation in a 30-minute survey. We will make our study available only to those who have not participated in our previous studies on online dating strategy.

We will recruit those who meet the following eligibility criteria: 1. Has an active account with one of the following dating websites: OkCupid, Plenty of Fish, & eHarmony - These websites were selected as they are more amenable to strategy use, in that individuals may report a variety of traits that could be classified as undesirable or desirable (e.g., personality traits, pet ownership, alcohol use, etc.).
2. Resides in Canada or the US
3. Has not participated in our previous study

Sample size

A total of 300 eligible participants will be recruited.

Sample size rationale

Sample size was determined based on the observed effect size to detect a moderation effect (f2 = 0.059).

Stopping rule

Data collection will terminate upon meeting the targeted sample size (i.e., 300 eligible participants).

Variables

Manipulated variables

Profile scanning condition
Participants will be randomly assigned to use either a desirable-trait scanning strategy or an undesirable-trait scanning strategy.

Measured variables

1. Chronic regulatory focus

- Promotion focus
- Prevention focus

2. Regulatory fit indices

- Engagement while viewing profiles
- Ease while viewing profiles

3. Regulatory fit outcomes

- Perceived success
- Evaluation of potential partners

Indices Two regulatory fit indices (i.e., engagement and ease of browsing online dating profiles) and two regulatory fit outcomes (i.e., perceived success and partner evaluation) will be represented as latent variables with the measured items (see attached the questionnaire for the full list of items). To improve the model fit, we will first examine the interitem correlations of measured variables for each latent variable and drop items with low factor loadings (i.e., $r < .30$; Tabachnick & Fidell, 2015).

Design Plan

Study type **Experiment**.

Blinding No blinding is involved in this study.

Study design A cross-sectional and between-subject design with two conditions.

Randomization Participants will be randomly assigned to use either the desirable-trait or undesirable-trait scanning strategies while browsing profiles on a dating website of their choice for 10 minutes.

The order of the outcome measure items will be randomized to control for a potential order effect.

Analysis Plan

Statistical models

We will first conduct a confirmatory factor analysis to examine the measurement model of the measure we created. We expect a multi-dimensional simple structure with four latent variables of engagement, ease of use, perceived success and partner evaluation forming independent factors with their corresponding items. We will then examine the structural model of the new measure. Specifically, we will test the relationship between regulatory fit indices and outcome by comparing two competing models: Our primary model will be regulatory fit indices (i.e., engagement and ease) predicting regulatory fit outcome (i.e., perceived success), and the alternative model will be both regulatory fit indices and outcome covarying with each other without causal relationships.

We will then test our regulatory fit hypothesis using structural equation modeling. We will test whether the profile-browsing condition moderates the relationship between regulatory focus and regulatory fit indices, which in turn predicts regulatory fit outcome with two moderated mediation analyses: One with promotion focus as a predictor and one with prevention focus as a predictor (see attached figures for model specifications).

It is possible that engagement and ease serve as regulatory fit outcomes and not as mediators. To test this, we will compare the moderated mediation models against a competing model where the profile-browsing condition only moderates the relationships between regulatory focus and both regulatory fit indices (i.e., engagement and ease) and outcome (i.e., perceived success).

Transformations

Prior to analysis, we will mean-center our continuous predictors (i.e., promotion and prevention focus) and effect-code profile-browsing condition variable ("+1" = desirable-trait screening condition & "-1" undesirable-trait screening condition).

Follow-up analyses

Inference criteria

We will evaluate our measurement and structure models using RMSEA and SRMR. A RMSEA between .05 and .08 will be considered as an acceptable fit (Maccallum,

Browne, & Sugawara, 1996). We will compare competing models using AIC to determine the parsimonious model for the regulatory fit hypothesis.

Data exclusion

1. Failed to comply with the experiment instruction
   Those who self-report being noncompliant with the instruction for our experimental conditions (e.g., not browsing online dating profiles for the full 10 minutes)

2. Missing, erroneous, and overly inconsistent responses
   Missing 50%+ responses
   Variance in participants' responses < 0.1

3. Failing attention-check tests Fail to correctly answer three attention-check items
4. Careless responses
   Those who self-report being careless or dishonest in their responses
   We will also exclude participants who provide nonsensical responses when asked to list desirable and undesirable traits in an open-ended form.

Missing data We will analyze our data with and without outliers and report both sets of results.

Assumptions (optional) Prior to analysis...

Exploratory analyses (optional) Enter your response here.

Analysis scripts (optional)

Other

Other (Optional)

References