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The role of target-specific shared reality in interpersonal interactions and protective health behaviours

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Abstract

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Shared reality-the experience of sharing common inner states (e.g. feelings, beliefs) with other people about a given topic or target—is a ubiquitous human experience. With research on the construct of shared reality burgeoning in various domains, we examined a fundamental, yet understudied topic: the role of experiencing shared reality about a target in real-time conversations and real-world contexts. Across five studies conducted in various contexts (total N = 973), we developed a measure of target-specific shared reality (SR-T) and examined its role in interpersonal interactions and protective health behaviours. In our initial Studies (1a-2), we developed a measure of SR-T and establish psychometric, construct and criterion validity. In Study 3, we established predictive validity by investigating the link between SR-T and important interpersonal interaction constructs (e.g. interpersonal rapport and epistemic trust in the partner). In Study 4 (preregistered), SR-T moderated the effect of close others' attitudes on vaccination and precautionary behaviours against COVID-19 during the Omicron-variant peak (2022). Our findings suggest that the experience of SR-T, assessed with a valid measure, is linked to important dimensions of interpersonal interactions and health decisions in the real world.

KEYWORDS

interpersonal relationships, shared reality, social influence

1 | INTRODUCTION

Shared reality is a ubiquitous social experience, permeating everyday life—from the experience of sharing emotional responses to a musical performance to sharing the same opinion of a political candidate. The construct of shared reality was initially introduced in the 1990's (Hardin & Higgins, 1996; Higgins, 1992) and has since attracted increasing empirical attention. An initial body of research focused on the impact of shared reality in interpersonal communication on communicators' attitudes, beliefs and memories (see Echterhoff & Higgins, 2017; Echterhoff, Higgins, et al., 2009; and Echterhoff & Higgins, 2021 for reviews). In recent years, the concept of shared reality has been fruitfully applied to various phenomena across different fields (see Higgins et al., 2021 for a review and the special issue by Echterhoff & Higgins, 2018). However, little work has investigated the experience of shared reality in real-time conversations or real-world contexts. Research in this area has been held back by the lack of a validated measure of experienced shared reality about a target.

In this paper, we first present a novel measure of the experience of shared reality about a target along with results on its psychometric,

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construct and criterion validity. We then establish predictive validity regarding key relational and epistemic interpersonal constructs in a dyadic, real-time conversation context, such as interpersonal rapport and trust in the partner's beliefs and judgements. Finally, we demonstrate the utility of this measure in a real-world context, specifically regarding vaccination and protective health behaviours (e.g. masking, testing) at the height of a global pandemic.

1.1 | Shared reality theory and scope of research

Humans are profoundly motivated to seek and establish shared reality (Higgins, 1992; 2019)-the perception of having inner states, such as judgements, attitudes, or feelings, in common with one or more others about a target (Echterhoff, Higgins, et al., 2009). People are driven to establish these shared inner states about the world to fulfil their fundamental epistemic need to understand the world and make sense of their experiences, and their fundamental relational need to belong and connect with others (Echterhoff & Higgins, 2021; Higgins et al., 2021). For example, when making sense of a new public policy, people may form their opinion of the policy through the process of discussing it with their friends and family. The perception of having the same feelings, beliefs and opinions about this policy as another person would constitute the experience of shared reality. As a result of establishing this shared reality, people should come to feel both more certain of their opinions of the policy and closer to each other, thereby reducing uncertainty in their surroundings and strengthening their interpersonal connection.

Shared reality has been conceptually and empirically distinguished from adjacent constructs in several ways (Bebermeier et al., 2015; Echterhoff & Higgins, 2017; Echterhoff, Higgins, et al., 2009; Hogg & Rinella, 2018; Shteynberg et al., 2023). For example, common ground refers to mutually understood conversational references and background information rather than shared inner states such as judgements and feelings about a target (Clark, 1996; Echterhoff, Higgins, et al., 2009). As another example, the perception of shared emotion would only constitute shared reality if it was experienced in response to the same target (e.g. shared elation about election results) rather than in response to different targets or 'caught' from another person. In the case of mood contagion, there is often no clear target-thus, neither shared emotion nor mood contagion necessarily meet the criteria of shared reality, that is, a commonality of inner states about a target (Echterhoff, Higgins, et al., 2009). Shared reality also differs from constructs like subjective norm compliance in that people may comply with what they perceive to be a normative behaviour while personally holding negative views towards this behaviour, that is, without sharing the same inner states about it (Bebermeier et al., 2015; Echterhoff & Higgins, 2017).

Research has demonstrated the role of shared reality in numerous psychological phenomena, spanning the formation of attitudes, judgements and memory (e.g. Echterhoff, Higgins, et al., 2009; Shteynberg, 2018; Steinmetz & Pfattheicher, 2017), the development of social thinking (e.g. Higgins, 2016), social identity (e.g. Hogg & Rinella, 2018), interpersonal relationships (e.g. Andersen & Przybylinski, 2018; Elnakouri et al., 2023; Enestrom et al., in press; Rossignac-Milon & Higgins, 2018; Rossignac-Milon et al., 2021), intergroup relations (e.g. Echterhoff et al., 2017; Skorinko & Sinclair, 2018), culture (e.g. Kashima et al., 2018; Lyons & Kashima, 2003) and politics (e.g. Jost et al., 2008; Stern & Ondish, 2018). The expanding range of applications of the shared reality concept testifies to both its utility in research and the pervasiveness of shared reality across domains.

Despite this expansive growth, two main issues still await closer investigation. First, no research has yet established a psychometrically validated and rigorous measure of target-specific shared reality (SR-T), holding back research in this area. Though prior research has used various self-report items to assess different aspects of shared reality (e.g. Bratanova & Kashima, 2014; Hellmann et al., 2011; Koudenburg et al., 2013; Stern et al., 2014), the items used in these studies relied on face validity and internal consistency, and were not designed to measure the perceived commonality of inner states about a target. SR-T captures the core definition of shared reality, that is, sharing inner states in common about a target (Echterhoff, Higgins, et al., 2009). Currently, the only validated measure of shared reality assesses the experience of generalised shared reality (SR-G; Rossignac-Milon et al., 2021) about the world at large (e.g. 'We typically think of things at the exact same time'; 'We have created our own reality'), which does not capture shared inner states about particular targets. SR-T and SR-G are conceptually distinct: people may experience a high sense of shared reality about the world at large (high SR-G) with a particular relationship partner, while disagreeing about particular topics (low SR-T's). In five studies, we aimed to develop a self-report scale to measure SR-T, evaluate its psychometric properties, establish construct validity and demonstrate its utility across different contexts.

