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RESEARCH

An Automated Test for Telepathy in Connection with Emails

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Abstract—Can people sense telepathically who is sending them an email before they receive it? Subjects, aged from 12 to 66 years, registered online with the names and email addresses of 3 senders. A computer selected a sender at random, and asked him to send an email message to the subject via the computer. The computer then asked the subject to guess the sender's name, and delivered the message after receiving the guess. A test consisted of 6 or 9 trials. In a total of 419 trials, including data from incomplete tests, there were 175 hits (41.8%), significantly above the 33.3% chance level ($p = .0001$). Hit rates in incomplete tests were higher than in complete tests. There was no significant difference between hit rates with male and female subjects. The highest hit rates were with subjects in the 20–29-year age group. The effect size in these tests was lower than in previous telephone and email telepathy tests, in spite of the fact that they were unsupervised. One reason may be that subjects were being asked to guess who had sent them a message several minutes earlier, rather than thinking about them simultaneously.

Keywords: email messages—telepathy—ESP—automated test

Introduction

Most people claim to have experienced telepathy, especially in connection with telephone calls (Brown & Sheldrake, 2001; Sheldrake, 2000, 2003). Typically, people say that they have thought of someone for no apparent reason, and then that person called, or they knew who was calling when the phone rang before answering it or looking at a caller identification display.

Telephone telepathy has been investigated experimentally by means of randomized trials in which subjects received a call from one of four potential callers (Sheldrake & Smart, 2003a,b; Sheldrake et al., 2004). These four people were nominated in advance by the participants themselves, and were usually people they knew well. In a given trial, the caller was picked at random by the experimenter. When the telephone rang, the participant guessed who was calling before the other person spoke. The guess was either right or wrong. By chance, participants would have been right about one time in four. In a total of 271 videotaped trials, 45% of the guesses were hits (effect size 0.45; $p < 1 \times 10^{-6}$; Sheldrake &

Smart, 2003b). Callers and participants were in some cases thousands of kilometres away from each other. In a replication at the University of Amsterdam the hit rate was also significantly above chance (Lobach & Bierman, 2004).

A similar kind of apparent telepathy occurs in connection with emails: someone thinks of a person for no apparent reason and soon afterwards receives an email from that person (Sheldrake, 2003). This phenomenon has been investigated experimentally using a similar procedure to the telephone telepathy tests. Participants had four potential emailers and in each trial the sender was selected at random. One minute before the email was due to be sent, the subject guessed whom it would be from. In 137 videotaped trials, the hit rate was 47%, significantly above the chance level of 25% ($d = 0.5, p < 1 \times 10^{-6}$; Sheldrake & Smart, 2005).

In this paper we describe an automated procedure to test for email telepathy. Previous research with automated telepathy tests has involved Internet-based procedures (Sheldrake & Lambert, 2007) and a test involving text messages on mobile telephones (Sheldrake et al., in press), but this is the first time an automated email telepathy test has been carried out. The purpose of this investigation was to explore the feasibility of such a test. The experiments were carried out under unsupervised conditions so we cannot be sure that none of the participants were cheating. Hence the results cannot provide strong evidence for telepathy, however positive they may be. But developing automated procedures that can be used under "real-life" conditions almost anywhere in the world opens up the possibility of independent, supervised testing by organized groups in schools, colleges and elsewhere. This automated method minimizes experimenter effects and permits widespread participation.

In the light of results from previous research on telephone, email and Internet telepathy, our hypothesis was that hit rates in the automated email telepathy test would be above chance, but that the effect size would be smaller than in previous telephone and email telepathy tests for two reasons.

First, in experiments on telephone and email telepathy, participants were recruited on the basis of their apparent telepathic sensitivity, whereas in the experiment described here there was no such selection.

Second, in the telephone and email experiments, participants were asked to guess who was calling or emailing while the other person was actually on the telephone or writing the email. In the automated email telepathy tests, participants were asked to guess who had sent an email several minutes ago, or sometimes more than half an hour before they made their guess. Thus the telepathic contact was not simultaneous, and we hypothesized that this would reduce the effect.

