Telecommunication Telepathy: A Meta-Analysis[1]

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Abstract: *Objective*: We bring together results from 15 published papers describing 26 telecommunication telepathy experiments published between 2003 and 2024 in a meta-analysis to explore the patterns in these results and their overall significance. *Methods*: The basic experimental design in these experiments involved four potential callers in remote locations. For each trial one of these callers was chosen at random and asked to call the participant, who was on a telephone without a caller ID. The participant then named the caller before answering the phone. Similar experiments were carried out with email and SMS messages. By random guessing, the hit rate would be around 25%. We collected relevant studies from reference lists and online searches and used a random-effects model in the meta-analysis. *Results*: Overall, hit rates were very significant above chance level (p = $1x10^{-7}$). By contrast, in tests carried out under precognitive conditions, the hit rates were at chance. There was no significant difference between the results of Sheldrake and his colleagues, who carried out most of the studies, and independent replications. Selected participants had significantly higher hit rates than unselected participants, and hit rates were significantly higher when callers and participants shared an emotional bond. The effect sizes in telecommunication telepathy are higher than those in ganzfeld and dream telepathy tests. *Conclusion*: Research on telecommunication telepathy could become an increasingly fruitful area for psi research, especially in conjunction with automated intuition training apps.

Keywords: telephone telepathy, e-mail telepathy, psi, anomalous cognition, meta-analysis, precognition, automated tests.

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Highlights

- Based on 26 telecommunications telepathy experiments, hit rates were very significant above chance level ($p = 1 \times 10^{-7}$).
- In tests carried out under precognitive conditions, the hit rates were at chance levels.
- Selected participants had significantly higher hit rates than unselected participants.
- Hit rates were significantly higher when callers and participants shared an emotional bond.
- The effect sizes in telecommunication telepathy were higher than those in ganzfeld and dream telepathy experiments.

Many people say that they have had telepathic experiences in connection with telephone calls, emails, SMS messages and instant messaging systems (Brown & Sheldrake, 2001; Sheldrake, 2000, 2003). Typically, people say they started thinking about somebody for no apparent reason who shortly afterwards called them on the telephone, sent an email, or text message, or they felt who was calling when the phone rang before looking at the caller ID or answering the phone. In questionnaire surveys in the UK, USA, Germany, and Argentina, an average of 85% of the respondents said they had experienced apparent telephone telepathy; in most cases it occurred with people they knew well, like family members, friends, or close colleagues. In the same surveys, people were also asked if they had experienced other kinds of telepathy, to which 68% answered yes (Sheldrake, 2003). Telepathy in connection with telecommunications seems to be more common than other kinds of apparent telepathy and may be the prevalent type of telepathy in the modern world.

However, although these experiences with telephones, emails, and text messages appeared to be telepathic, could they have been a result of chance coincidence combined with selective memory? People might have remembered the times they thought of someone who called or sent a message but forgot the times they thought about someone who did not. Moreover, because telepathy typically occurs between people who know each other well, people may have anticipated subconsciously when a particular person would call, or message them, based on their habits and schedules.

Although apparent telecommunications telepathy is common, as far as we know it was not investigated experimentally until the beginning of this century. To test the possibility that the phenomenon is merely a matter of chance or depends on knowing callers' habits, Sheldrake and Smart (2003a, b) carried out experiments in which the participants had four potential callers, all of whom were in remote locations, far beyond the range of normal sensory cues. For each trial, one of the callers was selected by the experimenter at random, and the experimenter then rang up that person and asked him or her to call the participant. In these tests, participants used landline telephones without caller ID systems and in some tests they were filmed continuously. When the phone rang, the participants had to guess which of four callers was on the line before answering the phone. By chance, their responses should have been right about 25% of the time; in fact, they were correct significantly more than this. In an initial unfilmed series of tests with 63 participants and 571 trials, the average hit rate was 40%, very significantly above the mean chance expectation of 25% (p <1x10^{-15}) (Sheldrake & Smart, 2003a). In a follow-up study in which four selected participants were filmed during the tests to minimize any possibility of cheating, the hit rate in a total of 271 trials was 45%, again very significantly above the chance level of 25% (p <1x10^{-12}) (Sheldrake & Smart, 2003b). In addition, an experiment of this kind was filmed for television in Britain with a group of five sisters, the Nolan sisters, who were a well-known girl band; their hit rate was 50% in 12 trials (p = .05) (Sheldrake et al., 2004).

Sheldrake and Smart (2005) also investigated possible telepathy in connection with emails in tests with a similar design, and with similar results. In a total of 819 unfilmed trials, the hit rate was 42%, very significantly above the 25% expected by chance (p < 1 x 10^{-18}). In a subsequent series of tests in which selected participants were filmed, in a total of 137 trials the hit rate of 47% was again very significantly above chance (p <1 x 10^{-7}). After Sheldrake & Smart's initial results were published in 2003, similar experiments were carried out on telephone telepathy by independent research groups in the Netherlands (Lobach & Bierman, 2004) and in Germany (Schmidt et al., 2009).

In the study of Lobach and Bierman (2004), the primary question they were asking was whether telephone telepathy occurred more at some times of day than others. In particular they tested the possibility that psychic phenomena occurred more around 13.30 hours local sidereal time (LST) than at other times of day. LST is defined in terms of the sun's relation to the fixed stars at the time of the vernal equinox and differs from regular solar time. The motivation for this enquiry was the finding by Spottiswoode (1997) that in a large sample of anomalous cognition studies, effect sizes were greatest at 13.30 LST, for unknown reasons. Spottiswoode examined the telephone telepathy data reported in Sheldrake and Smart (2003a) and found a similar pattern (Lobach

& Bierman, 2004). In their experimental study, Lobach and Bierman compared the hit rates in telephone telepathy tests around 13.30 LST (which was between 8.00 and 9.00 am in Amsterdam at the time of the study) and at a non-peak time, between 6.30 and 7.30 pm. The hit rates around 13.30 LST were indeed significantly above chance, 34.6% compared with 25% mean chance expectation, whereas at the non-peak time hit rates were 25.2%. The overall above-chance hit rate (29.4%, p = .05) was almost entirely because of the hit rates at peak times. As far as we know, there have been no follow up studies of this fascinating finding.