Second, more research is needed to examine the role of experienced shared reality about a target in important arenas of social life, for which the concept was originally developed (see Hardin & Higgins, 1996) and to which the construct of shared reality is fundamentally relevant: real-time conversations and real-world contexts. So far, albeit across different domains, research on shared reality has focused primarily on the effects of shared reality on attitudes, beliefs and memories (Higgins et al., 2021). It remains to be shown that the experience of shared reality about a target relates to conceptually relevant interaction variables in real-time conversation (e.g. closeness, desire to interact again) and to personal decisions in real-world contexts—for example, the decision to vaccinate and engage in protective health behaviours at the height of a global pandemic.

Extensive research on subjective social norms supports the idea that decisions about vaccination and protective health behaviours are informed by perceptions of other people's behaviours and expectations (Baeza-Rivera et al., 2021; Conner & Sparks, 2005; Ham et al., 2015; Jetten et al., 2012; McEachan et al., 2011; Sheeran et al., 2016; Winter et al., 2021). Of primary relevance, Rabb et al. (2022) recently found that one's perception of close others' intention to vaccinate predicted one's own vaccination intent (and behaviour), and that these effects extended beyond the effects of one's perception of other social groups' vaccination intent (e.g. one's neighbourhood). We theorised that shared reality should *moderate* the effect of one's perception of close others' attitudes towards vaccination on one's own vaccination behaviour. This is because COVID-19 protective behaviours and vaccination involve widespread uncertainty and ambivalence (Kreps & Kriner, 2020; Troiano & Nardi, 2021; Vergara et al., 2021), and because the experience of shared reality is a key way in which people reduce uncertainty, allowing them to feel confident in their decisions (Hardin & Higgins, 1996; Rossignac-Milon et al., 2021; Schachter & Singer, 1962). Specifically, we predicted that one's perception of close others' attitudes should be most predictive of one's own behaviour when one experiences a sense of shared reality with these close others. That is, rather than directly translating close others' attitudes into their own behaviour, people calibrate their behavioural adoption using their experience of shared reality.

1.2 Overview

To examine these hypotheses, we conducted a series of studies to develop and validate a measure of SR-T and examine its role in realtime interpersonal interactions and its utility in real-world contexts. In Studies 1a and 1b, we developed a psychometrically sound set of items and conducted an initial test of construct validity by showing that people report higher SR-T with someone who shared (vs. did not share) their inner states about something. Next, in Study 2 we established criterion validity by demonstrating that SR-T closely tracks a central, well-established marker of shared reality creation: the extent to which participants' memory of a target person aligns with their interaction partner's attitudes about this person.

In Study 3, we demonstrated predictive validity by showing that, in the context of a live conversation between newly acquainted dyads, SR-T (over and above SR-G) predicts key relational constructs (e.g. interpersonal rapport, desire to interact again) and key epistemic constructs (e.g. certainty, epistemic trust in the partner). Additionally, according to classic research on interpersonal processes, people are more (vs. less) likely to trust and feel close to others who seem more (vs. less) similar to them regarding attributes such as age or personality (e.g. Arkin & Burger, 1980; Cialdini, 2001; Montoya & Horton, 2013). To distinguish effects of SR-T from possible effects of perceived similarity of personal attributes, we examined whether SR-T predicts relational and epistemic variables over and above perceived similarity of personality traits and more generally feeling like the same type of person.

Having established and validated a measure of SR-T, in Study 4 (preregistered) we demonstrate the utility of the SR-T in a real-world context: we show that SR-T interacts with close others' attitudes to predict protective health behaviours (e.g. masking, testing) and vaccination behaviour (obtaining at least one shot of the vaccine and getting a booster shot) against COVID-19 during the Omicron-variant peak (January 2022). Our findings suggest that the experience of SR-T relates to important dimensions of interpersonal interaction and everyday decisions about public health behaviours.

Materials, data and code for all studies can be accessed on OSF (https://osf.io/pc8hy/). For all studies, we report all manipulations, mea-

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sures and exclusions. Individual preregistration links or links to full study materials are provided in the 'Methods' section of relevant studies.

2 | STUDIES 1a AND 1b

The aims of Studies 1a and 1b were to establish construct validity for a novel measure of SR-T by testing whether participants reported greater SR-T with someone who shared (vs. did not share) their inner states about a target. To develop SR-T, we first reduced an initial item pool through exploratory factor analysis (EFA; Study 1a) and then assessed the reduced item pool using confirmatory factor analysis (CFA; Study1b). To explore convergent validity, we analysed the associations between SR-T and conceptually related measures: relational measures (e.g. relational motivation, Inclusion of Other in the Self [IOS]), and epistemic measures (e.g. epistemic trust).

2.1 | Methods

Given their overlap, the Methods and Results for Studies 1a and 1b are reported in one section. We followed key steps of scale construction: item generation (see the Supporting Information for details); examination of construct validity; EFA; CFA and re-examination of construct validity (DeVellis, 2016). We compiled items in the extant literature that have been used to capture the experience of SR-T and adjacent constructs commonly measured in the shared reality literature, such as epistemic trust and relational motivation (see Table 1, e.g. 'I think that [partner] and I are on the same wavelength with regard to [target person/s]', or 'I feel the same way about [target person/s] as [partner] does') (Echterhoff et al., 2008; Echterhoff, Lang, et al., 2009; Hellmann et al., 2011; Lun et al., 2007; Pierucci et al., 2014).

2.1.1 | Participants and design

We based our sample size requirements on recommendations for conducting factor analysis (Kyriazos, 2018). Based on our analyses in simsem (Jorgensen et al., 2018), a sample of 200 would grant over .95 power for CFAs given five indicators with at least $\lambda = .600$. To allow for sample shrinkage of ~15%, we collected at least 230 observations in each study. Across Studies 1a and 1b, we recruited a total of 489 participants, using Crowdflower, 430 of whom passed our attention check and were retained (mean age = 36.03 years; SD = 12.15; $n_{female} = 232$; $n_{other} = 1$).

2.1.2 | Procedure

To manipulate perceived shared inner states, participants chose several times between two equally qualified job candidates (as pretested,

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TABLE 1 Descriptive statistics and EFA of the initial item pool (Study 1a).

