Shared Reality Disruptions and the Associations with Close Relational Functioning and Individual Perceptions of the World:

Summary Report

Atara Lonn[a] and Dr. Cheryl Harasymchuk[a]

[a]Carleton University

Corresponding author email: ataralonn@cmail.carleton.ca

Background/Context

Shared reality describes the feeling that another person understands the world in the same way as yourself (Higgins et al., 2021). In other words, people can believe that they have similar opinions and thoughts about the world around them as others in their social sphere (e.g., similar sensory experiences, opinions about media, political orientations). Rossignac-Milon et al. (2021) demonstrated in a series of studies that shared reality is important for the promotion of high-quality close relationships, and the formation of close relationships is thought to involve the development of a shared reality (Rossignac-Milon & Higgins, 2018).

This project specifically focuses on the idea of "shared reality disruptions" in close friendships, or what happens when people believe that they share the same understanding of reality with their close friend and then something happens to create a realization that this is not actually accurate. Put differently, we want to examine the effects of challenges to shared reality within close friendships.

A few examples of shared reality disruptions:

- Someone initially thought that they shared similar political ideologies with their friend (e.g., both thought that liberal arts are important, both care about the environment, both agreed that taxes on rich people are a positive thing), and then they discover that their friend actually voted for the Conversative candidate in the last election.
- Someone initially thought that they had a mutual understanding with their friend about how to respond to a friendship situation, but then realized that their friend acted in a different way than they had discussed.
- Someone initially thought that their taste in media was the same, but then discovered that their friend did not like the same song as them.

As you might note from these examples, shared reality is topic-general (i.e., spans multiple topics and domains), and we are specifically interested in dyadic experiences of shared reality (i.e., amongst close friends in a dyad).

The aims of this project are to:

1) Explore descriptives in shared reality disruption experiences (frequency of events, which topic domains are most common, etc.).

2) Examine whether shared reality disruptions are perceived as more positive or negative for both the friendship and the self.

3) Explore whether these differences in positive/negative perceptions are moderated by perceived shared reality experienced with the close friend.

Hypotheses

We expect that shared reality disruptions will be perceived as more negatively than positively impacting both the friendship and the self. People who perceive higher (vs. lower) shared reality with their close friend will report that shared reality disruptions are especially negative due to heightened perceptions of threat/challenge to shared reality.

Methods

This project was part of a larger study on the effects of shared reality in close friendships. Participants from a university student sample ($N = 225$, after attention checks/exclusions) nominated a best/close friend and answered a series of questionnaires about their friendship, such as perceived shared reality (8-items; 1-7 Likert scale; $\alpha = .86$, $\omega = .86$), similarity (5-items; 1-7 Likert scale; $\alpha = .92$, $\omega = .92$), and closeness (inclusion of other in the self; 1-7 scale). The participants also indicated whether they had experienced at least one shared reality disruption with their friend in the past year. If the participants answered yes, they were presented with a series of follow-up questions about their experiences, including how many shared reality disruptions occurred in the past year, how frequently they tended to occur, and the types of shared reality disruptions (i.e., topic domain) that tended to occur from a close-ended list of eight different categories and a ninth "write-in" other category.