In Schmidt el al.'s (2009) first test, participants were tested not at home, as in previous and subsequent studies, but in the experimenter's office. In the randomized tests their callers did not ring the participant but the experimenter. The participant, who was in the same room, responded by naming the person they thought was calling the experimenter. The results were almost at the chance level, 26.7% as opposed to 25%. Arguably, this procedure cannot be considered an exact but a conceptual replication of other studies because of the obtrusive role of the experimenter and should have been excluded from our meta-analysis. In their subsequent studies, Schmidt et al. (2009) adopted the usual procedure of testing people at home, with the participants answering the telephone themselves, and found that one of their participants consistently scored significantly above chance and continued to do so in a follow-up series of trials.

This first phase of research by Sheldrake and his team, Lobach and Bierman (2004), and Schmidt et al. (2009) involved experimenter-directed tests in which the experimenters telephoned the randomly selected callers and asked them to call the participant or emailed the emailers asking them to send an email to the participants. The second phase of research, starting in 2007, involved a variety of automated tests, including internet-based automated tests for telepathy (Sheldrake & Beeharee, 2009; Sheldrake & Lambert, 2007), tests on telepathy in connection with SMS messages (Sheldrake et al., 2009) and emails (Sheldrake & Avraamides, 2009) and automated tests for telephone telepathy on mobile phones (Sheldrake et al., 2015; Sheldrake & Stedall, 2024). Independent investigations of telephone telepathy using an automated procedure were carried out in the US by Wahbeh et al. (2024) and in Italy by Tressoldi and Stedall (2025). In some of these automated studies, instead of four potential callers, there were only three or two. With four callers, there is a 25% mean chance expectation with random guessing; with three callers, 33.3%, and with two callers 50%.

Sheldrake and Stedall's (2024) first three experiments followed a new procedure, never used before, in which the participant and two callers were continuously con-

nected in a conference call system, in which the potential caller who was not part of any given test was muted and could not hear what the other two were doing. Nevertheless, this non-caller was not physically and emotionally disconnected from the others when the tests were proceeding, and in this sense these experiments cannot be considered an exact but a conceptual replication of the methods used in most other tests; like Schmidt et al.'s (2009) first study, they could arguably have been excluded from the meta-analysis. The hit rates were not significantly above chance, perhaps because of telepathic interference from the non-caller, whose mind was not detached from the experiment when not calling, as in the usual design. When Sheldrake and Stedall (2024) reverted to a more conventional design in their experiment 4, the hit rate was positive and significant.

When Tressoldi and Stedall (2025) used the same method as in Sheldrake and Stedall's (2004) experiment 4, testing participants at a University in Italy, the overall hit rate was 48.7%, slightly below the mean chance expectation of 50%. However, there is more to this null result than meets the eye. After doing the test, the participants were asked about their strategy as follows: "*Please describe how you tried to solve the task, either to find an underlying rule or reasoning about the caller's identity, or using an intuitive approach, that is trying to guess the caller's identity based on your feelings and guessing abilities.*" Those who said they looked for rules or reasons scored very significantly below the chance level of 50%, with only 35.4% hits (p = .00003). Those who said they took an intuitive approach had an above-chance hit rate of 56.7% (p = .01). These results suggest not only that an intuitive approach works better than a non-intuitive approach under telepathic conditions, which is not surprising, but also that an attempt to use rules and reason does not merely inhibit telepathic effects, but reverses them – a kind of negative psi or psi-missing. This seems to be an example of the "sheep-goat effect," well known to psi researchers for decades. Sheep are people who accept the possibility of psi, whereas goats are people who reject the possibility of detecting psi in experimental tests. There is a general tendency for sheep to score above chance, and for goats to score at or below chance (Storm & Tressoldi, 2017).

Telecommunication telepathy research contrasts with earlier empirical research on telepathy because it does not take place in artificial experimental settings, but in people's homes and other informal environments. By contrast, in the well-known card-guessing tests of J.B. Rhine and his colleagues, people worked in pairs in formal laboratory conditions, and one, the sender, looked at cards with simple visual symbols on them, so-called Zener cards, while the participant, who was often unknown to the sender and behind a screen, tried to guess which of the five cards was being looked at. The effect size was very small, but because there were such large numbers of ESP

trials it was statistically significant (Storm & Tressoldi, 2023).

In Ganzfeld telepathy experiments, the participants were in isolated rooms, usually in reclining chairs, with halved ping pong balls taped over their eyes, in dim red light, with white noise playing through earphones. Meanwhile, a sender in a separate room watched a randomly selected video clip out of a pool of four video clips. Could the receiver identify the target video at levels above chance, in this case 25%? A long series of Ganzfeld experiments in many different laboratories has given repeatable, statistically significant positive results (Tressoldi & Storm, 2023).

Telepathy in connection with modern telecommunications offers the possibility for research in real life settings, rather than in laboratories or in hard-to-organize remote viewing sessions with an outbound target person. Telecommunication telepathy is closer to everyday experience and opens up the possibility for progressively improved automated tests, as well as for automated intuition training procedures.

Altogether there were 15 published papers describing 26 telecommunication telepathy experiments published between 2003 and early 2024. Here, we present a meta-analysis of these results.