	М	SD	γ1	γ2	F1	F2	F3	F4
C1: I feel that I share Michael's view of the candidates.	4.16	1.83	16	83	.933			
C2: Michael and I see things in much the same way.	4.02	1.86	04	-1.05	.990			
C3: Michael and I share the same thoughts and feelings about the candidates.	4.00	1.84	08	89	.945			
C4: I agree with Michael's judgements about the candidates.	4.45	1.68	16	80	.736			.231
C5: I agree with Michael's attitudes towards the candidates.	4.43	1.55	13	49	.681			.234
C6: I feel that my view harmonises with Michael's view of the candidates.	4.17	1.79	13	88	.977			
*C7: I think that Michael and I are on the same wavelength with regard to the candidates.	4.06	1.94	14	-1.07	.970			
$^{*}\mbox{C8:}$ I feel the same way about the candidates as Michael does.	4.06	1.83	10	96	.924			
* C9: I agree with Michael's point of view of the candidates.	4.25	1.76	24	73	.825			
* C10: Michael and I see the candidates in the same way.	3.99	1.87	08	-1.03	.960			
* C11: I agree with Michael's perception of the candidates.	4.28	1.75	26	71	.816			
C12: I could empathise with Michael's perception of the candidates.	4.78	1.59	57	12	.463	.267		.304
E1: Michael's judgement helped me to form an impression about the candidates.	3.55	1.72	.15	94			893	
E2: Michael helped me clarify my thoughts about the candidates.	3.61	1.71	.07	74			964	
*E3: One can rely on Michael's impression of the candidates.	4.31	1.56	19	39	.412		373	.359
*E4: Michael is a credible source of information with regard to the candidates.	4.34	1.55	31	30	.404		404	.353
E5: I feel more confident about my responses to the candidates after learning about Michael's responses.	4.32	1.67	07	74			481	
*E6: Michael is a person whose judgement about the candidates one can trust.	4.39	1.53	12	44	.390	.201	341	.333
E7: Michael is a person whose judgement about other people one can trust.	4.43	1.44	18	15	.377		369	.273
R1: I feel close to Michael.	3.32	1.79	.35	93	.364	.283	416	359
R2: I feel closely connected to Michael through our communication.	3.24	1.73	.36	82	.372	.314	384	391
R3: I would want to be friends with Michael.	4.07	1.52	04	04		.764		
*R4: I want to get along with Michael.	4.45	1.47	36	10		.889		
R5: I feel comfortable working together with Michael.	4.58	1.48	44	.13		.808		
*R6: I think Michael is a likable person.	4.52	1.41	28	.09		.758		
*R7: I would like to spend more time with Michael.	3.99	1.60	16	36		.734	203	243

Note: γ_1 = skewness; γ_2 = excessive kurtosis; 'C' indicates that we expected this item to load on a 'perceived commonality' factor; 'E' means 'epistemic trust' and 'R' means 'relational motive'. Loadings smaller than .20 are not reported. Items bolded and marked with an '*' represent the final scales for SR-T, Epistemic trust and Relational motivation.

n = 24) for a corporate middle management position and were informed that they would be paired with another participant (Michael) for the task. They were randomly assigned to hear that Michael selected the same candidate or not (and that Michael was also informed of their own choice). There were four rounds and feedback was manipulated between groups: high (4/4 agreements), moderate (2/4 agreements) and low commonality (0/4 agreements). Afterwards, participants rated their agreement (1 = strongly disagree; 7 = strongly agree) with items in the potential SR-T pool. Additionally, participants completed the IOS (Aron et al., 1992), in which they choose between a set of increasingly overlapping circles representing their relationship with Michael, along with other measures (see the Supporting Information). The procedure for Study 1b was identical to that of Study 1a, except for different questionnaires for exploring convergent and discriminant validity (see the Supporting Information).

TABLE 2 Results of the uni-factorial confirmatory factor analyses (Studies 1b, 2 and 3).

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Model		χ^2 (df)	р	CFI	TLI	RMSEA [90% CI]	SRMR
SR-T	Study 1b	2.19 (5)	.822	1.000	1.010	0.000 [0.000, 0.000]	0.005
	Study 2	2.70 (5)	.747	1.000	1.062	0.000 [0.000, 0.193]	0.029
	Study 3	52.80 (34)	<.001	0.977	0.969	0.073 [0.050, 0.094]	0.044

2.1.3 | Analysis plan

We conducted all analyses in *lavaan* (Rosseel, 2012). For the EFA, we first ran Principal Axis Factoring with Oblimin rotation. Second, we employed parallel analysis (PA; Hayton et al., 2004), which compares eigenvalues based on random correlation matrices parallel to the empirical data. For the CFA, we used the robust maximum likelihood estimation method (MLM) with Satorra and Bentler's (2001) scaled χ^2 . We also tested for measurement invariance across commonality groups (see the Supporting Information).

2.2 Results

2.2.1 | Item characteristics and EFA

In Study 1a, the EFA revealed one factor explaining the majority of the variance (60.80%), with the second (10.76%) and third (5.67%) factors of less importance. PA provided evidence for a two-, potentially a three-factor solution (see the Supporting Information for details). As can be seen from Table 1, the items loading strongly on the primary factor concern the experience of SR-T (e.g. 'I think that X and I are on the same wavelength with regard to Y'.). The epistemic trust and relational motivation items (primarily taken from Echterhoff et al., 2008; Echterhoff, Lang, et al., 2009; Hellmann et al., 2011; Lun et al., 2007; Pierucci et al., 2014) loaded onto Factors 2 and 3, confirming that these constructs are separate from SR-T (see the Supporting Information for more tests of discriminant validity).

Thus, as theorised, we obtained evidence for a strong one-factorial solution for SR-T, with Items 1, 2, 3, 6, 7, 8, 9, 10 and 11 yielding high loadings on this factor ($\lambda > .800$). We eliminated Items 1 and 2, as they exhibited exceptionally high squared multiple correlations (>.90), and Item 3 because it included both thoughts and feelings simultaneously, which could add ambiguity to the assessment. Finally, we removed Item 6 because it had the lowest factor loading in a second EFA of the six remaining items. See the Supporting Information for tests of skewness/kurtosis and measurement invariance.

2.2.2 | Construct validity

The scale constructed in Study 1a fit very well in Study 1b (see Table 2 and the Supporting Information for details about fit indices). Factor loadings were high, between .929 and .950, and internal consistency was very high $\omega = .976$. Factor loadings of remaining items revealed

latent factors relating to Epistemic Trust and Relational Motivation (see the Supporting Information).

2.2.3 Diagnostic validity: Sensitivity to manipulation of shared inner states

To assess construct validity, we tested whether SR-T would reflect differences induced by our commonality manipulation. Indeed, SR-T scores were significantly higher in the high-commonality (vs. moderate vs. low-commonality) condition in both studies, $F_{\text{Study 1a}}(2, 222) = 142.93, p < .001, \eta^2_p = .563$ [.492; .615], $F_{\text{Study 1b}}(2, 202) = 144.27, p < .001, \eta^2_p = .588$ [.516; .640]. All pairwise comparisons revealed large effects, d > 1. In Table 3, we report means and standard deviations of the experimental groups for SR-T.