In terms of the overall effects of shared reality disruption events on the friendship and the self, participants were presented with five different constructs of interest: impact on friendship, evaluations of the friendship, trusting the best/closest friend's perceptions of the world, trusting your own perceptions of the world, and relational behaviours. The participants rated how positive and how negative shared reality disruptions were for each of these constructs on 7-point scales (where 1 = *Not at all [positive/negative]* and 7 = *Very much [positive/negative]*).
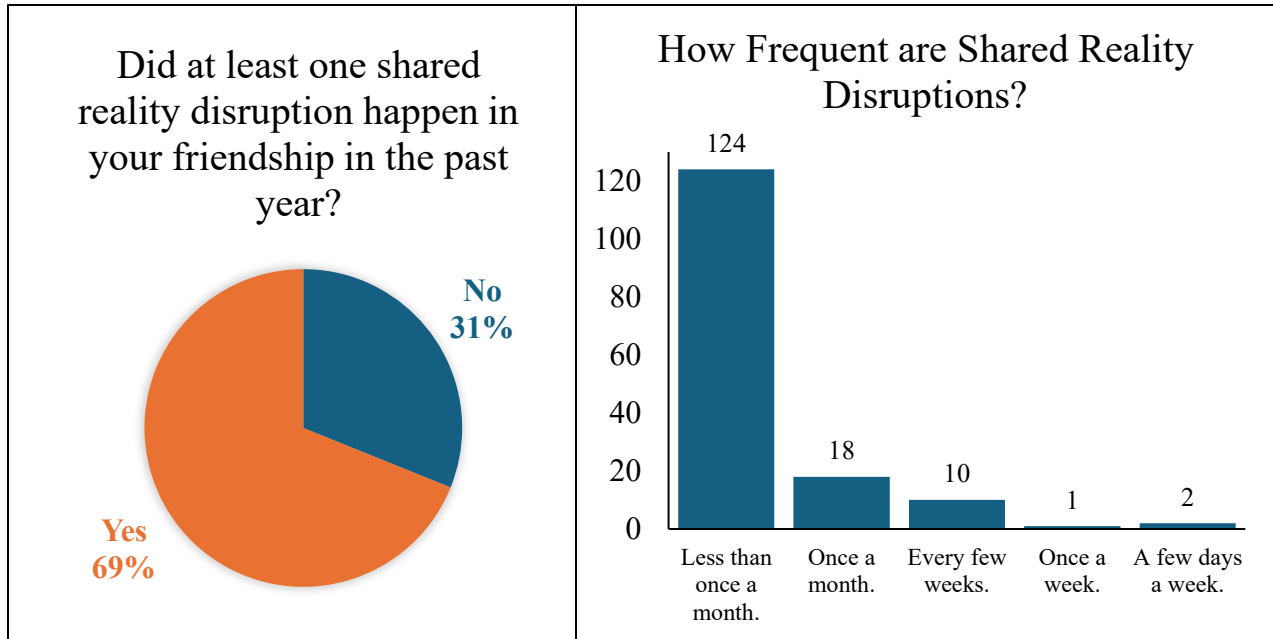
Results

The student sample primarily identified as White (57.8%), women (77.3%), and heterosexual (73.3%). They were on average 19 years old ($SD = 2.47$ years).
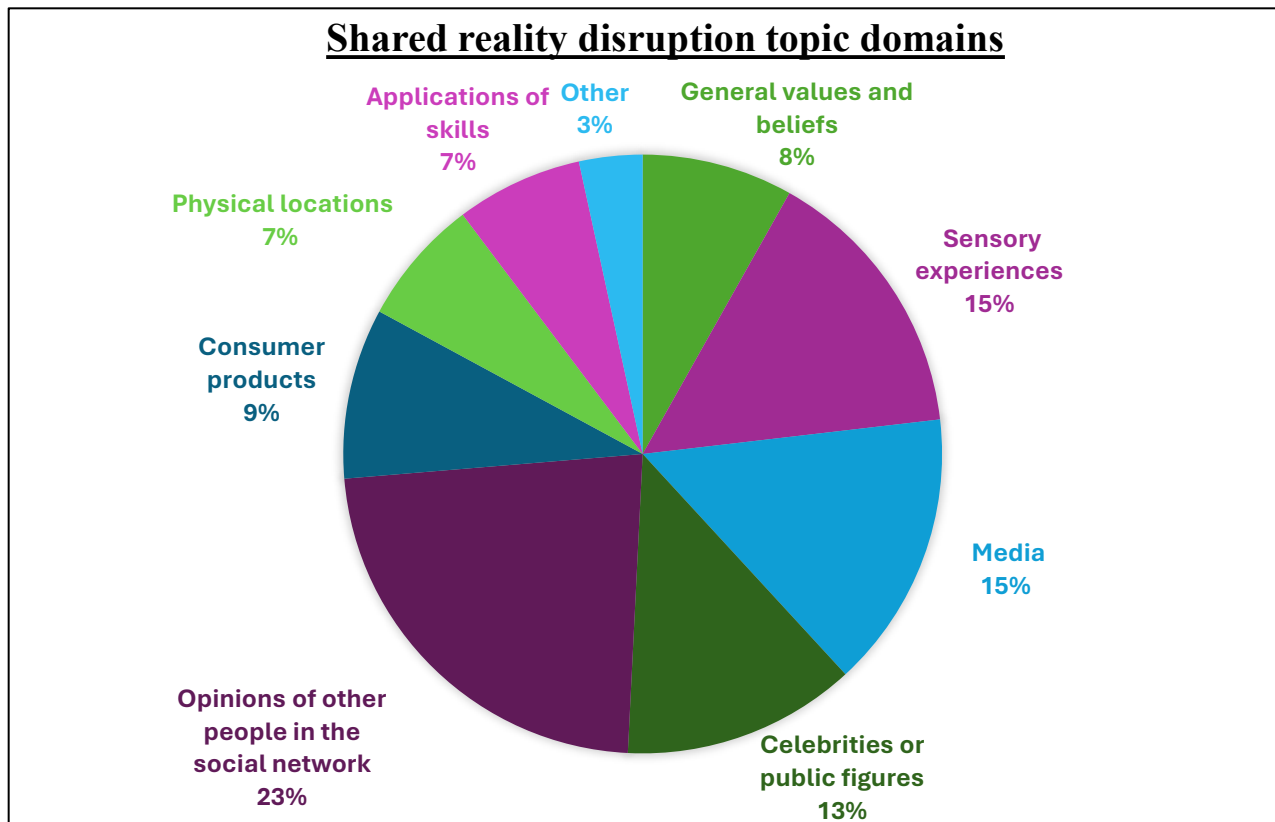
Participants were most likely to nominate a close friend that was their current classmate (29.1%) and/or former classmate/childhood best friend (18.5%). The length of the friendship was, on average, 7.44 years ($SD = 6.54$). The nominated close friend was most frequently White (60.4%), a woman (76.4%), and heterosexual (73.3%). They were on average 19 years old ($SD = 3.96$ years). The participants reported interacting with their best/closest friend most commonly multiple times during the day (45.3%), followed by a few days a week (23.6%), once a week (10.2%), once a day (8.4%), every few weeks (8.4%), once a month (3.6%), and – least commonly – less than once a month (0.4%).

