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THE ROLE OF DIVERGENT THINKING IN INTERPERSONAL TRUST DURING THE COVID-19 PANDEMIC: CREATIVE ASPECTS

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Abstract. Interpersonal trust relies on positive expectations about other people. Social psychology distinguishes ingroup (individuals share social identity, *e.g.*, family) from outgroup trust (individuals do not share social identity, *e.g.*, strangers). We conducted an experimental study to test if divergent thinking, which relies on an inclusive processing mode, differently affected ingroup and outgroup trust during the lockdown due to the COVID-19 pandemic. A sample of 114 healthy college students, with no prior or current COVID-19 infection (mean age = 23.66, *sd* = 2.53, 89% women) was recruited. Interpersonal trust was measured by three ingroup and three outgroup trust items. Divergent thinking was measured by the alternative uses task, which asked to find alternative uses for common objects. Divergent thinking was scored by two independent raters in terms of fluency and quality of ideas. To control for generalized anxiety and mood states, the generalized anxiety disorder scale and the Positive and Negative Affect Schedule were administered, respectively. To control for the inclusiveness of divergent thinking performance, the alternative uses task was administered using three types of instructions. Thus, the sample was divided in three groups of 38 participants according to the divergent thinking task instructions: "be-fluent: find as many different uses for the objects", "be-creative: find creative uses for the objects", and "be fluent and creative: find as many different and creative uses of the objects". The hierarchical regression analyses showed that the quality, but not the quantity of divergent thinking positively predicted only outgroup trust, whereas the mood positively predicted ingroup trust. Divergent thinking task instructions did not affect interpersonal trust. Thus, in the context of the COVID-19 pandemic, the quality of divergent thinking supports only outgroup trust based on the inclusive processing mode, meaning that people showing high ability to produce uncommon, remote and clever ideas are more inclusive and by consequence more prone to trust strangers. Limitations and implications are discussed.

Keywords: coronavirus, creativity, emotions, group membership, inclusive processing mode, social identity, trust.

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Introduction

The new virus officially named SARS-CoV-2 or COVID-19 (World Health Organization, 2020) caused millions of deaths and induced a variety of medical problems, psychological distress and symptoms of mental illness (Bao et al., 2020), in both people with high risk of infection (*e.g.*, medical workers) and general population (di Crosta et al., 2020; Huang & Zhao, 2020). In addition, evidence suggested that anxiety, confusion, stress, mood swings, anger, and irritability were associated with quarantine and social isolation (Cannito et al., 2020; Ceccato et al., 2021). Another psychological effect due to the COVID-19 pandemic regards possible changes in interpersonal trust, which develops through continuous social interactions (Lewicki & Benedict Bunker, 1996). Indeed, in the context of the COVID-19 pandemic, factors such as the fear of contagion, the reduction of mobility, and the physical and social distancing, may have affected interpersonal trust. Previous studies showed that in the aftermath of crises trust sometimes decreased (Algan et al., 2018), although, catastrophic events (*e.g.*, war) were also found to increase trust and cooperative behavior (Bauer et al., 2016). Specifically, the COVID-19 pandemic was found to lead to higher levels of institutional and interpersonal trust (Esaiasson et al., 2021). In Italy, the relationship between national identity and interpersonal trust was fully mediated by the social dimension "relating to others", as if interpersonal trust did not derive automatically by social salient identities, but rather by a re-attribution of meaning to one's relationships with others (Ellena et al., 2021).

Trust is generally defined as "a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another" (Rousseau et al., 1998, p. 395). Trust is related primarily to social group membership (*e.g.*, Cruwys et al., 2021; Kramer & Brewer, 1984). Following the social identity approach (Tajfel & Turner, 1979; Turner et al., 1987), people evaluate themselves in terms of both personal and social identities (*e.g.*, as a member of particular social groups), which affect cognition and behavior in several ways (Haslam, 2014). Accordingly, it is possible to divide between ingroup trust (individuals share social identity, *e.g.*, family), and outgroup trust (individuals do not share social identity, *e.g.*, strangers) (Crepaz et al., 2014). Potential threats arising from ingroup members are perceived as less risky compared to potential threats arising from outgroup members (Cruwys et al., 2021). People trust more ingroup than outgroup members because they assume that the former behave less risky than the latter. This implies that when ingroup members perceive strong similarities in goals and values among them, they also believe that other ingroup members will behave in accordance with these values (Kramer & Brewer, 1984; Kramer et al., 1996). This attitude is strengthened if there is a competitive interdependence with the outgroup, for instance when the outgroup represents a threat to the goals of the ingroup (*e.g.*, Tjosvold, 1988). For these reasons, in the context of the COVID-19 pandemic, people could perceive ingroup members as less contagious than outgroup members. Ingroup members could be considered more respectful of the norms to avoid the virus contagion, whereas outgroup members could be perceived as a potential threat to personal health.