2.2.4 Convergent and discriminant validity

We expected SR-T to be associated with Epistemic Trust, Relational Motivation and IOS, as these are key constructs conceptually related to shared reality (Echterhoff & Higgins, 2021). SR-T correlated strongly with these constructs (see Tables 4 and 5, and the Supporting Information for correlations with other constructs measured).

2.3 Discussion

In Studies 1a and 1b, we developed a novel five-item measure of SR-T to capture the experience of sharing inner states in common about a target with a partner. We found that participants reported greater SR-T with people who shared (vs. did not share) their inner states about a set of targets. We also obtained evidence for factorial validity, reliability and measurement invariance between commonality conditions and demonstrated convergent validity with adjacent constructs such as, IOS, Relational Motivation and Epistemic Trust.

3 | STUDY 2

In shared reality research, the creation of SR-T has been primarily assessed via the 'saying-is-believing' paradigm (Higgins & Rholes, 1978; now called 'sharing-is-believing' (SIB) given the critical role of shared reality creation, and the experience of 'sharing' as opposed to simply 'saying', in obtaining the audience-congruent recall bias; Higgins, 2019;

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TABLE 3 Means (SDs in parentheses) of SR-T as a function of manipulated commonality of inner states (Studies 1a and 1b).

Study	Low commonality	Moderate commonality	High commonality
Study 1a	2.45*** (1.31)	4.13*** (1.06)	5.74*** (1.05)
Study 1b	2.14*** (1.43)	4.17*** (1.12)	5.90*** (1.17)

*****p* < .001.

TABLE 4 Correlation Matrix (Study 1a).

	1	2	3	4
1. SR-T	1	.794***	.468***	.450***
2. Epistemic Trust		1	.533***	.468***
3. Relational Motivation			1	.562***
4. IOS				1

****p* < .001.

TABLE 5 Correlation Matrix (Study 1b).

	1	2	3	4
1. SR-T	1	.749***	.503***	.502***
2. Epistemic Trust		1	.624***	.550***
3. Relational Motivation			1	.568***
4. IOS				1

****p* < .001.

Higgins et al., 2021). In communicating with another person (an audience) about a third person (a target), people systematically tune what they say (their message) to match their audience's attitude toward the target person. Subsequently, participants exhibit an audience-tuning bias in their free recall: they recall the target's behaviours in a way that matches their audience-tuned message (See Higgins et al., 2021 for a review). For example, when describing a movie character to another person who likes (or dislikes) that character, people would describe the character positively (or negatively) to match their conversation partner's attitude, and subsequently recall the character as such. In Study 2, we establish criterion validity for SR-T by demonstrating that it was associated with the established memory index of shared reality formation.

3.1 | Methods

3.1.1 | Participants and design

We based our calculation of sample size requirements on the lower limit of audience-attitude effects on recall ($\eta^2_p = .14$; see Echterhoff et al., 2013). A power analysis with $\alpha = .05$ and $\beta = .10$ yielded a required n of 67, to which we added 20% to account for shrinkage. Eighty-two undergraduates completed this study in exchange for course credit ($M_{age} = 19.91$ years, SD = 1.82; 59.8% female). Three participants were excluded for reporting that they did not understand all of the

instructions; 10 were excluded for failing the audience-attitude manipulation check. Results did not depend on exclusion criteria.¹

3.1.2 | Procedure

As in the standard saying (sharing)-is-believing paradigm (Echterhoff et al., 2005, 2013, 2017; Higgins & Rholes, 1978), participants were told that the goal of the study was to determine whether a group of students who had gotten to know each other as part of a longterm study could identify one another from message descriptions of their personality-related behaviours. The participants then read evaluatively ambiguous behavioural descriptions of a target person named Michael (from Echterhoff et al., 2017). They were instructed to write a descriptive message about Michael using their own words (without mentioning his name) to be given to another student from the longterm study (Ryan, the audience) who would identify whom was being described in the message. Before writing the message, participants were randomly assigned to hear that Ryan had a positive or negative attitude towards Michael. They then wrote the message description, which the experimenter collected and supposedly delivered to Ryan while participants completed filler tasks.

Subsequently, participants received written feedback indicating that Ryan had successfully identified Michael. Participants then wrote down everything they could recall about Michael from the original behavioural descriptions. Finally, they completed the SR-T, Epistemic Trust and Relational Motivation scales, and a manipulation check ('In your opinion, how positive/negative is Ryan's view of Michael?'; 1 = extremely negative, 7 = extremely positive).

3.1.3 | Message and recall valence ratings

Two independent judges blind to conditions rated the valence of the message and recall (–5 to +5; see the Supporting Information for details). Judges' valence scores were highly consistent (ICC_{message} = .85, 95% CI [0.76, 0.91] and ICC_{recall =} .92, 95% CI [0.88, 0.95]) and were averaged for each participant. As in previous studies, we also calculated unidirectional bias scores (reflecting the extent to which participants' message and recall were biased towards the audience's attitude) by multiplying the valence scores in the negative-audience attitude condition by -1.

¹ As this study involved secondary analyses of existing data in which some conditions included a manipulation that deviated significantly from the standard SIB paradigm to test unrelated hypotheses (i.e. participants were told the message delivered to Ryan was written by someone else), we only analysed data for participants in the standard SIB conditions.

3.2 Results

3.2.1 Confirmatory factor analysis

Fit indices from the unidimensional CFA were very good (see Table 2). Standardised factor loadings varied from .766 to .865. Reliability was very good ($\omega = .902$).

3.2.2 | Predicting the audience-congruent recall bias

To examine whether SR-T predicted audience-congruent recall, we ran two regressions with audience attitude (effects coded: 1 = positive; -1 = negative), SR-T (grand mean centred), and their interaction as predictors of message and recall valence. As in previous studies (see Echterhoff & Higgins, 2017; Echterhoff, Lang, et al., 2009), audience attitude predicted both message valence (B = 0.436, $\beta = .379$, t(70) = 3.81, p < .001) and recall valence (B = 0.610, $\beta = .381$, t(73) = 4.19, p < .001). We found significant interactions between audience attitude and SR-T in predicting message valence (B = 0.302, $\beta = .437$, t(70) = 4.36, p < .001) and, importantly, recall valence $(B = 0.484, \beta = .504, t(73) = 5.37, p < .001).$

To further investigate these interactions, we reran the regressions with SR-T scores centred at one standard deviation above and below the mean. In these analyses, the audience attitude manipulation had strong effects on message valence (B = 0.939, $\beta = .816$, t(70) = 5.88, p < .001) and recall valence ($B = 1.416, \beta = .885, t(73) = 7.00, p < .001$) for SR-T scores 1 SD above the mean compared to small and nonsignificant effects for SR-T scores 1 SD below the mean (message: B = -0.067, $\beta = -.058$, t(70) = -0.41, p = .686; recall: B = -0.196, $\beta = -.123$, t(73) = -0.91, p = .366). Removing the interaction between audience attitude and SR-T from the regression models reduced the adjusted R² from .39 to .16 for recall valence. Thus, SR-T captured a large amount of variance in recall valence.²

Finally, SR-T correlated highly with the unidirectional audiencecongruent recall bias, that is, the extent to which participants' recall was biased towards the audience's attitude, r(75) = .511, p < .001.