Participants reported moderate-high levels of perceptions of shared reality ($M = 5.62$, $SD = 0.92$), perceived similarity ($M = 5.18$, $SD = 1.30$), and closeness ($M = 4.71$, $SD = 1.48$) with their best/closest friend.

Shared Reality Disruption Descriptives

Did at least one shared reality disruption happen in your friendship in the past year?

No 31%

Yes 69%

How Frequent are Shared Reality Disruptions?

Less than once a month.	Once a month.	Every few weeks.	Once a week.	A few days a week.
124	18	10	1	2

A little over two-thirds of our sample (*n* = 155) reported experiencing at least one shared reality disruption event in their relationship with their best/closest friend in the past year. However, these events were not considered to be very frequent, with the majority of participants indicating that they happened less than once a month.

Shared reality disruption topic domains

- **Applications of skills** 7%
- **Other** 3%
- **General values and beliefs** 8%
- **Sensory experiences** 15%
- **Physical locations** 7%
- **Media** 15%
- **Consumer products** 9%
- **Celebrities or public figures** 13%
- **Opinions of other people in the social network** 23%

The most frequent shared reality disruption events encompassed 1) opinions about other people in the social network, 2) perceptions of media, and 3) sensory experiences such as taste and smell.

The participants reported experiencing an average of five shared reality disruptions in the past year (*Med* = 2.5, *SD* = 10.59). The number of reported shared reality disruptions in the past year ranged from 1 – 100.

Interestingly, participants who reported that they had not experienced a shared reality disruption event in their friendship over the past year reported heightened levels of closeness with their best/closest friend (*M* = 5.13, *SD* = 1.34) relative to participants who had experienced a shared reality disruption with their best/closest friend in the past year (*M* = 4.52, *SD* = 1.51), $t(141.56) = 3.01$, $p = .003$, $d = 0.42$, 95% CI [0.21, 1.02]. However, there were no significant differences in either reported perceived shared reality or similarity across participant groups ($p > .10$).

There were no significant links ($p > .10$) found between demographic characteristics (e.g., gender, age, relationship length, contact frequency) and whether participants reported at least one shared reality disruption occurring in the past year, how many shared reality disruptions were reported or how frequently they were experienced.