Methods

Studies Retrieval

All studies with Rupert Sheldrake as author were retrieved from the database at this link: https://www.sheldrake.org/research/telepathy. All the remaining studies were retrieved using references in Sheldrake's papers, personal contacts of the authors, and a search on Google Scholar (scholar.google.com) database with the keywords "Sheldrake" and "telephone telepathy," on 10th November 2023. The Google Scholar database is is more comprehensive than other academic search engines such as Scopus and Web of Science, which are confined to mainstream journals; Google Scholar includes non-mainstream journals, preprints, and technical reports. Further searches were carried out on 20th August 2024 using the PsychINFO database. A search for "telephone telepathy" came up with several of the publications we had already identified, but no other publications on the subject. Searches for "email telepathy", "SMS telepathy", "text telepathy" and "telecommunications telepathy" came up with no relevant publications. In short, we found no papers on telephone or other forms

of telecommunication telepathy in the scientific literature before the publications of Sheldrake and his colleagues starting in 2000. However, even if we missed some published papers in our searches, we took into account the possibility of undetected or unpublished studies through the Publication Bias Control, discussed below.

Inclusion Criteria

Studies had to be experimental studies published in scientific journals or conference proceedings and had to report the number of trials and correct identifications (hits).

After elimination of duplicates and non-experimental studies, we retained 15 studies with 26 experiments (see Figure 1; cf. Page et al., 2021). We included the first experiment of Schmidt et el. (2009) and the first three experiments of Sheldrake & Stedall (2023) even though they were not exact replications of the original designs of Sheldrake and his colleagues but used different conditions.

Two authors, Patrizio Tressoldi and Tom Stedall, both experts in experimental studies analyses, coded the following variables to be inserted in the database: a) Authors of the study; b) Year of publication; c) Type of device (telephone, email, etc.); d) Type of condition (Telepathy or Precognition); e) Participants selection (Yes or No); f) Risk of cheating (Yes or No); g) Independent Replication (Yes or No); h) Callers' emotional bond with the receivers (Yes or No); i) Number of participants; l) Number of trials; m) Number of Hits (correct identifications).

Because in some studies the authors reported both complete and incomplete tests, that is tests interrupted either for technical problems or by participants for any reason such as optional stopping, we decided to include all complete and incomplete tests. This means that optional stopping could have been occurring, in which participants stop a test because they are not doing well. However, this would have the effect of lessening the hit rate.

All information was checked and agreed by the two coders and supervised by the first author.

The final database with all 15 papers and related 26 experiments, are available open access at: https://doi.org/10.6084/m9.figshare.24574174 for independent controls.

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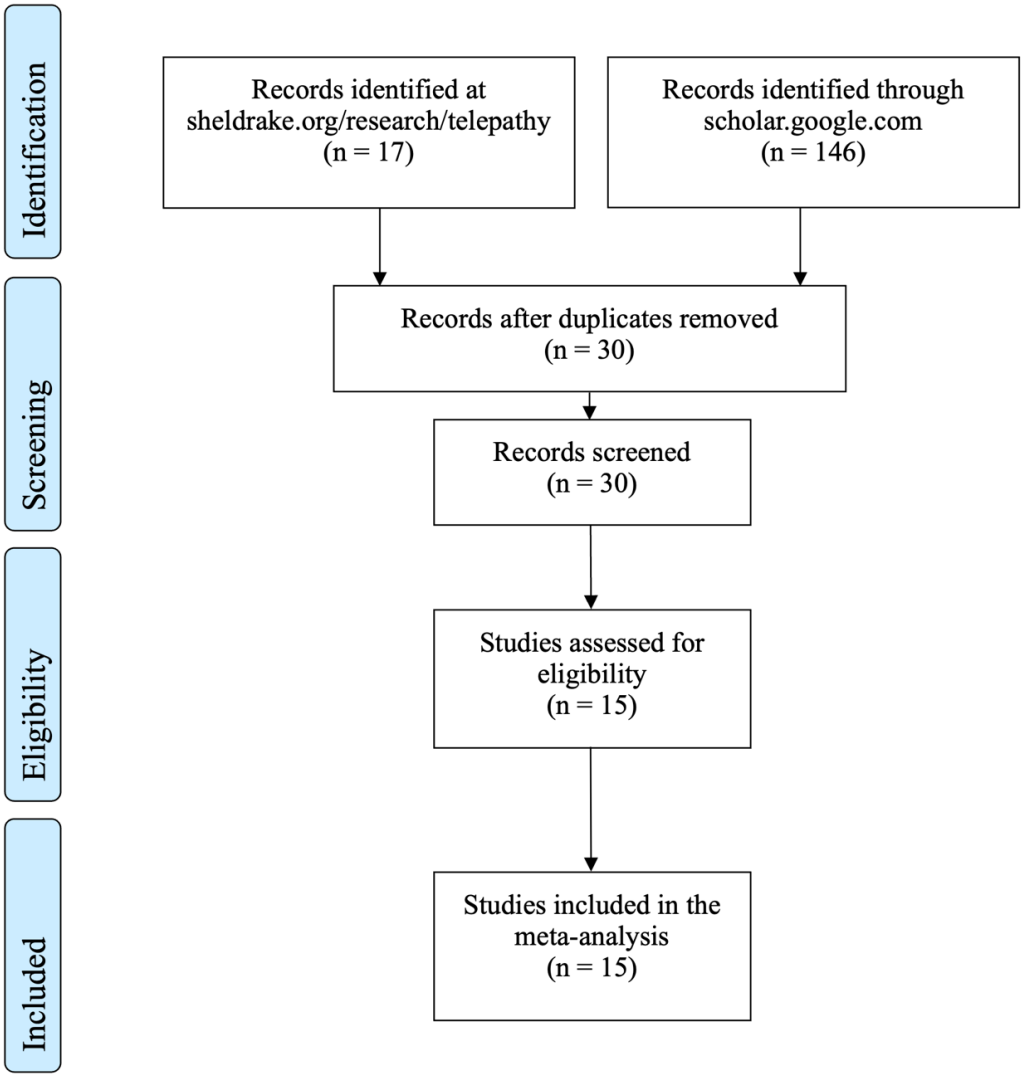
Figure 1

PRISMA Flowchart for Literature Retrieval



Effect Size Measures

We analyzed the raw effect size (ES.Hits) obtained calculating the difference between the hits percentage and the percentage expected by chance which is a measure that conveys an immediate comprehension of the overall results. In the experimenter directed tests, the mean chance expectation was 25%, and in the automated tests 33.3% or 50%. For an easy-to-understand overview of the overall results we took an average of the raw effect sizes in all experiments. We compared the raw effect sizes in a Forest plot (Fig.2).