Trust appears related also to a distributed, inclusive processing mode, which refers to the ability to process different sources of information simultaneously (Hommel & Colzato, 2015). In this direction, Sellaro et al. (2014) showed that after engaging in divergent thinking people

were more prone to transfer money to unknown trustees, than to when engaging in convergent thinking. Indeed, divergent thinking promotes a higher degree of parallel, inclusive processing mode (Fischer & Hommel, 2012), as it reflects the ability to find many different and new alternative ideas to open problems (Guilford, 1967; Palmiero et al., 2019, 2020; Stolte et al., 2020), whereas convergent thinking promotes a higher degree of exclusive processing mode (Fischer & Hommel, 2012), reflecting the ability to find one single solution to closed problems, and providing criteria for effectiveness of ideas generated by divergent thinking (Cropley, 2006; Japardi et al., 2018). In addition, divergent thinking requires the ability to switch between defocused attention (disinhibition – low cognitive control), useful to collect more information, and focused attention (inhibition – high cognitive control), useful to select and refine information (see Palmiero et al., 2022; Zabelina, 2018). The neuroscientific research revealed that divergent thinking engages simultaneously the default, salience, and executive systems (Beaty et al., 2018; Ovando-Tellez et al., 2019). The default system allows idea generation; the salience system selects and forwards ideas to the executive system, and also modulates the switch between the default and the executive systems; this latter is involved in efficacy evaluation and revision of ideas (Beaty et al., 2018). Thus, divergent thinking is supported by both associative and controlled processes (Beaty et al., 2021). The flexible control mode underpinning divergent thinking is consistent with a reduced local competition that is with a higher inclusiveness of information (Fischer & Hommel, 2012). These findings suggest that interpersonal trust toward outgroup members share with divergent thinking not only the inclusive processing mode, but also some degree of cognitive control (the ability to regulate one's attention, thoughts, and behavior, see Sellaro et al., 2014). Consequently, even the process of self-other integration is more related to divergent thinking than to convergent thinking, as people tend to relate their own actions to that of a co-actor when switching between the divergent thinking task and the joint Simon effect (stimuli and responses are on the same side – spatial correspondence – or on opposite sides – not spatial correspondence – and two people press two different keys) (Colzato et al., 2013). In summary, on the basis of this evidence, it is plausible to hypothesize that divergent thinking predicts interpersonal trust.

The present study analyzed to which extent divergent thinking (defined in terms of both fluency and quality of ideas) and interpersonal trust are related in the context of the COVID-19 pandemic. We investigated the effect of divergent thinking on both ingroup and outgroup trust. The idea was not to study the effect of divergent thinking on interpersonal trust comparing the COVID-19 pandemic condition with a pre-COVID-19 pandemic condition, but rather to explore the differential impact of divergent thinking on ingroup and outgroup trust during a threatening condition such as the one faced during the COVID-19 pandemic. Subjects were tested remotely during the national tight lockdown period established in Italy, during the first COVID-19 pandemic wave,, when the virus spread rapidly (Vinceti et al., 2021). During the first wave the high contagiousness induced in the population a high degree of fear and worry about psychological health (World Health Organisation, 2020). In addition, the impact of the virus on daily life and on future employment and economic stability caused anxiety and depression (Cao et al., 2020; Cornine, 2020; Wang et al., 2020). The absence of social life and loneliness experienced during the lockdown also contributed to increase anxiety (Kmietowicz, 2020). Plausibly, the alteration of interpersonal norms during

the COVID-19 pandemic impacted even interpersonal trust (Fell 2020). Previous studies showed a negative relationship between social isolation and trust (Rotenberg, 1994; Yang & Moorman, 2021). Importantly, during the COVID-19 pandemic the lack of perceived interpersonal trust was found associated with depression (Li et al., 2020).