Shared Reality Disruption Positivity vs. Negativity – Main Effect Models

As each participant was asked to respond to both the positive and negative prompts (i.e., repeated measures design), the data were analyzed using multilevel modeling, with observations nested within participants. Condition was dummy coded (0 = positive and 1 = negative). Surprisingly, for each of the main effect models (i.e., the models without the shared reality moderator), participants rated shared reality disruptions as being significantly ($p < .001$) more positive for the friendship and the self as compared to negative (see below figures and the summary table).
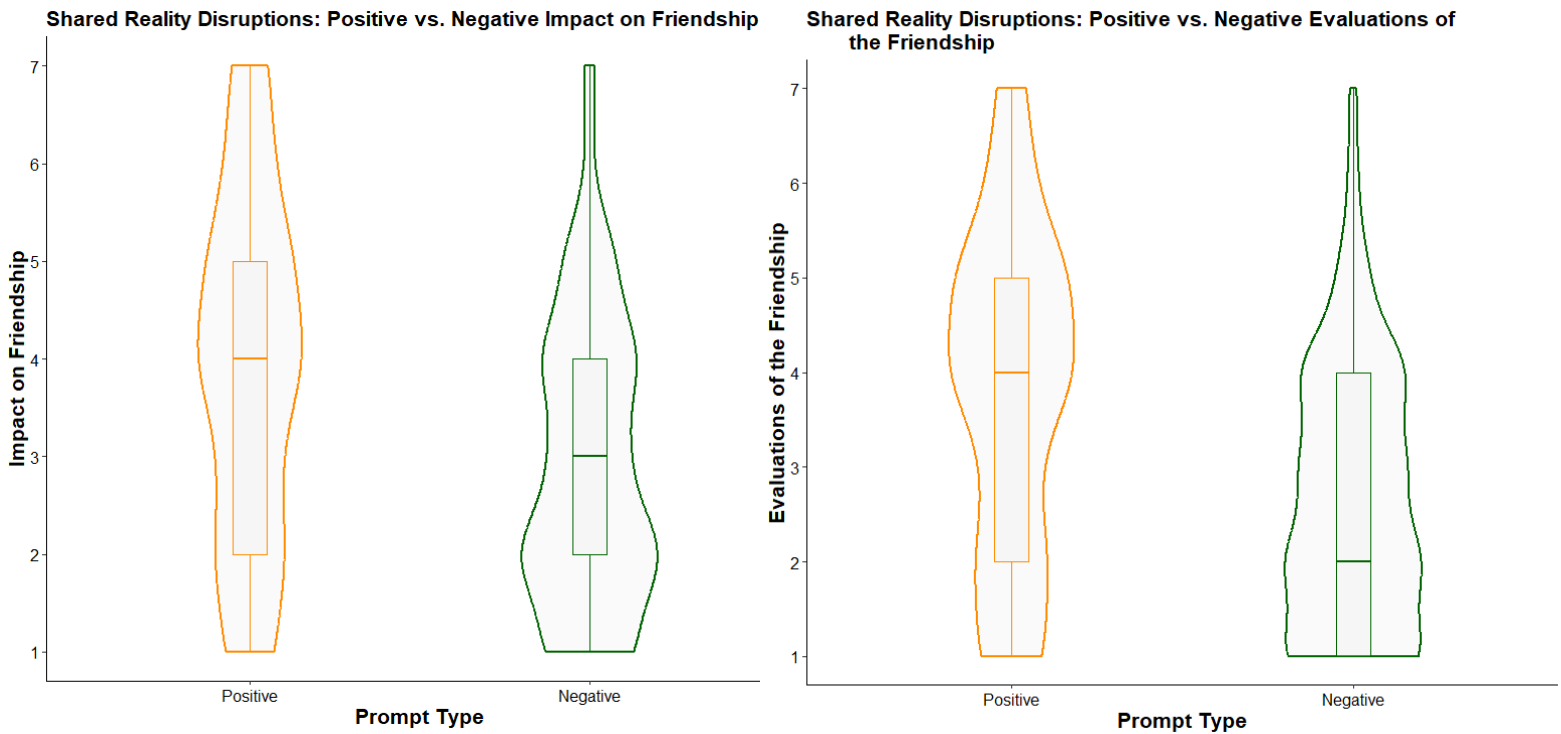
Shared Reality Disruptions: Positive vs. Negative Trusting Friend's Perceptions of the World
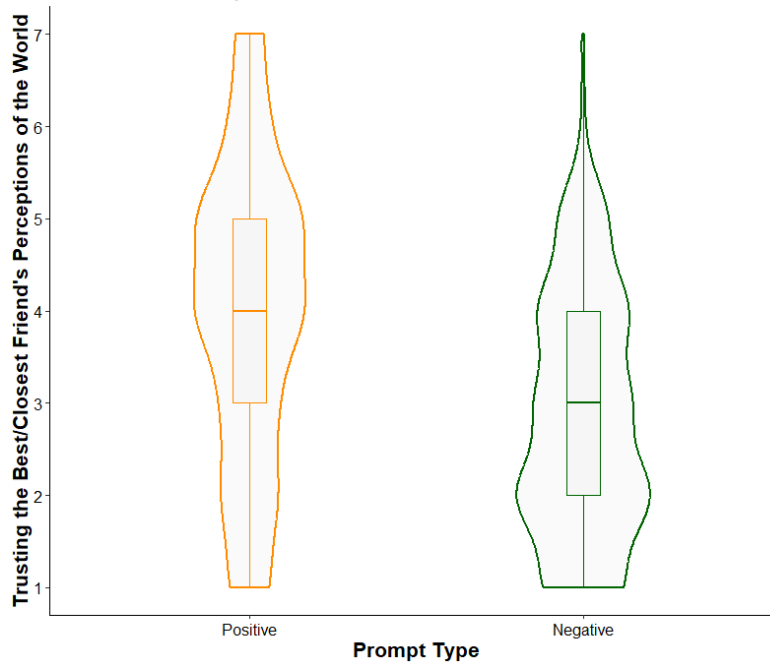
Shared Reality Disruptions: Positive vs. Negative Trusting Own Perceptions of the World
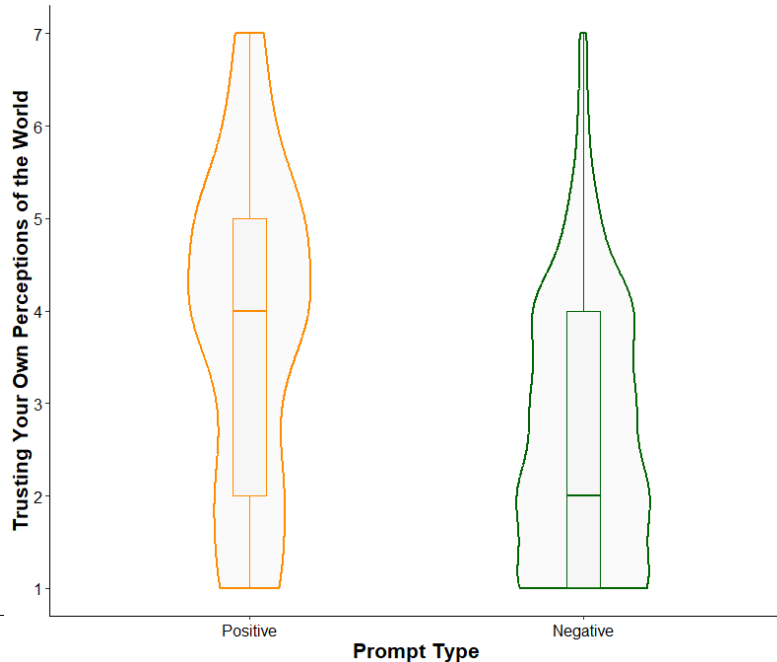
Shared Reality Disruptions: Positive vs. Negative Relational Behaviours
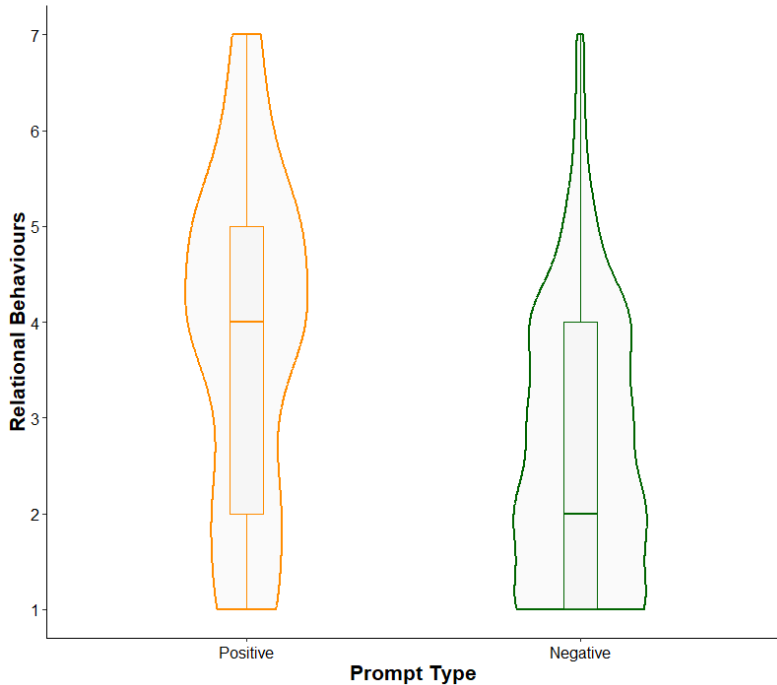
Table 1