3.2.3 Mediated moderation of SIB

To examine whether the SR-T moderated the full SIB effect itself, we conducted a mediated moderation. Specifically, we examined the mediation model of audience attitude predicting message tuning and in turn recall bias, with the addition of SR-T as a moderator of both the audience attitude to message tuning path (a-path) and the audience attitude to recall bias path (c-path).

Using the lavaan package, we found that SR-T significantly moderated the audience attitude to message tuning path ($\beta = .487, 95\%$

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CI = [0.283, 0.705], z = 4.44, p < .001 and the audience attitude to recall bias path (β = .357, 95% CI = [0.175, 0.555], z = 3.67, p < .001). Furthermore, the indirect effect of the SR-T-by-audience attitude interaction on recall bias through message tuning was also significant (β = .192, 95% CI = [0.089, 0.364], z = 2.94, p = .003). Simple slopes analyses show that the moderation was in line with our hypothesis: there was a stronger indirect effect of audience attitude on recall bias through message tuning for higher levels of SR-T (1 SD above the mean: β = .319, 95% CI = [0.159, 0.615], z = 2.92, p = .003) than for lower levels (1 SD below the mean: $\beta = -.064$, 95% CI = [-0.178, 0.055],

3.3 Discussion

z = -1.08, p = .280).

The results of Study 2 established criterion validity of the SR-T by demonstrating that it was closely associated with the widely established marker of shared reality creation, that is, the audiencecongruent recall bias. Participants exhibited this memory bias to the extent to which they subjectively experienced a shared reality with their audience about the target. Further, audience attitude had a stronger indirect effect on recall bias through message tuning (i.e. a greater SIB effect) for participants who experienced a greater (vs. lesser) degree of shared reality.

STUDY 3 4

We conducted Study 3 to (a) establish predictive validity for the central relational and epistemic effects of experienced shared reality in a naturalistic conversation; and (b) to distinguish SR-T from SR-G about the world at large (Rossignac-Milon et al., 2021) and from perceived similarity of attributes. Pairs of participants discussed several ambiguous images in a real-time, online conversation. We examined whether SR-T predicted key relational and epistemic constructs independently of SR-G and perceived similarity.

4.1 Methods

4.1.1 | Participants

Mechanical-Turk workers were recruited to participate in exchange for financial compensation. This dataset was part of a larger project testing several research questions. The full set of measures is available on OSF (https://osf.io/c3hjd). The link between SR-G and the relational and epistemic variables of interest was reported in Rossignac-Milon et al. (2021, Study 3) and the effect of perceived partner authenticity on SR-G was reported in Rossignac-Milon et al. (2024, Study 3), but neither of these papers examined SR-T.

This sample consisted of 232 participants (57% female; $M_{age} = 38.2$ (SD = 11.46); see Rossignac-Milon et al. (2021; Study 3) for further details), granting us 80% power to detect an effect as small as $f^2 = .034$

² Furthermore, the interaction term remained significant when interactions with the Relational Motivation and Epistemic Trust scales were included in the model, B = 0.426, $\beta = .444$, t(61) = 2.95, p = .005, indicating that SR-T assesses an independent construct despite being related to Relational Motivation (r = .44) and Epistemic Trust (r = .62).

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(with .02 defined as a small effect size, and .15 as medium (Cohen, 1992)).

4.1.2 | Procedure and materials

Participants were paired on arrival to an online text-based chat platform structured like an instant-messenger conversation. They were instructed to work together to answer questions about two ambiguous images (selected from a set of ambiguous scenes used in previous shared reality research; Kopietz et al., 2010) to figure out what was really going on in the pictures. Participants received a new discussion guestion every 2 min (six guestions total), such as, 'What are the people in the picture talking about?'. After their discussion, participants answered questions about their conversation and partner presented in a randomised order (rated from 1 = strongly disagree to 7 = stronglyagree, unless otherwise specified): SR-T (about the images; $\omega = .98$), interaction-specific SR-G (Rossignac-Milon et al., 2021; $\omega = .96$; eight items, e.g. 'During our chat, we thought of things at the exact same time', '... we saw the world in the same way'.), and perceived similarity of non-inner states (Rossignac-Milon et al., 2021; $\omega = .98$; five items, e.g. 'My partner and I seemed to have similar personalities', 'My partner and I seemed to be very much alike'). In terms of relational variables, participants rated their sense of *clicking* ('I felt like my partner and I "clicked""), their closeness using the relatedness subscale of the Intrinsic Motivation Inventory (McAuley et al., 1989; $\omega = .95$; eight items; 1 = not at all true, 7 = very true; e.g. 'I feel close to my partner'), theiranticipated rapport if they had a chance to interact with their partner in person (0 = not at all; 8 = extremely; Bernieri et al., 1994; positive rap*port* (comfortable, friendly, harmonious, positive, satisfying; $\omega = .94$); or negative rapport (awkward, boring, cold, dull, slow; $\omega = .93$)), and their desire to interact again ('I would be interested in continuing our discussion'). In terms of epistemic variables, participants rated their epistemic trust ($\omega = .96$; as in prior studies), joint sense-making (Rossignac-Milon et al., 2021; $\omega = .90$; five items; e.g. 'I feel that through our conversation, my chat partner and I made sense of the pictures together'), and certainty (Rossignac-Milon et al., 2021; $\omega = .93$; three items; e.g. 'I am certain of what I think is really going on in the pictures').

4.2 Results

First, we replicated the test of factorial validity using a dyadic CFA model. Fit indices were good (see Table 2). Next, we predicted relational and epistemic constructs using SR-T, SR-G and perceived similarity. All of these analyses were conducted using the *lme4* package in R (Bates et al., 2015) as multi-level models including a random intercept for dyad. As recommended by Bolger and Laurenceau (2013), variables were standardised using the residual standard deviation (after removing the dyad-level component from the variance).

We report the results in Table 6. Alone, SR-T strongly predicts all of the constructs of interest. Upon covarying for SR-G and Perceived Similarity, SR-T coefficients remained significant for closeness, positive rapport, clicking, epistemic trust and joint sense-making, but not for certainty, negative rapport, or the desire to interact again. Epistemic trust, especially, remained strongly predicted by SR-T.