Therefore, the relationship between divergent thinking and interpersonal trust was studied after controlling, on the one hand, for affective factors, such as generalized anxiety disorder, and mood states, and, on the other hand, for the inclusiveness aspect of divergent thinking performance. Regarding affective factors, beside the psychological effects (*e.g.*, anxiety, stress, mood swings, anger, irritability, *etc.*) of the quarantine and social isolation due to the COVID-19 pandemic (Cannito et al., 2020; Ceccato et al., 2021), previous studies highlighted that people with low trust reported higher levels of social anxiety (Bienvenu et al., 2001). Happiness was found to positively affect the likelihood to trust an unknown individual (Mislin et al., 2015) by promoting expectations of trustworthiness and intentions to engage in trust behavior (Dunn & Schweitzer, 2005). Positive mood was found to increase trust if the other person was trustworthy and to decrease trust if the other person was untrustworthy (Lount, 2010). Regarding the inclusiveness of divergent thinking performance, previous studies showed that divergent thinking performance can increase on the basis of the task instructions delivered to participants (see Acar et al., 2020; Acar & Runco, 2019). Usually, divergent thinking tasks are administered using the "be-fluent" instructions, which primes the quantity aspect of divergent thinking. With these instructions, participants are instructed to find as many different alternative ideas as possible for a problem (*e.g.*, find different alternative uses for a brick). However, when participants are primed with the quality aspect of divergent thinking, such as "be creative" (*e.g.*, find creative uses for a brick), or with the instruction that combines fluency (quantity) and originality (quality), divergent thinking performance increases. Thus, in the current study we used three different types of task instructions, namely "be-fluent", "be-creative" and "combined: be-fluent + be-creative".

Starting from the premise that divergent thinking is positively associated with outgroup trust (Sellaro et al., 2014), our main hypothesis was that high divergent thinking abilities promote both ingroup and outgroup interpersonal trust even during the COVID-19 pandemic, after controlling for generalized anxiety disorder and mood states. This hypothesis was based on the assumption that the inclusiveness aspect of divergent thinking can overcome the negative effects of the COVID-19 pandemic on interpersonal trust. In addition, we also hypothesized that higher levels of divergent thinking would correspond to higher inclusive processing mode, and therefore, to more interpersonal trust using the instruction "be-creative" and "combined: be-fluent + be-creative".

1. Method

1.1. Participants

Three groups of 38 participants each were enrolled (114 in total: mean age = 23.66, *sd* = 2.53, 89% women), one for each type of divergent thinking task instructions: "be-fluent" (34 women, mean age = 23.68, *sd* = 2.74); "be-creative" (33 women, mean age = 23.95, *sd* = 2.44); "be-fluent + be-creative" (36 women, mean age = 23.37, *sd* = 2.43). The three groups

did not differ in terms of age: F (2.111) = 0.49, p = .61. All participants were students at the G. D'Annunzio University of Chieti–Pescara, Italy. Their participation was voluntary. They reported no neurological and/or psychiatric disorder, and no problem with alcohol or drug addiction. They also reported no prior or current infection associated with COVID-19 pandemic. Participants provided written informed consent electronically. The study was designed following the ethical principles of human experimentation stated in the Declaration of Helsinki and was approved by the Ethical Committee of the University of Bergamo, Italy.

1.2. Materials and procedure

The study was carried out during the lockdown in Italy, since 11 March, 2020 until 3 June, 2020 (first COVID-19 wave). Due to the social distancing, the whole procedure was conducted remotely, using the online software *Inquisit Web* software's script (Millisecond, 2022). Along with the informed consent and the demographic questionnaire, four tests were administered. The administration lasted approximately 25 minutes.

Trust scale (Delhey & Welzel, 2012): this self-reported measure assesses individual differences in ingroup and outgroup trust. The questionnaire consisted of 6 items, preceded by the following question: "How much do you trust the following group of people?". The first three items were related to "familiarity" and were referred to close people (ingroup-trust), namely: family, neighbourhood and people you know personally; the other three items were related to "remoteness" and "otherness" and were referred to unknown people (outgroup-trust), namely: people you meet for the first time, people of another religion, people of another nationality. Subjects were asked to respond using a Likert scale ranging from 1 (not at all agree) to 4 (totally agree). In this sample, the internal consistency reliability was α = .49 for the 3-ingroup items, and α = .74 for the 3-outgroup items.