Regression Models Examining the Effects of Positive or Negative Prompt Type on Evaluations of Friendship and Self Outcomes When Experiencing Shared Reality Disruptions

Outcome	Simple model
Impact on friendship	-0.99 (0.19)*** [-1.36, -0.63]
Evaluations of the friendship	-1.16 (0.17)*** [-1.50, -0.81]
Trusting the friend's perceptions of the world	-1.15 (0.17)*** [-1.48, -0.82]
Trusting own perceptions of the world	-1.05 (0.17)*** [-1.38, -0.71]
Relational behaviours	-1.61 (0.18)*** [-1.96, -1.26]

Note. All analyses were conducted as multilevel models with observations nested within participants. The "Simple model" column displays the effect of prompt type (mean difference between negative and positive prompts) on each of the outcome variables. As the prompt type condition variable was dummy coded (0 = positive and 1 = negative), negative effects indicate that mean scores were higher for the positive prompt as compared to the negative prompt, and vice versa for positive effects. Each cell contains the beta coefficient, standard error in parentheses, and 95% CI in brackets.

*$p < .05$, **$p < .01$, ***$p < .001$.

Shared Reality Disruption Positivity vs. Negativity – Shared Reality as a Moderator

For four out of the five outcomes of interest, there was either a significant ($p < .05$) or marginal ($p < .10$) interaction between shared reality and dummy-coded condition type (see Table 2). When the interaction terms were probed, we observed attenuation effects for all of the outcomes. Specifically, as seen in the below figures, there were larger differences in how positive vs. negative the shared reality disruption events were considered for people with higher perceptions of shared reality (+1 SD) as compared to people with lower perceptions of shared reality (-1 SD).

Table 2

Regression Models Examining the Effects of Prompt Type on Evaluations of Friendship and Self Outcomes When Experiencing Shared Reality Disruptions, as Moderated by Perceptions of Shared Reality

Outcome	Interaction effect
Impact on friendship	-0.28 (0.20) [-0.68, 0.11]
Evaluations of the friendship	-0.41 (0.19)* [-0.78, -0.03]
Trusting the friend's perceptions of the world	-0.52 (0.19)** [-0.88, -0.15]
Trusting own perceptions of the world	-0.33 (0.19)† [-0.71, 0.05]
Relational behaviours	-0.41 (0.20)* [-0.80, -0.02]

