Study Preregistration
2021-04-08

Working Title: *Exploring the effect of social distance on medium preferences in interpersonal communication: A replication of* Amit, Wakslak and Trope (2013, Experiment 2).

Description

The present research aims to replicate Amit, Wakslak and Trope (2013, Experiment 2) study which investigated the effect of social (psychological) distance on participants' medium preference for interpersonal communication. Participants were asked to pick out party invitations, dominated by either pictures or text, to send to socially close and socially distant guests. The results showed that participants preferred invitations dominated by pictures for 'close' guests and dominated by words for 'distant' guests. These findings support construal level theory (Trope & Liberman, 2010) which states that people use more abstract representations when mentalizing targets that are more psychologically distant. Amit et al.'s (2013) findings extended this to interpersonal communication. The present study will conduct a close and extended replication of Amit, Wakslak and Trope (2013, Experiment 2) to assess the results reproducibility.

Hypotheses

The present study will test the same hypothesis as stated in Amit et al. (2013, Experiment 2).

H1: *People's preference for using words and pictures will be influenced by the communication target's social distance. Specifically, when communicating with distant others, people will increasingly prefer to use words; when communicating with close others, people will increasingly prefer to use pictures.*

Stimuli and procedure

Participants will be asked to imagine planning a housewarming party. They will be presented with two optional invitation cards presented next to each other. One—the *picture card*—will contain a smaller box which has the word "text" written in it and a bigger box with a small image of a mountain (the symbol of a picture in Microsoft PPT). The second invitation—the *text card*—will have a small box with the symbol of a picture and a big box with the word "text". Participants will be asked to imagine that the text is "humoristic" and the picture "funny". Participants are presented with a guest list. Three guests from the list are socially close (e.g., "my best friend") and three are socially distant (e.g., "an acquaintance from the sports club"). There will also be 8 filler persons, so a total of 14 people in the list. Participants will be asked to choose which guest would get which invitation.

Changes made for replication:

A part of the sentence from the original instructions will be removed as this was aimed at an all-student sample ("i.e., "it's only a few blocks from the university and…").

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New versions of the invitations have been created because the original ones looked outdated. The original study specified that the smaller box on the invitation card was 2.6 x 3 cm and the bigger box was 6 x 3.3 cm. Since we will collect data in an online setting (instead of using paper and pencil as in the original study) we will not be able to make sure that the image size is held constant. For example, a participant may have zoomed in on the screen. However, to be as similar to the original ones as possible, the new invitation cards have the same proportions, similar colours and fonts.

In the original study, the picture card content was described as an image of the participant and his/her partner (i.e., "*of you and your girl-/boyfriend in your new apartm*ent"). The wording of the picture card may produce confounding effects on participants' card choice for two reasons: (1) the picture content was only described for the picture card and not for the text card, which could have a potential effect on card choice. (2) Participants may be more reluctant to send the picture card to distant (vs. close) guests because it might seem less appropriate to disclose their private lives to them, and not necessarily because of a difference in construal level. To test whether the wording for the picture card has a potential confounding effect on participants' card choice, we will manipulate the wording for the picture card, producing two different descriptions. One picture card description will include the original wording "*of you and your girl-/boyfriend in your new apartm*ent" used in Amit et al. (2013, Experiment 2), whereas the other description excludes this wording. Participants will be randomly assigned to *one* of two conditions ('inclusion' condition, 'exclusion' condition) in which they will read only *one* of the picture card descriptions.

The present study will use a mixed factorial design where the dependent variable is the number of text cards (ranging from 0 to 3) chosen in each of the two conditions (socially close, socially distant), social distance is the within-subject factor with two levels (close, distant) and the picture card description is the between-subject factor two levels (inclusion, exclusion).

Data collection

Data for this study will be collected as part of a larger data collection (see https://osf.io/svdp9/). Data will be obtained through electronic questionnaires via the Qualtrics online survey tool. Study completion time is estimated to 14 minutes based on a previous pilot study.

Instruments

The questionnaire (included in the OSF project files) includes the complete guest list (3 socially close, 3 socially distant, 8 filler guests) and will measure participants' preferred choice of invitation card (picture vs. text) to be sent to each guest. Participants will report their card choice for each guest by entering a 'P' for picture or 'T' for text in a designated text box.