Guilford's Alternative Uses (1967): this task assessed divergent thinking's abilities by asking participants to generate alternative uses for common objects (brick, newspaper, and shoe). For each stimulus, 3 minutes were given. Participants were assigned randomly to one of the following groups: the "be-fluent" group was instructed to find as many different alternative uses for each object as possible; the "be-creative" group was instructed to find creative uses for each object; the "be-fluent + be-creative" group was instructed to find as many different and creative uses for each object as possible. Two independent raters scored participants' responses in terms of fluency and overall quality. Fluency was evaluated considering the number of appropriate ideas. Incomplete and incomprehensible responses were discarded (only a few responses were discarded). The total fluency score was computed dividing the number of appropriate responses by the number of stimuli. The overall quality was evaluated by each rater along a 5-points Likert-type scale, in terms of uncommonness, remoteness and cleverness (Forthmann et al., 2017; Silvia et al., 2008). Raters were instructed to weigh these dimensions and give one single score for each response. They worked on the entire pool of responses, without considering the type of task instructions. Each response was given a single evaluation score, by averaging the two raters' scores. The total quality score was computed for each participant by dividing the sum of response evaluations by the number of responses provided across the three stimuli. The inter-rater correlations (intra-class coefficient, absolute agreement) for the quality of response was α = .998, p < .001.

Generalized Anxiety Disorder-7 (GAD-7) (Löwe et al., 2008; Spitzer et al., 2006): this is a 7-item self-report questionnaire measuring the severity of anxiety symptoms, following the Diagnostic and Statistical Manual of Mental Disorders, 4th Edition criteria. Participants reported how often they had experienced anxiety symptoms in the past two weeks, on a 4-point Likert scale ranging from 0 (not at all) to 3 (nearly every day). Higher scores indicated generalized anxiety symptomatology. GAD-7 has been increasingly used to assess both anxiety in general (Beard & Björgvinsson, 2014) and anxiety disorder research (Dear et al., 2011). In this sample, the internal consistency reliability of the 7-items questionnaire was $\alpha = .84$.

Positive and Negative Affect Schedule (PANAS) (Watson et al., 1988; Italian version by Terracciano et al., 2003), aims at assessing individuals' mood state. This test consisted of 10 items of positive affects (PAs) and 10 items of negative affects (NAs). Participants indicated on a 5-point Likert scale the extent to which they had experienced each emotional state during the past week. In this sample the internal consistency reliability for the PAs subscale was $\alpha = .58$, whereas for the NAs subscale was $\alpha = .68$. In order to obtain a single mood score, the negative affect score was subtracted from the positive affect score (see Golub et al., 2009; Phillips et al., 2002). Higher scores corresponded to higher positive mood. The single mood score was used in subsequent analysis.

2. Results

Descriptive statistics for all variables are reported in Table 1.

First of all, the possible confounding effect of gender on both ingroup and outgroup trust was tested using two analyses of variance (ANOVAs). Given that results were not significant for either ingroup trust [F (1.111) = 1.90, $p = .71$] or outgroup trust [F (1.111) = 3.50, $p = .64$], gender was not further considered.

Table 1. Descriptive statistics (source: created by authors)

	Be-fluent		Be-creative		Be-fluent + be-creative		TOTAL	
Variable	M*	SD**	M	SD	M	SD	M	SD
Ingroup trust	9.18	1.64	9.71	1.35	9.42	1.24	9.44	1.43
Outgroup trust	7.08	1.73	7.26	1.74	7.13	1.30	7.16	1.59
DT-F***	5.31	1.88	5.05	2.51	6.23	2.59	5.53	2.38
DT-Q****	2.03	.44	2.29	.55	2.26	.43	2.19	0.49
GAD-7*****	6.71	3.68	8.05	3.51	8.47	4.32	7.75	3.90
PANAS-PA******	24.5	5.54	25.8	5.85	25.4	5.55	25.2	5.63
PANAS-NA*******	24.4	6.50	26.6	7.32	27	7.96	26.0	7.31
Mood	.053	9.30	−0.9	10.4	−1.61	8.85	−0.8	9.46

Notes: *M – mean; **SD – standard deviation; ***DT-F – divergent thinking-fluency; ****DT-Q – divergent thinking-quality; *****GAD-7 – Generalized Anxiety Disorder-7; ******PANAS-PA – Positive and Negative Affect Schedule-positive affect; *******PANAS-NA – Positive and Negative Affect Schedule-negative affect.

Afterwards, we examined the effect of task instructions on divergent thinking performance, comparing the three groups using two ANOVAs. Results showed that instructions did not affect the fluency score [F (2.111) = 2.62, p = .08], but impacted the quality of divergent thinking [F (2.110) = 3.53, p = .03]. Bonferroni's (1936) adjusted *post hoc* analysis (p < .05) (see Field, 2009) revealed that the "be-creative" group (M = 2.29, sd = 0.55) provided higher scores compared to the "be-fluent" group (M = 2.03, sd = 0.44), but not compared to the "be-fluent + be-creative" group (M = 2.26, sd = 0.43). No difference was found between the "be-creative" and "be-fluent + be-creative" groups.