Note. All analyses were conducted as multilevel models with observations nested within participants. The models were constructed with condition type, perceptions of shared reality, perceived similarity, and closeness as included variables. The "Interaction effect" column displays the results of the interaction between prompt type condition and shared reality perceptions. Each cell contains the beta coefficient, standard error in parentheses, and 95% CI in brackets.
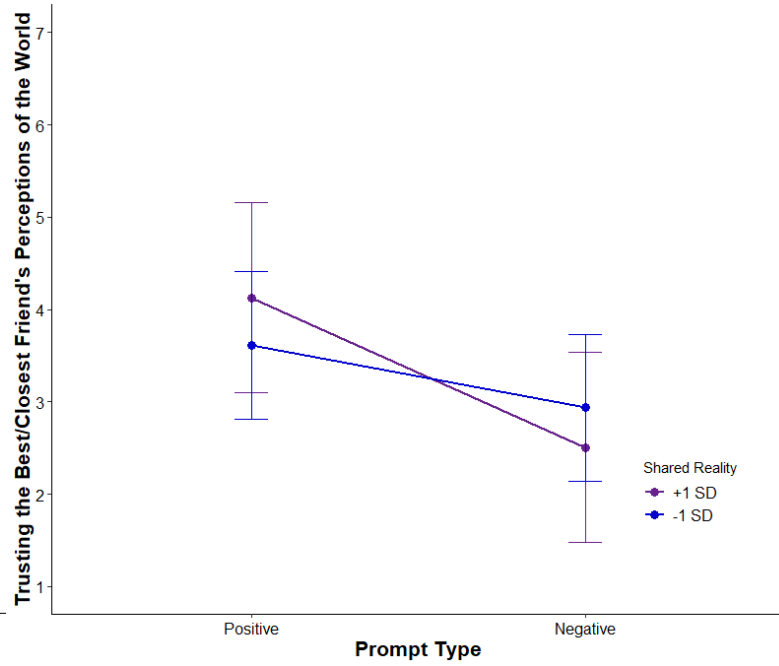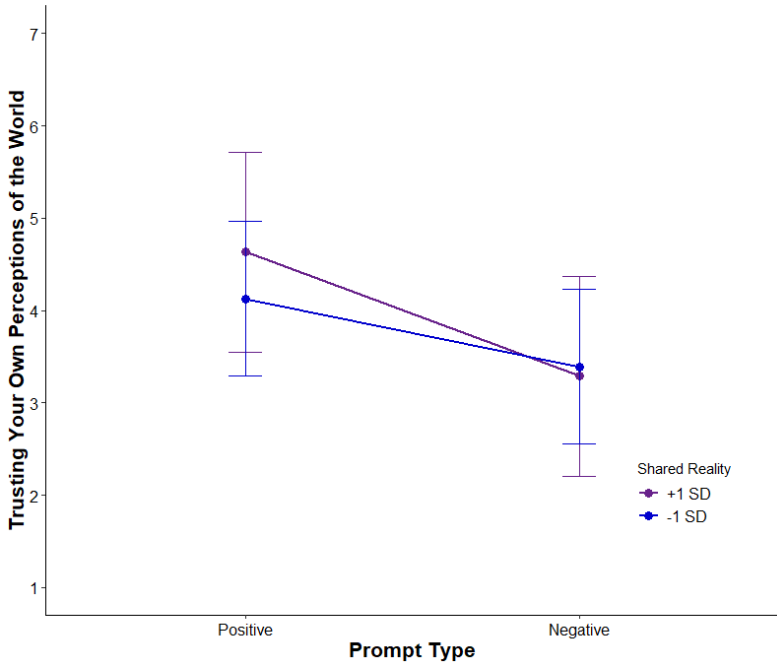*$p < .05$, **$p < .01$, ***$p < .001$.
†$p = .09$