We also analyzed the overall results with standardized effect size (ES), as this measure is often used in other meta-analyses. The standardized effect size was estimated from the Z values of the normal approximation to the binomial distribution applying the formula $Z/\sqrt{n}$ of trials. We estimated the effect sizes variance with the formula: $(p(1-p) / (n * \pi_0 (1-\pi_0)))$; where p = hits percentage; π_0 = percentage chance, n = number of trials.

Meta-Analyses Model

There are two main statistical procedures for meta-analysis: fixed-effect and random-effects models. Fixed-effect models assume that all the studies in the meta-analysis are very similar and that the only sources of variability are sampling errors in the selection of participants. This was not the case here. Therefore**,** given the heterogeneity among the different experiments, we applied a random-effects model adopting the restricted maximum likelihood (REML) to estimate the heterogeneity variance (Langan et al., 2019) and the Hartung method to control effect size nonnormality (Rubio-Aparicio et al., 2018) and corresponding confidence intervals estimation.

We carried out all analyses using the free software R and the following libraries: metafor v. 4.4.0 (Viechtbauer, 2010), PublicationBias v. 2.4.0 (Braginsky et al., 2023). The syntax is available open access at: https://doi.org/10.6084/m9.figshare.24574174 for results independent reproducibility.

Reporting Guidelines

We used the APA Meta-Analysis Reporting Standards (MARS, Appelbaum et al., 2018) and the Preferred Reporting Items for Systematic Reviews and Meta-analysis (PRISMA) (Page et al., 2021) as reporting guidelines.

Results

Descriptive Statistics

The main descriptive statistics related to all 26 experiments are presented in Table 1.

Table 1

Descriptive Statistics for the Experiments

Number of studies (%)	
Telepathy	Precognition
23 (88.5)	3 (11.5)
Selected participants	Unselected participants
8 (30.8)	18 (69.2)
No risk of cheating	Risk of cheating
15 (57.7)	11 (42.3)
Independent replications	Non-independent replications
7 (26.9)	19 (72.1)

Meta-Analyses

The results of the overall meta-analyses for both the raw and standardized effect size are reported in Table 2 divided between Telepathy and Precognition conditions.

Table 2

Results of the Meta-Analyses

Condition	***N***	**Effect size.Hits**				**Effect size**			
		ES.Hits	95% CI	**Tau²**	*p*	ES	95% CI	**Tau²**	*p*
Telepathy	23	8.7	5.3-11.9	59.2	$4x10^{-8}$	.17	.10-.24	.022	$1x10^{-7}$
Precognition	3	-.77	-2.4 -.91	.46	.18	-.017	-.05-.09	.0002	.17

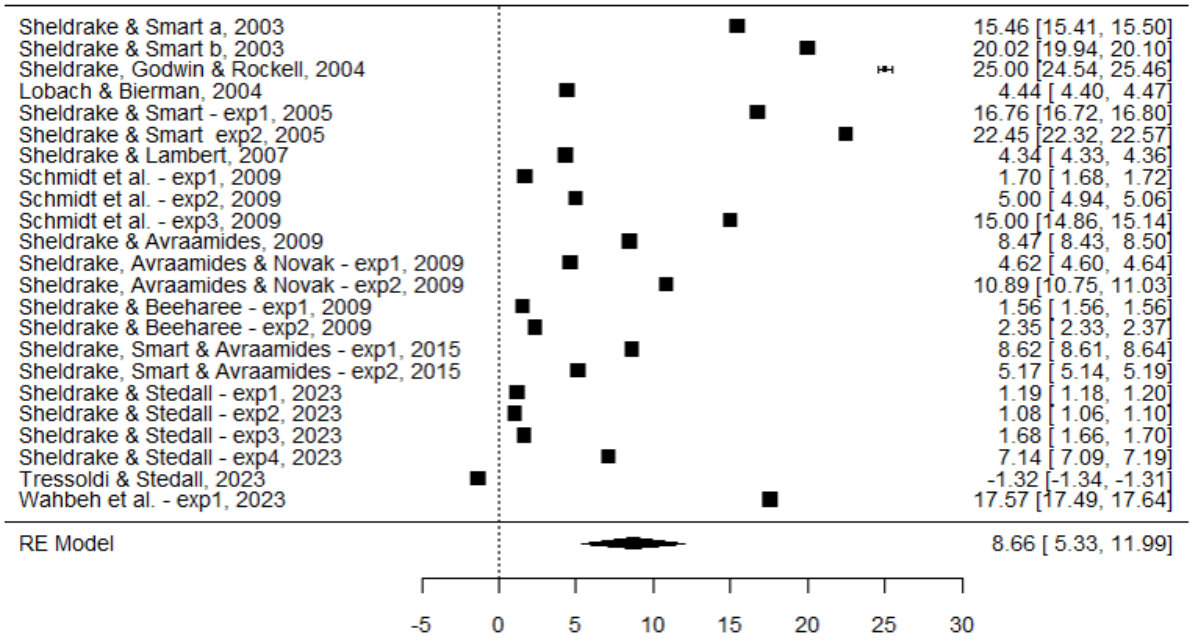
Note. This table shows both the raw effect size, as percentages above mean chance expectation (ES. Hits) and standardized (ES) effect sizes, with corresponding 95% confidence intervals (95% CI), Tau^2 is a measure of the variance heterogeneity among the different experiments. The effect size ***p*** value is with respect the null hypothesis.

The results of the telepathy experiments are also presented in a Forest plot (Fig. 2) using the raw effect sizes expressed as percentages.

Figure 2

Forest Plot of the Experiments

Note. The figures on the right and the axis at the refer to percentages above mean chance expectation. Confidence Intervals are given in square brackets in percentages. RE model is the overall result of the random effect model as reported in Table 2.