Then, groups' differences in interpersonal trust were explored by two ANOVAs. Group did not affect either ingroup [F (2.111) = 1.30, p = .28] or outgroup trust [F (2.111) = .13, p = .88]. Given that group affected the quality of divergent thinking, and that a specific prediction was formulated in terms of the type of task instructions, the variable group was used as a predictor in the subsequent analyses.

Furthermore, the relationships between divergent thinking and interpersonal trust were examined. The correlation matrix is presented in Table 2. Considering the cells of interest, results indicated that ingroup trust correlated negatively to generalized anxiety disorder (r = –.188), and positively to mood (r = .295). Outgroup trust was positively associated only with the quality of divergent thinking (r = .290).

Finally, two hierarchical regression analyses were performed, one for ingroup trust and one for outgroup trust. For both analyses three blocks of independent variables were used: the generalized anxiety disorder and mood were entered first (first model), followed by the variable group (second model), and by the fluency and the quality of divergent thinking (third model).

Based on the suggested cut-off value of 5 for the variance inflation factor (VIF) (see Hair et al., 2010; Sheather, 2009), no multicollinearity was found, since the obtained VIF value ranged from 1.002 to 1.737 across predictors. In addition, Allison (1999) suggested that, although there is not a strict cut-off for tolerance, a value of tolerance below .40 can be an index of multicollinearity. In this study tolerance ranged from .59 to 1 across predictors.

Regarding the regression analysis for ingroup trust, the first model was significant [F (2.110) = 5.28, p = .006, R^2 = .087, R^2 adjusted = .070] and explained 8.7% of variance. Mood emerged as a significant coefficient (β =.295, t = 2.50, p = .014). The second model

Table 2. Correlation matrix (source: created by authors)

	Ingroup trust	Outgroup trust	GAD-7*	Mood	DT-F**	DT-Q***
Ingroup trust	1					
Outgroup trust	.395*****	1				
GAD-7	–.188****	–.045	1			
Mood	.295*****	–118	–.642*****	1		
DT-F	–.092	.064	–.119	.031	1	
DT-Q	.085	.290*****	.017	–.026	.077	1

Notes: *GAD-7 – Generalized Anxiety Disorder-7; **DT-F – divergent thinking-fluency; ***DT-Q – divergent thinking-quality; ****p < .05; ****** p < .01.

was also significant [F (3.110) = 3.78, p = .013, R^2 = .092, R^2 adjusted = .068], but adding the group variable in the second model explained only an additional 0.5% of variance (F (1.110) = 0.66, p = .42). Also, the third model was significant [F (5.108) = 2.67, p = .026, R^2 = .110, R^2 adjusted = .069], but again, the amount of variance explained did not significantly increase (ΔR^2 = .018; F (2.108) = .107, p = .35). The final model explained 11% of variance in ingroup trust, with only mood (β =.29, t = 2.44, p = .016) positively predicting trust.

As regards the outgroup trust, the first model [F (2.113) = .87, p = .42] and the second model [F (3.110) = .61, p = .61] were not significant. Notably, the third model, in which divergent thinking was entered, was significant [F (5.108) = 2.51, p = .035, R^2 = .104, R^2 adjusted = .062], and explained 10.4% of variance in outgroup trust. Only the quality of divergent thinking was a significant positive predictor (β =.29, t = 3.14, p = .002).

Discussion

Interpersonal trust plays a key role in social interactions and relationships in predicting cooperation (Balliet & van Lange, 2013) based on positive expectations about the behavior and intentions of other people (Rousseau et al., 1998). Previous studies revealed that participants engaged in a divergent thinking task showed higher interpersonal trust, as the two constructs share both an inclusive processing mode and some degree of cognitive control (Sellaro et al., 2014). This study explored the role of divergent thinking in both interpersonal ingroup and outgroup trust, after controlling for general anxiety disorder, mood and inclusiveness of divergent thinking performance. The study was carried out during the lockdown period due to the COVID-19 pandemic, that is, during the first COVID-19 pandemic wave, which caused a social condition that might have impaired the way in which people rely and trust on each other. The main hypothesis was that the divergent thinking abilities (fluency and quality of ideas), especially when assessed using the highest inclusiveness instructions "be-creative" and "be-fluent + be-creative", would positively predict interpersonal trust toward outgroup members during the COVID-19 pandemic. The results showed that the quality of divergent thinking, evaluated in terms of uncommonness, cleverness, and remoteness, positively predicted outgroup trust, but not ingroup trust, which in turn was positively predicted by mood. No effect of the type of instructions was found.