Shared Reality Disruptions: Positive vs. Negative Evaluations of the Friendship
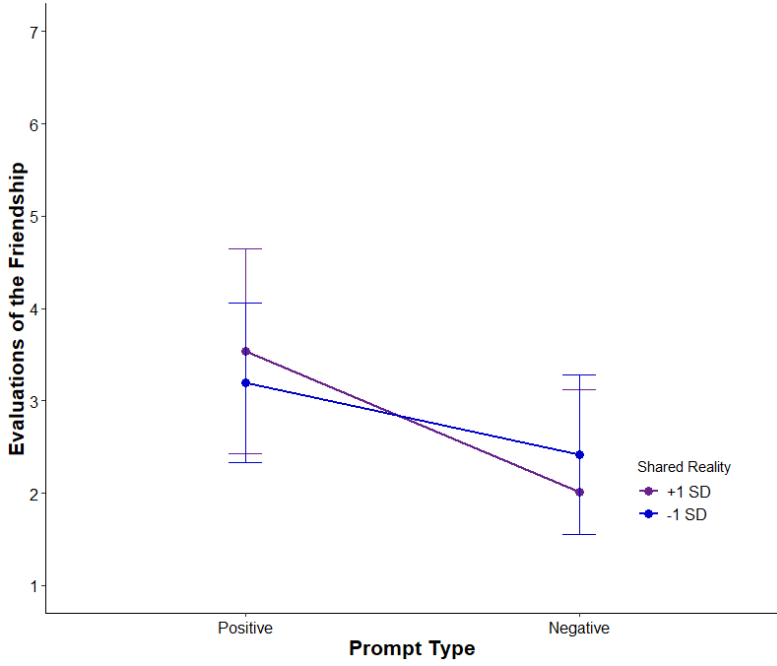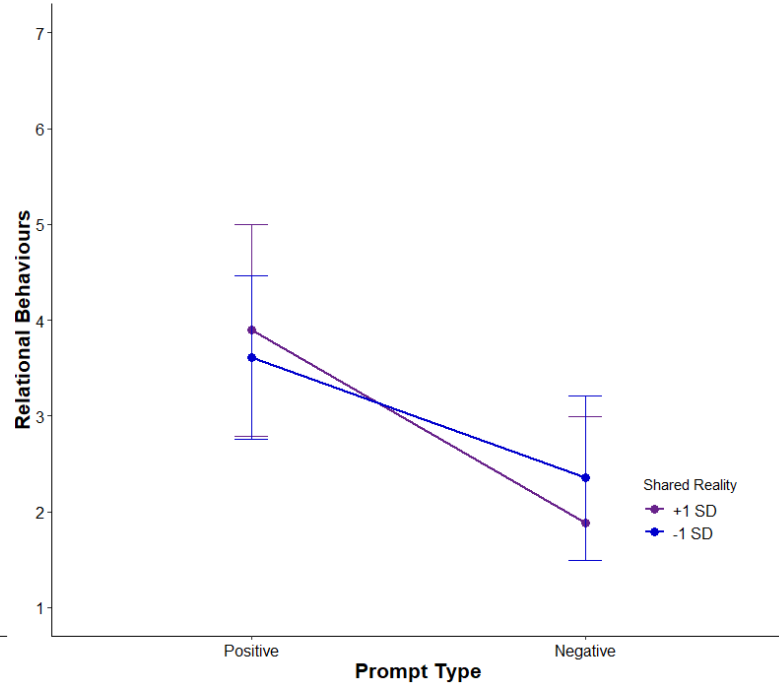

Shared Reality Disruptions: Positive vs. Negative Trusting Friend's Perceptions of the World

Shared Reality Disruptions: Positive vs. Negative Trusting Own Perceptions of the World

Shared Reality Disruptions: Positive vs. Negative Relational Behaviours

Discussion/Conclusion

Shared reality disruptions are commonly, but not necessarily frequently, experienced in close friendships amongst emerging adults in university. Within our student sample, the most common reported shared reality disruption events concerned perceptions of other people within a shared social network, understandings of media, and sensory experiences such as taste and smell. Contrary to our initial hypothesis, participants rated the shared reality disruptions to be generally more positive than negative for the friendship and the self. Moreover, people who reported more (vs. less) perceived shared reality with their close friend rated shared reality disruptions to be particularly positive experiences as compared to negative experiences.

One potential explanation for our findings could relate to the immediate impacts of shared reality disruptions as compared to general impacts over time. On an immediate timescale, shared reality disruptions may be perceived negatively and have more negative than positive impacts as people process the implications of these disruptions (e.g., prompt relational conflict and self-doubt). However, close friends need to work through their differences to restore and repair their relationships. They might even consider their friend's different perspectives and incorporate them into a new understanding of shared reality, which helps to explain why the moderation effect showed that these experiences were more positive for people with higher vs. lower perceptions of shared reality. Therefore, when considered generally, challenges to shared reality such as shared reality disruptions may actually be beneficial to close friendships and create stronger social bonds over time.

It is important to note that we surveyed a student sample cross-sectionally in this preliminary investigation. This is especially pertinent to the question of generalizability for the descriptive and quantitative results, as well as whether these findings truly do reflect experiences over time. In other words, do people in other life stages (i.e., established adults who are not in university) have similar shared reality disruption experiences in their friendships, and are these events similarly considered to be more positive than negative for the friendship and the self in general/over time? We are considering the use of a daily diary design (combined with a follow-up survey to be assessed several months after the diary phase) to further examine these questions in a community sample.

References

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