The overall results related to experiments using the telepathy condition show a strong effect both with the raw and the standardized effect size. The average hits percentage above chance is 8.6% with 95% confidence interval from 5.3 to 11.9%. The high hit rate in Wahbeh et al.'s (2023) telepathy tests, 17.6% above chance, may be explained by a statistical artifact. As the authors themselves pointed out, they offered participants three optional responses: they could choose one of the two callers but also choose to respond that no one was calling, giving a 33.3% probability of being right by chance. In fact, in all trials one of the two callers was calling and most participants never responded "no one". Hence the effective mean chance expectation was 50% rather than 33.3%. In the tests in which participants never responded "no one" the average hit rate was 56.3%, 6.3% above the chance level (p = .02). Recalculating the overall raw effect size in our meta-analysis taking his correction into account gives ES.Hits = 8.15 with 95% confidence interval 4.9-11.3, and overall $p = 8 \times 10^{-8}$ showing that this correction makes very little difference to the overall results.

The results related to the precognition condition show no significant overall effect (Table 2), and in all three studies, the results were close to chance levels, as dis-

cussed below. However, there are too few experiments on precognition to apply a meta-analysis, and all following analyses are based on only the experiments adopting a telepathic condition.

Publication Bias Controls

Among the different publications bias tests, we chose the empirical control of the percentage of experiments reporting statistical non-significant results and Mathur and Van der Weele (2020) publication bias tests which enable statements such as: "For publication bias to shift the observed point estimate to the null, 'significant' results would need to be at least N-fold more likely to be published than negative or 'nonsignificant' results."

We choose the option that affirmative results should be 5-fold more likely to be published than negative or nonsignificant results.

In our database, 46.2% of the experiments were published even if they did not reach the minimum conventional statistically significant value, thus it is implausible to assume that affirmative results were five times more likely to be published than non-significant results. Furthermore, the Mathur and Van der Weele (2020) publication bias test shows that the if the statistically significant experiments were five times more likely to be published than non-statistically significant ones, the overall effect size would be reduced from 8.6 to 7.1, and the *p* value of .001 would still be significant. Thus, both tests show that the overall significant positive results are unlikely to be a result of publication bias.

Meta-Analyses of Moderating Effects

In Table 3 and in Figure 3, we present the meta-analyses using the raw effect size of the following moderators of the experiments on telepathy: independent replications; device type; participants selection; risk of cheating; and participants' emotional bond.

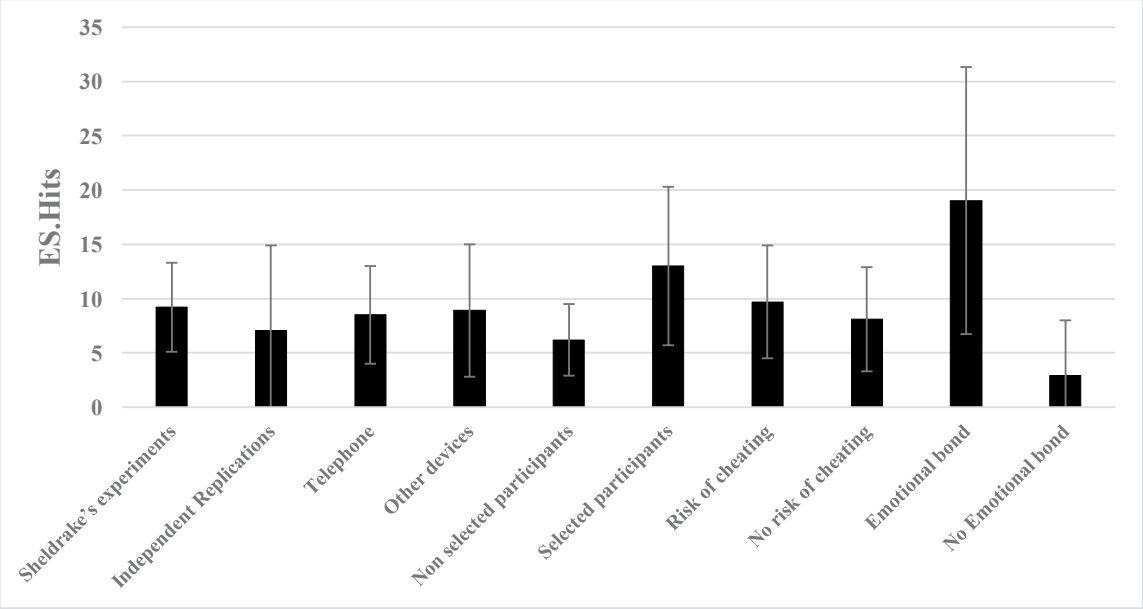
Table 3

Meta-Analyses Parameters Related to Main Moderators of Differences.

Condition	*N* of studies	ES.Hits	95% CIs	Tau²	*p*
Sheldrake's experiments	17	9.2	5.1 – 13.2	62.0	.0002
Independent replications	6	7.1	-.84 – 14.9	56.7	.07
Telephone device	15	8.5	4.0 – 13.0	65.4	.001
Other devices	8	8.9	2.7 – 15.0	54.2	.01
Non selected participants	15	6.2	2.9 – 9.6	38.8	.001
Selected participants	8	13	5.7 – 20.3	75.4	.004
Risk of cheating	8	9.7	4.5 – 14.8	38.4	.003
No risk of cheating	15	8.1	3.3 – 12.8	72.9	.002
Emotional bond	6	19.0	6.5 – 31.4	140.7	.01
No Emotional bond	6	2.9	-2.2 – 8.1	24.2	.2

Figure 3

Effect Size and 95% Confidence Intervals of the Moderators Presented in Table 2.



Even if for most comparisons the range of confidence intervals is largely due to the low number of experiments, the only statistically significant differences are between selected and non-selected participants, M = 6.8%; 95% CIs = .78 – 12.9; p = .027, and between callers with and without emotional bond with the receivers; M = 16.1%; 95% CIs = 5.8 – 26.4; p = .002.