These results partially confirm the hypotheses, given that only trusting outgroup seems to benefit from the quality of divergent thinking in the context of the COVID-19 pandemic. People showing high ability to produce uncommon, remote and clever ideas rely more on an inclusive processing mode, and therefore are more prone to trust strangers. Although one can assume that people intuitively prefer to cooperate with ingroup members during the COVID-19 pandemic, the results of the present study suggest that people can use an inclusive processing mode to override distrust of outgroup members even during life-threatening conditions. Interestingly, Colzato et al. (2013) showed that "self–other integration" benefits from divergent thinking, which regulates the integrativeness of information processing irrespective of its social implications. In this direction, the mechanism of "self–other integration" based on divergent thinking probably was effective also in the context of the COVID-19 pandemic, by increasing outgroup trust.

The finding that the quality rather than the quantity of divergent thinking positively affected outgroup trust is also noteworthy, as if the quality aspect of divergent thinking, more than the quantity reflects higher inclusiveness of information processing. In other words, this result reveals that cognitive control state associated with the quality of divergent thinking can predict outgroup trust even during the COVID-19 pandemic. Following Hughes et al. (2017), trusting unfamiliar people yields activity in cortical areas involved in top-down control (dorsal anterior cingulated cortex and lateral prefrontal cortex), as if the exertion of control can help recover trust in intergroup settings; in addition, outgroup trust would increase when individuals have time to make decisions. Interestingly, the dorsal anterior cingulated cortex (Sun et al., 2016) and the lateral prefrontal cortex (Wu et al., 2015) were identified as key regions also for divergent thinking. Thus, although the extent to which the divergent thinking-outgroup trust relationship changed from pre- to the COVID-19 pandemic condition could not be determined, from the present study it is possible to speculate that people with high levels of the quality of divergent thinking and interpersonal trust are more reluctant to perceive other individuals as potential health threats. Notably, this could have some side effects, given that people with higher quality of divergent thinking and interpersonal trust could perceive less risks and therefore be more resistant to adopt the measures aimed at reducing the spread of the virus compared with those individuals characterized by lower quality of divergent thinking and lower interpersonal trust.

On the contrary, the quality of divergent thinking did not predict ingroup trust, which appeared to be more related to feelings and emotions, rather than to an inclusive processing mode. One possible explanation of such a finding can be drawn from the social identity theory (Tajfel & Turner, 1979; Turner et al., 1987), which predicts that the ingroup members not only form an important part of our identity, but also serve to partially fulfil belonging and self-esteem needs. Highly identified members are more prone to match the ingroup's emotional standard (Smith et al., 2007). They feel a particular emotion according to the ingroup's emotion mostly felt (Moons et al., 2009), regardless of the emotional valence (Maitner et al., 2007), with the consequence that trust might be also affected. Thus, in the present study, it might be that during the lockdown people reactivated the ingroup identity based on existing positive emotions and as a result ingroup trust also increased.

Conclusions

Taken together, these results show that in the context of the COVID-19 pandemic interpersonal trust is differently affected by cognitive and emotional factors: the quality of divergent thinking predicts only outgroup trust, whereas mood predicts ingroup trust. This study is not free of limitations. First of all, although the main idea was to explore the different impact of divergent thinking on both ingroup and outgroup trust during the COVID-19 pandemic, the lack of a baseline (COVID-19 pandemic measure) does not allow to hatch possible changes in the interpersonal trust-divergent thinking relationship from one non-threatening condition to a threatening condition. In addition, the electronic administration of the protocol has probably damped the reliability of some scales, such as the ingroup trust scale and the PANAS schedule.

The main implication of this study is that encouraging positive emotions might be not sufficient to promote trust toward the outgroup. Instead, it may be necessary to focus on inclusive processing mode, as the one underpinned by divergent thinking (Sellaro et al., 2014). Future studies should confirm and extend these results, for instance by using appropriate tasks to measure both ingroup and outgroup trust, based on economic (*e.g.*, trust games) and health perspectives.

In conclusion, think divergently might be an alternative and successful strategy to foster interpersonal trust especially toward outgroups.

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