Methods

Procedure

Participants registered online through Rupert Sheldrake's (R.S.'s) Web site, www.sheldrake.org. The subjects entered their first and second names, sex, age and email address, and also entered the names of three contacts (first names only) together with their email addresses.

All participants received a welcome email message, and the subject was told that she could stop the test at any time by emailing STOP to the system. Then the test proceeded as follows:

1. After a random time delay of between 1 and 4 minutes, the system selected one of the contacts at random and sent him a message reading, “This is the telepathy test. Please send an email reply which will be forwarded to [subject’s name]. Do not attempt to contact [subject’s name] directly. Thank you.”
2. The contact then wrote a message to the subject and sent it back to the system, which then immediately sent a text message to the subject reading “Dear [subject’s name] one of your contacts has sent you a message. Please reply and guess who has sent it. Thank you.”
3. The subject then sent an email back to the system with the name she guessed. When this had been received by the system and the data recorded, the message from the contact was sent on to the subject, who therefore received immediate feedback as to whether the guess was correct or not.
4. After a random time delay this process was repeated until the subject had completed 9 trials, at which stage the test was complete. She then received a message saying “Thank you for taking part in this test. You scored [number of hits] correct out of 9 trials. Please text the word START if you wish to do the test again.” After the first 4 months of testing, the number of trials per test was reduced from 9 to 6, but everything else remained the same.

The data were stored on an online database, accessible by the use of a password. When group leaders were recruiting subjects, they asked them all to register with the same group name, and by using this group name as a password, the leader could access the data from all members of his group. The database displayed a chronological list of results, with one line per test, giving the subject’s name, the subject’s sex and age, the date and time at which the test started, the number of trials and the number of hits. Also, separate columns showed the number of trials and hits that occurred less than 3 minutes after the contact sent a message to the subject, those that occurred 3–10 minutes afterwards, and those that occurred more than 10 minutes afterwards. In addition, for each test it was possible to display all the details trial by trial, and a full list of all messages sent and received by the system during the test, together with the time at which they were sent or received, recorded to the nearest second.

System and Programming

The system was developed and operated by Mobifi Ltd., a Short Message Service (SMS) solutions and application provider. Mobifi had an email gateway that enabled customers to send and receive email messages.

The programming environment was Microsoft Visual Studio, utilising the Tools for MS SQL Server. The core of the application was written in T-SQL, the language for operations with databases in SQL server. The version used for this application was SQL Server 2000. Microsoft SQL has its own developer utilities which were sufficient for developing this application. The standard Microsoft SQL procedures for generating seed numbers and random numbers were used to select the contacts for each test.

Parts of the application were programmed in VB Script (Visual Basic Script). This script was used to present the results on the Web. All the Web pages were ASP pages, a version of VB Script.

The application sent email messages using SQL server and SMTP server.

Inbound emails were received using a version of an email client which periodically connects to a POP3 server and downloads and copies all newly received messages to a database. This version of the email client was programmed in Microsoft Visual Studio 6.0 and in language C++.

The biggest technical problem we encountered was that some spam filters blocked emails from the system and hence some participants did not receive emails from it. To counteract this, we asked all participants to put the email address of the system in their address book, or otherwise try to stop the spam filters blocking the messages. But some participants were still unable to stop the messages being blocked and hence could not take part in the test. Also, some email systems, like hotmail.com, did not always function properly with our application, and hence some participants were excluded from the system.

Participants

Participants were recruited in two ways. First, through R.S.'s Web site, where anyone could volunteer to take part. Second, by several Research Helpers, volunteers who were taking part under the aegis of the Perrott-Warrick Project, of which R.S. is Director. These were people who wished to gain some research experience. Each of them was asked to do the test themselves and then recruit other subjects from among their friends and family members. They themselves usually served as a contact in the tests with the participants they recruited and usually registered the subjects.

Subjects were between 12 and 66 years old, with the majority aged between 30 and 39.