There are no significant differences between Sheldrake's and independent experiments, between the use of telephone and other devices, and between experiments with and without risk of cheating. However, the number of studies is small and therefore non-significant p values are likely.

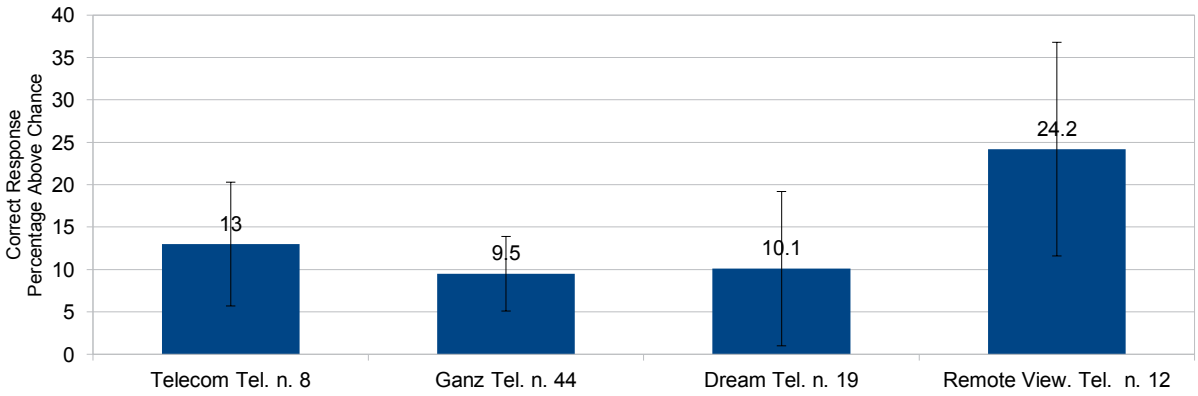
Comparison with Other Telepathy Protocols

With the accumulation of experimental studies analyzed meta-analytically, is it possible to compare the outcomes of this meta-analyses with those obtained by other experimental protocols that used telepathic conditions.

This comparison is possible with the experiments related to anomalous cognition in a ganzfeld environment (Tressoldi & Storm, 2023), experiments related to remote viewing with an outbound partner (Tressoldi & Katz, 2023), and experiments on telepathy in dreams (Storm et al., 2017). We compared the results obtained with selected participants in all these experimental protocols (Fig. 4).

Figure 4

Mean Effect Sizes of Different Telepathy Protocols



Note. Mean and related 95% Confidence Intervals of hits above chance obtained by selected participants in this meta-analysis of telecommunications telepathy (Telecom Tel), in the telepathic condition in ganzfeld (Ganz Tel), in dream telepathy (Dream Tel) and with remote viewing with outbound partner protocols (Remote View. Tel), ***n*** = number of experiments.

The performance of selected participants in telecommunication telepathy tests summarized in this meta-analysis is higher than that in telepathic ganzfeld and dream experiments, but lower than the hit rates of selected participants doing remote viewing tasks.

Discussion

A meta-analysis of 23 studies on telepathy in electronic communications showed a hit rate 8.6% above the mean chance expectation ($p = 4 \times 10^{-8}$). Using the standard methods of random effect meta-analysis, the standardized effect size was 0.17 ($p = 1 \times 10^{-7.}$) (Table 2).

We tested the possibility that these positive results were artifacts of publication bias, whereby researchers may have selectively published positive results and not published non-significant results. In fact, almost half of the published studies had statistically non-significant results. Even if five times more statistically significant studies than statistically non-significant studies had been published, the hit rate above mean chance expectation would be reduced from an average of 8.6% to 7.1%, and the result would still be statistically significant ($p = .001$). Thus, the results of the telecommunication telepathy tests conducted so far indicate that there are real effects that seem to be telepathic.

Could these effects have been precognitive rather than telepathic? Did the participants feel who was going to call them in the near future, as opposed to calling them in the present? An explanation in terms of precognition seems unlikely in the light of three studies, referred to above, under precognitive rather than telepathic conditions. Under telepathic conditions, the caller called the participant, who then said who the caller might be before answering the call, in the absence of any caller ID system. By contrast, under precognitive conditions, the participant was asked to identify who is about to call. After receiving the participant's response, one of the possible callers was chosen at random, and asked to call the participant as soon as possible. Two of these studies were with precognitive responses to telephone calls (Sheldrake, 2014; Wahbeh et al., 2024) and one with text messages (Sheldrake, 2014). The results were very close to chance: -0.1%, -1.4% and -0.9% respectively. Our provisional conclusion is that the overall positive hit rates in tests for telecommunication telepathy are indeed a result of telepathy rather than chance coincidence or precognition.

Why does telecommunication telepathy show relatively strong effects compared with Ganzfeld telepathy and dream telepathy (Fig. 4)? One reason may be that

it is more familiar. Most people have experienced apparent telepathy in connection with telephone calls, emails, and SMS messages, whereas in real life no one has experienced telepathic communication sitting in reclining chairs in dim red light with halved ping pong balls taped over their eyes, as in Ganzfeld experiments, or sleeping in a dream lab and being woken by an experimenter to ask about their dreams, as in dream telepathy experiments.

Above all, telepathy often seems to be involved in 'calling' another person at a distance to express a need (Sheldrake, 2003). Similar effects occur between humans and non-human animals (Sheldrake, 1999). Some nursing mothers respond to their babies' distress when they are away from the baby by experiencing their milk let down; their breasts squeeze out milk and often tingle (Sheldrake, 2002). Some cat and dog owners have found that they can call their animals silently when they are out of sight and earshot, and the animals come to them, apparently responding telepathically (Sheldrake, 1999). Conversely, some people who keep cats have found that their cats silently call them to open doors or windows so that they can get into the house, rather like remote garage door opening systems (Sheldrake, 1999). Many people (Sheldrake, 2003) and non-human animals (Sheldrake, 1999) have responded seemingly telepathically to distant deaths or accidents of people with whom they are emotionally bonded, and sometimes succeed in going to their help.