Changes made for replication: The present study will use electronic questionnaires instead of paper-pencil questionnaires which was originally used in Amit et al. (2013, Experiment 2).

A comprehension check will assess participants' understanding of the instructions and will ask participants to report what statement (out of three possible) that best represents what the invitation card looked like. A manipulation check that corresponds to the pre-test used in Amit et al.

(2013, Experiment 2) will ask participants to indicate how socially/personally close they consider each guest to be to themselves, on a scale ranging from 1 (very far away) to 7 (very close).

To explore alternative explanations for invitation card choice, participants will answer four questions that ask: how comfortable they would be sending a picture of themselves and their partner to (1) a close friend, (2) a distant acquaintance; and how appropriate it would be for someone else to send a picture of themselves and their partner to (3) a close friend, (4) a distant acquaintance. The scale will range from 1 (very uncomfortable/inappropriate) to 7 (very comfortable/appropriate).
Additional measures include the Behaviour Identification Form (BIF: Vallacher & Wegner, 1989), which assesses personal preferences for how behaviours should be described, and the Ten-item Personality Inventory which measures the Big-5 using 10 items (TIPI: Gosling, Rentfrow, & Swann, 2003). The BIF and TIPI measures will be used to explore the extent to which participants' card choice may be moderated by individual differences.

Demographic information about participants' gender, age, occupation, and ethnicity will be obtained for descriptive purposes.

Sample recruitment and power analysis

Participants will be recruited from the survey panel Prolific. Participants will be paid 1.24£ for completing the study. Study completion time is estimated at 14 minutes based on a previous pilot, corresponding to an hourly wage of 5.31£. In addition, each participant will be given a bonus of .2£ which can be kept or donated.

Inclusion criteria: Completion of at least 50 studies on Prolific, approval rate of at least 95% on all completed submissions, fluent in English language. Only participants conducting the study on a desktop computer are eligible for participation.

Exclusion criteria: Participants who completed the pilot for the current study will be excluded from participation through a pre-screening on Prolific.

Sample size aim:
1000 participants will be recruited from Prolific. A sample size of 1000 was concluded satisfactory considering power needed to detect effects of interest and resource constraints. Sensitivity analyses indicate that, within each between-subjects condition (n = 500), this sample size will be sufficient to detect simple main effects of d = .16 with 95% power and d = 0.13 with 80%, with a paired t-test. For context, the original reported effect was approximately d = 0.93. Additionally, this sample size will be sufficient to detect between-group differences of d = 0.23 with 95% power and d = .18 with 80% power, with an independent samples t-test. Data collection will terminate once 1000 completed responses have been collected and the study will automatically go offline.

Data analysis

A significance level of $p < .05$ will be considered for all data analyses.

The data analysis will be performed using a mixed ANOVA with the number of text cards chosen for each type of guest (0-3) as the dependent variable, social distance (close, distant) as the within-subject factor and the inclusion/exclusion of picture content as a between-subject factor.

H1 will be supported if the mixed ANOVA shows a significant simple main effect of social distance within the 'inclusion' condition; that is, if participants choose the text cards more for 'distant' guests than for 'close' guests.

Data exclusion criteria

1. Data from participants who have failed to respond correctly to the comprehension check will be excluded.
2. Data from participants who have not completed the entire survey will be excluded.

Exploratory analyses

First, we will test interaction in the ANOVA to explore whether the effect of social distance on participants' card choice is moderated by picture card wording. Second, if we find statistically significant differences between the experimental conditions (close *vs.* distant) in the condition with the original picture wording, alternative explanations of the effect will be explored by examining the extent to which it can be accounted for by participants' ratings of the comfortableness and appropriateness of sending a picture of themselves and their partner to a close friend/distant stranger. Additional exploratory analyses may also be conducted. For example, we will reanalyze the data using a mixed effects logistic regression predicting the selection of a picture or text card for each target person, with random effects for each participant and each target person. Third, we will explore the extent to which an effect of social distance on participants' card choice is moderated by participants' scores on the BIF and the TIPI subscales.

References

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