4.3 | Discussion

Study 3 shows that, in a real-time conversation, both SR-T and SR-G predict epistemic and relational constructs. Critically, we established predictive augmentation (Shrout & Yip-Bannicq, 2017) by demonstrating that SR-T predicted key epistemic and relational constructs even when removing the variance accounted for by the SR-G and by perceived similarity of non-inner states. These findings suggest that experiencing shared reality about the particular images statistically contributed to participants' sense of interpersonal closeness and epistemic trust in their conversation partner even when controlling for the extent to which they felt that they shared reality about the world at large and their perception of having similar personalities and generally being alike. More broadly, this study suggests that the experience of SR-T arises naturally in everyday conversation and that it predicts meaningful relational and epistemic variables.

Future work could further examine the relations between SR-T, SR-G and perceived similarity in predicting these variables of interest. Our results suggest that perhaps participants experience lesser negative rapport and greater desire to talk again to the extent that they extrapolate a sense of SR-G or similarity from their sense of SR-T; that is, having a shared reality specifically about the images may contribute to these relational variables to the extent to which it contributes to the sense of shared reality about the world at large or the feeling of being similar people. Similarly, perhaps participants' sense of agreeing about the images to the extent that they felt they saw the world at large in the same way and felt like the same kind of person. Future work could examine these possible causal pathways through experimental studies.

5 | STUDY 4

In Studies 1 to 3, we established psychometric, construct, criterion, divergent and predictive validity of a new measure assessing the experience of SR-T. In Study 4, we sought to extend these findings by examining the role of SR-T in predicting real-world behaviours. Specifically, we examined the link between the SR-T and health-protection behaviours (vaccinating, masking and testing) during the peak of the COVID-19 Omicron-variant in the United States (January 2022).

Prior research has shown that close others' vaccination intent predicts one's own vaccination intent and behaviour (Rabb et al., 2022). We theorised that shared reality should moderate this effect, given that COVID-19 protective behaviours and vaccination involve widespread uncertainty and ambivalence (Kreps & Kriner, 2021; Troiano & Nardi, 2021,Vergara et al., 2021) and the experience of shared reality is a key way in which people resolve uncertainty (Hardin & Higgins, 1996; Schachter & Singer, 1962). Specifically, we predicted



TABLE 6 Regression of epistemic and relational variables on target-specific shared reality (SR-T) alone (Model 1), simultaneously with generalised shared reality (SR-G) (Model 2) and simultaneously with perceived similarity (Model 3) (Study 3).

DV	Model	SR-T	SR-G	Perceived similarity
Closeness	Model 1	.69*** (.60, .79)		
	Model 2	.30*** (.14, .45)	.50*** (.34, .67)	
	Model 3	.24*** (.12, .35)		.65*** (.52, .77)
Positive rapport	Model 1	.62*** (.53, .71)		
	Model 2	.25** (.10, .41)	.47*** (.30, .63)	
	Model 3	.23*** (.11, .35)		.55*** (.42, .68)
Negative rapport	Model 1	51*** (62,40)		
	Model 2	15 (35, .04)	45*** (65,24)	
	Model 3	17* (33,002)		47*** (65,30)
Desire to talk again	Model 1	.54*** (.44, .64)		
	Model 2	.10 (07, .26)	.56*** (.39, .74)	
	Model 3	.04 (08, .17)		.69*** (.56, .83)
Clicking	Model 1	.76*** (.67, .85)		
	Model 2	.28*** (.14, .43)	.60*** (.45, .75)	
	Model 3	.28*** (.17, .39)		.68*** (.56, .79)
Epistemic trust	Model 1	.76*** (.69, .83)		
	Model 2	.62*** (.50, .75)	.18** (.04, .31)	
	Model 3	.59*** (.49, .69)		.24*** (.13, .35)
Joint sense-making	Model 1	.82*** (.71, .92)		
	Model 2	.37*** (.20, .55)	.56*** (.38, .74)	
	Model 3	.69*** (.53, .84)		.18* (.01, .35)
Epistemic certainty	Model 1	.34*** (.22, .45)		
	Model 2	.01 (19, .21)	.42*** (.21, .63)	
	Model 3	.13 (04, .30)		.29** (.11, .48)

Note: In each cell, we display standardised β coefficients and 95% confidence intervals.

***p < .001.

that close others' attitudes should be most predictive of one's own behaviour when one experiences a sense of shared reality with these close others. We theorised that experiencing a shared reality about protective health behaviours should boost people's sense of certainty that their views are correct, thereby strengthening behavioural adoption. That is, rather than directly translating close others' attitudes into their own behaviour, people calibrate their behavioural adoption using their experience of shared reality.

We therefore tested whether SR-T interacted with close others' attitudes to predict behaviours related to COVID-19 precautions. We predicted that when people experience a greater sense of shared reality about these issues, their perception of their close others' attitudes (positive vs. negative) should more closely predict their own protective health behaviours (i.e. the extent to which they engaged in masking and testing during the Omicron wave, and their likelihood of having received at least one dose of the vaccine and a vaccine booster). Further, we hypothesised that the experience of shared reality should

interact with close others' attitudes to predict these behaviours over and above the interaction with SR-G and over and above the interaction with previously established predictors of vaccination behaviour, such as political orientation, age, gender and race (Agley et al., 2021; Engin & Vezzoni, 2020; Kerr, et al., 2021; Meier et al., 2021; Mondal et al., 2021; Stecula & Pickup, 2021; Willis, et al., 2021). This study was preregistered on OSF: https://osf.io/hg7dv/.³

^{*}p < .05

^{**}*p* < .01

³ Note that our pre-registered hypotheses predicted main effects, as we ran an initial study in April 2020 in which we found that people who experienced greater SR-T held more positive attitudes towards protective health behaviours against COVID-19 and were more likely to engage in these behaviours (all materials and results detailed in the Supporting Information). As preregistered, we replicated these main effects in the present study (see the Supporting Information). Additionally, given that there was more variance in people's attitudes towards COVID-19 precautions and vaccines by January 2022 than there was in April 2020 (ratio of variances between the two studies = 0.57, 95% CI [0.46, 0.73], p < .001), with a contingent of people having developed negative views (Jørgensen et al., 2022; Salomon et al., 2021; Troiano & Nardi, 2021; Vergara et al., 2021), in the present study we were able to examine whether shared reality could also exacerbate negative attitudes towards COVID-19 precautions and vaccines. To better reflect the pattern of results in the data, we present these interaction effects in the main paper and the main effects in the Supporting Information.