A related phenomenon is the ability of many cats, dogs and other animals to anticipate when their owners are coming home, sometimes 15 minutes or more in advance, in a way that cannot be explained in terms of routine or sensory cues. The return-anticipating responses seem to be telepathic; the animals appear to be picking up their owners' intentions to come home (Sheldrake, 1999, Sheldrake & Smart, 1998, 2000a, 2000b).

These kinds of seemingly telepathic responses to calls and intentions in non-human suggest that there is a long evolutionary history of responding to calls from a distance, The invention of telecommunication systems enables people to call others at a distance in a way that would only have been possible telepathically in the past. Telecommunications telepathy seems like a natural accompaniment of new methods of calling from a distance made possible by modern technologies.

The meta-analysis highlighted two major moderators of the telepathic responses. First, selected participants scored significantly higher than unselected ones. For example, most of Schmidt et al.'s (2009) participants scored little better than chance, but one in particular scored well above chance in preliminary tests, and continued

to do so over 60 subsequent trials, in which her hit rate was 40%, well above the 25% chance level (p = .007). Not surprisingly, some people are better at this task than others. In general, selecting higher-scoring participants raises the hit rate in subsequent tests.

Second, telepathic communication worked better between people with emotional bonds than between strangers. This finding is consistent with a large body of evidence showing that telepathy predominantly occurs between people who know each other well, or have strong emotional bonds (Sheldrake, 2003). The same principles apply to telepathy between people and non-human animals (Sheldrake, 1999).

Possibly the sheep-goat effect influenced the research brought together in this meta-analysis. In general, the experiments by Sheldrake and his colleagues had higher effect sizes than in independent replications (Fig. 2; Table 2), even if the difference between them was not statistically significant. The replications were mostly carried out in academic settings – by Lobach and Bierman (2004) at Amsterdam University, by Schmidt et al. (2009) at the University Medical Centre in Freiburg, Germany, and by Tressoldi and Stedall at Padua University. By contrast, Sheldrake's recruitment methods through the media, social media and internet may well have attracted participants interested in his work, more likely to be sheep, whereas recruitment in academic and scientific settings may have included a higher proportion of goats.

Suggestions for Future Investigations

The procedures in all the studies considered here are essentially contrived. The automated call environments used by Sheldrake and Stedall (2024) were particularly complex. The recruitment of participants was consistently difficult, largely because of the requirement for three or more people to be available at the same time. Further research would be facilitated by developing procedures that make it much easier for people to take part.

People communicate ubiquitously via smart phones and social media. Often this is instantaneous, or nearly so. It should be possible to construct an app that facilitates normal online communication via existing social media channels, but that also permits an element of guessing who is getting in touch. This could readily be achieved via social media Application Programming Interfaces (APIs).

Participants would not be engaging in tests as such, but willing to use such an app as an alternative means of normal online communication. If participants were not

online at the same time, any possible telepathic effect could be explored in terms of the time difference between communication and guess. Such an approach could potentially gather a large amount of data, because no coordination would be required. Such an approach could not prevent cheating but could be used to train potential telepathic ability. Talented participants could then be re-tested under controlled conditions. In summary, research on telecommunication telepathy could become an increasingly fruitful area for psi research, especially in conjunction with automated intuition training apps.

Declaration of interest

The authors declare that there is no conflict of interest.

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*These studies were included in the meta-analysis.

Télépathie par Télécommunication : Une Méta-Analyse

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Résumé: *Objectif*: Nous avons regroupé les résultats de 15 articles publiés, décrivant 26 expériences de télépathie par télécommunication menées entre 2003 et 2024, dans le cadre d'une méta-analyse visant à explorer les tendances de ces résultats et leur significativité globale. *Méthodes*: Le protocole expérimental de base dans ces études impliquait quatre appelants potentiels situés à distance. Pour chaque essai, l'un de ces appelants était sélectionné aléatoirement et invité à appeler le participant, lequel utilisait un téléphone dépourvu d'identification de l'appelant. Le participant devait alors nommer l'appelant avant de décrocher. Des expériences similaires ont également été menées avec des messages électroniques (email) et des SMS. Le taux de réussite attendu par pur hasard était d'environ 25 %. Les études pertinentes ont été recensées via des listes bibliographiques et des recherches en ligne, puis analysées à l'aide d'un modèle à effets aléatoires dans la méta-analyse. *Résultats*: Dans l'ensemble, les taux de réussite étaient très significatifs au-dessus du niveau de chance (p = 1 x 10^{-7}). En revanche, dans les tests effectués dans des conditions précognitives, les taux de réussite se situaient au niveau du hasard. Il n'y a pas de différence significative entre les résultats de Sheldrake et de ses collègues, qui ont réalisé la plupart des études, et les réplications indépendantes. Les participants sélectionnés avaient des taux de réponse significativement plus élevés que les participants non sélectionnés, et les taux de réponse étaient significativement plus élevés lorsque les appelants et les participants partageaient un lien émotionnel. L'ampleur de l'effet de la télépathie par télécommunication est supérieure à celle des tests de télépathie de Ganzfeld et de télépathie par le rêve. *Conclusion*: La recherche sur la télépathie par télécommunication pourrait devenir un domaine de plus en plus fécond pour l'étude des phénomènes psi, en particulier si elle est couplée à des applications automatisées d'entraînement à l'intuition.

French translation by Antoine Bioy, Ph. D.

Telekommunikations-Telepathie: A Meta-Analyse

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Zusammenfassung: *Zielsetzung*: Wir fassen die Ergebnisse von 15 veröffentlichten Arbeiten, die 26 Telekommunikations-Telepathie-Experimente beschreiben, die zwischen 2003 und 2024 veröffentlicht worden waren, in einer Meta-Analyse zusammen, um die Muster in diesen Ergebnissen und ihre Gesamtsignifikanz zu untersuchen. *Methoden*: Der grundlegende Versuchsplan dieser Experimente umfasste vier potenzielle Anrufer an entfernten Orten. Für jeden Versuch wurde einer dieser Anrufer zufällig ausgewählt und gebeten, den Teilnehmer anzurufen, der sich an einem Telefon ohne Anrufererkennung befand. Der Teilnehmer nannte dann den Namen des Anrufers, bevor er das Telefon abnahm. Ähnliche Versuche wurden mit E-Mail- und SMS-Nachrichten durchgeführt. Beim zufälligen Raten würde die Trefferquote bei etwa 25 % liegen. Wir sammelten relevante Studien von Literaturlisten und Online-Suchen und legten für die Meta-Analyse ein Modell mit Zufallseffekten zugrunde. *Ergebnisse*: Insgesamt lagen die Trefferquoten sehr signifikant über dem Zufallsniveau ($p = 1 \times 10^{-7}$). Bei den unter präkognitiven Bedingungen durchgeführten Tests lagen die Trefferquoten dagegen im Bereich des Zufalls. Es gab keinen signifikanten Unterschied zwischen den Ergebnissen von Sheldrake und seinen Kollegen, die die meisten Studien durchgeführt hatten, und unabhängigen Replikationen. Ausgewählte Teilnehmer hatten signifikant höhere Trefferquoten als unausgewählte Teilnehmer, und die Trefferquoten waren signifikant höher, wenn Anrufer und Teilnehmer emotional miteinander verbunden waren. Die Effektstärken bei der Telekommunikations-Telepathie sind höher als bei den Ganzfeld- und Traumtelepathieversuchen. *Schlussfolgerung*: Die Erforschung der Telekommunikations-Telepathie könnte ein zunehmend fruchtbarer Bereich für die Psi-Forschung.

German translation by Eberhard Bauer, Ph. D.

Telepatia por Telecomunicação: Uma Meta-Análise

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Resumo: *Objetivo*: Reunimos os resultados de 15 artigos publicados que descrevem 26 experimentos de telepatia por telecomunicação, publicados entre 2003 e 2024, em uma meta-análise visando explorar padrões em tais resultados e sua significância geral. *Metodos*: O desenho experimental básico nesses experimentos envolvia quatro pessoas que seriam os possíveis emissores das ligações em locais distantes. Para cada teste, um desses emissores era escolhido aleatoriamente e solicitado a ligar para o participante, que estava em um telefone sem identificador de chamadas. O participante, então, nomeava o chamador antes de atender o telefone. Experimentos semelhantes foram realizados com mensagens de email e SMS. A taxa de acerto por adivinhação aleatória seria em torno de 25%. Coletamos estudos relevantes de listas de referências e buscas online e usamos um modelo de efeitos aleatórios na meta-análise. *Resultados*: No conjunto, as taxas de acerto foram muito significativas acima do nível de chance aleatória ($p = 1 \times 10^{-7}$).

Em contraste, nos testes realizados sob condições precognitivas, as taxas de acerto estavam no nível das chances aleatórias. Não houve diferença significativa entre os resultados de Sheldrake e seus colegas, que realizaram a maioria dos estudos, e as replicações independentes. Os participantes selecionados tiveram taxas de acerto significativamente mais altas do que os participantes não selecionados, e as taxas de acerto foram significativamente mais altas quando os emissores e os participantes compartilhavam um vínculo emocional. As proporções dos efeitos na telepatia por telecomunicação são maiores do que aquelas nos testes de ganzfeld e telepatia em sonhos *Conclusão*: A pesquisa sobre telepatia por telecomunicação pode se tornar uma área cada vez mais frutífera para a pesquisa psi, especialmente em conjunto com aplicativos de treinamento de intuição automatizados.

Portuguese translation by Antonio Lima, Ph. D.

Telepatía por Telecomunicación: Un Meta-Análisis

Rupert Sheldrake Tom Stedall Patrizio Tressoldi

Resumen: *Objetivo*: Reunimos en un meta-análisis los resultados de 15 artículos con 26 experimentos de telepatía por telecomunicación publicados entre 2003 y 2024, para explorar los patrones de los resultados y su importancia global. *Métodos*: El diseño experimental básico de estos experimentos tuvo cuatro llamadores potenciales en ubicaciones remotas. En cada prueba se elegía al azar a una de estas personas y se le pedía que llamara al participante, que se encontraba en un teléfono sin identificador de llamadas. A continuación, el participante nombraba a la persona que llamaba antes de contestar al teléfono. Se realizaron experimentos similares con mensajes de correo electrónico y SMS. Adivinando al azar, el porcentaje de aciertos rondaría alrededor del 25%. Se recopilaron los estudios apropiados de listas de referencia y búsquedas en línea, y se utilizó un modelo de efectos aleatorios en el meta-análisis. *Resultados*: En general, los porcentajes de aciertos fueron significativos muy por encima del nivel del azar (p = 1x10$^{-7)}$. No obstante,, en las pruebas realizadas en condiciones precognitivas los porcentajes de aciertos se situaron al nivel del azar. No hubo diferencias significativas entre los resultados de Sheldrake y sus colegas, que realizaron la mayoría de los estudios, y las réplicas independientes. Los participantes seleccionados obtuvieron porcentajes de acierto significativamente más altos que los no seleccionados, y los porcentajes de acierto fueron significativamente más altos cuando las personas que llamaban y los receptores compartían un vínculo emocional. Los tamaños del efecto en la telepatía por telecomunicación son superiores a los de los diseños de ganzfeld y de telepatía onírica. *Conclusiones*: La investigación de la telepatía por telecomunicación podría convertirse en un área cada vez más fructífera para la investigación psi, especialmente en conjunción con programas (apps) automatizados para el entrenamiento de la intuición.

Spanish translation by Etzel Cardeña, Ph. D.