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5.1 | Methods

5.1.1 | Participants

Five hundred and five participants residing in the United States were recruited from the Prolific online subject pool in exchange for financial compensation. As preregistered, we excluded 30 participants who failed our attention check. Our final sample consisted of 475 participants. 336 identified as female, 122 identified as male and 15 identified as 'Other'. Their mean age was 30.8 (SD = 10.84). This sample granted us 80% power to detect an effect as small as $f^2 = .016$. This study was part of a larger project testing multiple research questions (the full set of measures is available on OSF at https://osf.io/42efb/).

5.1.2 | Procedure and materials

Generalised shared reality ($\omega = .89$). Participants rated their general agreement (1 = strongly disagree, 7 = strongly agree) with eight items measuring the cross-situational version of the SR-G (Rossignac-Milon et al., 2021) with the people in their close social circle, such as, 'We frequently think of things at the exact same time', and 'We have created our own reality'.

COVID-19 precautions

SR-T about COVID-19 precautions ($\omega = .99$). SR-T measured the extent to which they perceive that they and people in their close social circle see COVID-19 health precautions in the same way.

Close others' attitude towards COVID-19 precautions. Participants rated the degree to which people in their close social circle were in favour of or against taking precautions against COVID-19 ($1 = extremely \ against \ taking \ precautions; 7 = extremely \ in \ favour \ of taking \ precautions).$

COVID-19 precautionary behaviours ($\omega = .81$). Participants rated how often they engaged in the following three COVID-19 precaution behaviours (1 = never; 4 = sometimes; 7 = always): Wearing a mask in indoor public spaces; COVID-testing before joining indoor gatherings of 10+ people (or avoiding such gatherings); Avoiding crowds and poorly ventilated public spaces. Items were averaged for a composite measure.

COVID-19 vaccines

SR-T about COVID-19 vaccines ($\omega = .99$). SR-T measured the extent to which they and their close social circle saw the COVID-19 vaccines in the same way.

Close others' attitude towards COVID-19 vaccines. Participants rated the degree to which people in their close social circle were in favour of or against COVID-19 vaccines ($1 = extremely \ against; 7 = extremely \ in favour$).

Receiving at least 1 dose of a COVID-19 vaccine. In response to the question, 'Have you been vaccinated against COVID-19?' participants selected: (1) No, I have not received any COVID-19 vaccines; (2) I am partially vaccinated (received one dose of Pfizer or Moderna); or (3)

I am fully vaccinated (received one dose of J&J or AZ, etc., or two doses of Pfizer or Moderna). Those who selected (1) were coded as 0, and those who selected (2) or (3) were coded as 1. Participants who selected (1) were then asked, 'What is the main reason why you have not been vaccinated against COVID-19?' and selected: (1) I do not want to be vaccinated, (2) I have not had time to book an appointment, (3) I am unable to be vaccinated due to a medical condition (4) I do not have access to vaccines in my area, or (5) Other (open response). As planned in our preregistration, those who selected (3) or (4) were removed from any analyses about vaccine behaviour.

Receiving a booster vaccine. Participants who indicated that they were fully vaccinated were then asked, 'Have you received a booster vaccine against COVID-19?' and selected either 'Yes' (coded as 1) or 'No' (coded as 0). Those who selected 'No' were asked the same question 'What is the main reason why you have not received a booster vaccine against COVID-19?' and as planned in our preregistration, participants who indicated that they were unable to be vaccinated due to a medical condition or did not have access to vaccines in their area were removed from all analyses relating to receiving a booster vaccine.

Demographics. Participants entered their age, gender (males were coded as 0; females as 1) and race (White participants were coded as 0, Black participants as 1, Latino participants as 2, Asian participants as 4, Native American participants as 5 and Multiple as 6).

5.2 Results

Precautionary behaviours. Results revealed a significant interaction between SR-T and close others' attitudes towards COVID-19 precautions on one's precautionary behaviours (b = 0.29, 95% CI [0.22, 0.36], t(471) = 7.96, p < .001) such that close others' attitudes had a stronger effect on one's behaviours at levels of SR-T 1 *SD* above the mean (b = 0.76, 95% CI = [0.63, 0.88], t = 12.04, p < .001) than at levels of SR-T 1 *SD* below the mean (b = 0.18, 95% CI = [0.06, 0.29], t = 3.08, p = .002).

These effects persisted when controlling for the interaction between SR-G and close others' attitudes towards precautions and when controlling for the interaction between each individual difference predictor (age, gender, political orientation and race) and close others' attitudes towards precautions, both one at a time and simultaneously (see the Supporting Information).

Vaccine behaviours. Results revealed a significant interaction between SR-T and close others' attitudes towards the vaccines on one's likelihood of receiving at least one dose (b = 0.90, 95% CI [0.63, 1.22], z = 6.02, p < .001). Specifically, close others' attitudes had a stronger effect on one's likelihood of receiving at least one dose at levels of SR-T 1 *SD* above the mean (b = 3.02, 95% CI = [2.28, 3.95], z = 7.17, p < .001) than at levels of SR-T 1 *SD* below the mean (b = 0.36, 95% CI = [-0.10, 0.79], z = 1.57, p = .116). Finally, there was also a significant interaction between SR-T and close others' attitudes towards the vaccines on one's likelihood of receiving a booster shot (b = 0.27, 95% CI [0.13, 0.42], z = 3.76, p < .001): Close others' attitudes had a stronger effect on one's likelihood of receiving a booster shot at levels of SR-T 1

SD above the mean (b = 3.02, 95% CI = [2.28, 3.95], z = 7.17, p < .001) than at levels of SR-T 1 SD below the mean (b = 0.36, 95% CI = [-0.10, 0.79], z = 1.57, p = .116).

These effects persisted when controlling for the interaction between SR-G and close others' attitudes towards the vaccines and when controlling for the interaction between each individual difference predictor (age, gender, political orientation and race) and close others' attitudes towards the vaccines, both one at a time and simultaneously (see the Supporting Information).

5.3 | Discussion

In Study 4, SR-T with one's close social circle interacted with close others' attitudes to predict engaging in COVID-19 precautions and vaccination. Specifically, close others' attitudes had a stronger effect on one's own behaviours for participants who experienced a higher level of SR-T with their close others. These effects remained robust when adjusting for the interaction between close others' attitudes and either SR-G or individual difference predictors. These results suggest that the experience of SR-T can have important associations with real-world public health behaviours, such as receiving COVID-19 vaccines.

To fully appreciate our findings, it is important to differentiate shared reality from compliance with social norms. It has been found that people tend to comply with injunctive norms (i.e. others' expectations for their behaviour; Neighbors et al., 2008), descriptive norms (i.e. others' actual behaviour; Rivis & Sheeran, 2003) and subjective norms (i.e. their perception of the consensus behaviour; Ham et al., 2015). However, previous work has distinguished shared reality from perceived norm compliance both theoretically and empirically (Bebermeier et al., 2015; Echterhoff & Higgins, 2017). Accounts invoking norm compliance do not explicitly consider the role of people's subjective experience of alignment with others' inner states in this process. For instance, it is possible for someone to perceive a high subjective norm to vaccinate while personally holding negative views towards vaccination. Our results suggest that subjective norms are more likely to shape one's behaviour when one experiences a sense of alignment with the attitudes and beliefs endorsing these norms.

6 | GENERAL DISCUSSION

The present studies examined the experience of SR-T in various contexts. We began by psychometrically validating a measure of SR-T and establishing construct validity by showing that participants rated higher SR-T with someone who shared (vs. did not share) their inner states about a target. Next, we demonstrated criterion validity by showing that SR-T tracked a widely established marker of shared reality creation: audience-congruent recall bias in the SIB effect. We then established predictive validity by showing that in a real-time conversation between strangers, SR-T predicts key relational and epistemic constructs. Having established a valid measure of SR-T, we then extended the effects of the SR-T to a real-world context, demonstrating that the SR-T interacted with close others' attitudes to predict precautionary health behaviours (e.g. mask-wearing, COVID-19 testing before gatherings) and vaccine behaviour (obtaining at least one shot of the vaccine and getting a booster shot) during the Omicron-variant wave. These findings make several contributions to the psychological literature.

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First, these findings significantly advance the shared reality literature. This research contributes to the shared reality literature by assessing the subjective experience of shared reality about a target quantitatively. No prior work to our knowledge had developed and psychometrically validated a measure of the experience of SR-T. We hope this measure will provide a useful tool for researchers examining SR-T across various fields—from intergroup relations to interpersonal relationships, organisational behaviour, culture, morality and politics. For example, SR-T could allow researchers to measure the perception of sharing inner states in common with other people about a particular political candidate and investigate the effects of this SR-T on voting and activism behaviour.

Second, prior research has largely examined the effects of shared reality on psychological experiences like attitudes and memories (Higgins et al., 2021). Our research examines how shared reality relates to everyday behaviours like getting vaccinated and engaging in protective health behaviours during a global pandemic. This work suggests that the experience of shared reality may matter for important behaviours and life decisions.

In the present research, we use SR-T to measure shared reality about various targets: potential job candidates (Studies 1a and 1b), a third person (Study 2), a set of images (Study 3), health precautions against COVID-19 (Study 4) and the COVID-19 vaccine (Study 4). We also measure SR-T with different relationship partners: fictitious study partners (Studies 1a, 1b and 2), a live conversation partner (Study 3), and people in one's close social circle (Study 4). The diversity of these target types and relational contexts illustrates the utility of SR-T across different contexts. However, the generalisability of our results is limited by the fact that all of our samples were recruited in the United States. To further ensure generalisability of SR-T effects across different samples, it is necessary to examine SR-T across different cultures, as has been done with the German translation of the SR-T (Schmalbach et al., 2019), which replicated the effects of the job candidate manipulation (Studies 1a and 1b) in Germany.⁴ Specifically, future research could examine boundary conditions in certain cultures of the effect of shared reality with friends and family on COVID-19 precautionary health behaviours. For example, in certain cultures, people may rely

⁴ Though the English SR-T is the original measure, due to incidental timing, the German translation of SR-T was published earlier. The second author of the present paper (Schmalbach), who served as the first author of the German translation, was required to publish a paper in order fulfil his university's dissertation requirements. At the time, we were still in the process of validating the English SR-T and had only completed Studies 1a and 1b. Schmalbach had concurrently run a set of studies to validate the German translation of SR-T. Under the time pressure to fulfil his dissertation requirements, his supervisor (Echterhoff) recommended that he submit the studies validating the German translation of SR-T as a separate paper. Importantly, the German SR-T paper clearly delineates in the abstract, paper and the Appendix that the measure is a translation of the English SR-T and directs readers wishing to use the English SR-T to cite the present paper.

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less on their shared reality with close friends and family to inform their behaviours and may instead place greater trust in their shared reality with society at large. Finally, future research could also examine whether particular types of individuals are more likely to infer or create shared realities with others.

In the present studies investigating protective health behaviours against COVID-19, we examined the effects of SR-T with one's close social circle. People's close social circles may not be homogeneous in their views on COVID-19-related issues (as found by Rabb et al., 2022). How do people navigate situations in which they have conflicting shared realities with different close others? In such cases, which factors determine the more influential relationship? Given the importance of SR-G in close relationships (Rossignac-Milon et al., 2021), perhaps relationships in which people experience greater SR-G can hold more weight in such situations, swaying people to adopt an SR-T from significant others with whom they feel they tend to see the world in the same way. More broadly, future research could examine the potentially reciprocal relationship between SR-G and SR-T, in that a sense of SR-G may facilitate shared reality about particular targets, and vice versa.

Finally, our studies examining the link between shared reality and various behaviours were correlational in nature. Future research could investigate the causal relationship between these variables by manipulating SR-T and investigating the effects on interaction behaviours and protective health behaviours. Research could eventually build on this line of work to design interventions aimed at fostering interpersonal closeness and trust, and perhaps even increasing health-protective behaviours amongst people who experience uncertainty and ambivalence towards particular health issues.

In the face of uncertainty, people turn to others to understand and make sense of the world around them (Hardin & Higgins, 1996). Our work suggests that the experience of sharing inner states in common with other people may matter not only for one's attitudes and memories, but also for one's everyday interpersonal interactions, decision-making and behaviour.

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CONFLICT OF INTEREST STATEMENT

The authors declare no conflicts of interest.

ETHICS STATEMENT

The Münster University Internal Review Board granted permission for Studies 1 and 2, and the Columbia University Internal Review Board

granted permission for Studies 3 and 4. All participants gave their informed consent before participating in the studies.

TRANSPARENCY STATEMENT

Materials, data and code for all studies can be accessed on OSF (https:// osf.io/pc8hy/). For all studies, we report all manipulations, measures and exclusions. Individual preregistration links or links to full study materials are provided in the 'Methods' section of relevant studies.

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APPENDIX

Target-Specific Shared Reality (SR-T) Scale

Please rate your agreement (1 = strongly disagree; 7 = strongly agree)with the following items. [Note for researchers: replace 'X' with the interaction/relationship partner(s) and 'Y' with the target of the shared reality].

I think that X and I are on the same wavelength with regard to Y.

I feel the same way about ${\sf Y}$ as ${\sf X}$ does.

I agree with X's point of view of Y.

X and I see Y in the same way.

I agree with X's perception of Y.

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