Statistics

The results were analysed using the binomial test; the chance probability of a hit was .33. Single-sided p values were used. The null hypothesis was that the hit rate in the tests would not be significantly different from the chance level. For comparisons of different sets of data, e.g., from male and female subjects, the 2×2 chi-square test was used. Cohen's effect size d was calculated according to the formula $d = (p \text{ (hits observed)} - 0.33) / \text{sqrt}(0.33 \times 0.66)$, where p (hits observed) is the proportion of hits.

Results

Overall Results

In a total of 419 trials, there were 175 hits (41.8%), significantly more than the 33.3% expected by chance ($p = .0001$).

Not all the subjects completed the prespecified number of trials in a test. In some cases one of their contacts did not respond, in others they had to stop the test because they ran out of time, in some there were technical faults with the system that terminated the test too soon, and in some they may simply have decided to stop. This raises the possibility of an "optional stopping" artefact, whereby people with low hit rates stop and only those with high hit rates complete the test. However, there were 37 complete tests with a total of 276 trials, in which there were 106 hits (38.4%; $p = .03$). Of these tests, 17 had hit rates above the chance level, 10 were at the chance level, and 11 were below it. In the incomplete tests, there were 143 trials with 69 hits (48.3%; $p = .0001$). The hit rate in the incomplete tests was in fact significantly higher ($p = .05$) than in the complete tests.

In the complete tests, the hit rate in the first 3 trials was 48 out of 111 (43.2%) compared with 58 out of 165 (35.2%) in the subsequent trials. This difference was not significant at the $p = .05$ level.

Effects of Delayed Guesses

The beginning of each trial took place with a random time delay after the ending of the previous trial. There were also variable delays in the responses of the contacts to the request to send a message, some of which were due to unpredictable delays in the deliveries of emails by the Internet system and also variable delays in the responses of the contacts.

After the contact sent his message to the system, the system sent an email within a few seconds to the subject asking her to guess whom the message was from. There were variable delays before the subject made her guess and sent it back to the system, variable delays in the transmission of the email to the subject by the Internet system, and variable delays in the subject responding to the text message.

The exact times at which all messages were sent and received were recorded on the database to the nearest second. The delays in responses by the subjects after the contacts sent their messages were grouped into three categories: delays of less than 3 minutes, 3–10 minutes and more than 10 minutes. In 161 out of 419 trials (38%), the time between the contact sending his message and the subject making her guess was less than 3 minutes (Table 1). The hit rate in these trials was 42.2% ($p = .01$).

In 78 trials the delay was between 3 and 10 minutes, and here the hit rate was 32.1%, slightly below the chance level, although not significantly so. In 180 trials the delays were more than 10 minutes; the hit rate was 45.6% ($p = .0003$),

TABLE 1
Hit Rates in Trials with Different Delays between Contact Sending a Message and the Subject Responding

Delay (min)	Trials (n)	Hits (n)	Hits (%)
<3	161	68	42.2
3–10	78	25	32.1
>10	180	82	45.6

slightly higher than in trials with less than 3 minutes delay, but this difference was not statistically significant.

Effects of Subjects' Sex and Age

With male subjects there were 265 trials with 115 hits (43.4%), and with female subjects 154 trials with 60 hits (39.0%). The higher hit rate with males than females was not statistically significant ($p = .37$).

The hit rates for subjects of different ages are shown in Table 2. The highest rates were in the 20–29-year age group and the lowest in the 30–39 group.

Discussion

Our hypothesis was that hit rates in an automated email telepathy test would be above chance levels, but the effect size would be smaller than in previous telephone and email telepathy experiments, in which the contacts were focussing on the subject when she made her guess, and in which we chose subjects who were unusually sensitive. We expected a lower effect size because the subjects in this automated email experiment were not selected on the basis of apparent telepathic ability, and also because the subjects guessed who had sent them a message only after the message had been sent. The overall hit rate of 41.8% was above the chance level of 33.3% ($p = .0001$), but the effect size ($d = 0.2$) was indeed smaller than in telephone telepathy tests ($d = 0.5$; Sheldrake & Smart, 2003b) and simultaneous email telepathy tests ($d = 0.5$; Sheldrake & Smart, 2005). We have also carried out a similar automated experiment involving SMS messages

TABLE 2
Hit Rates with Subjects of Different Ages

Age (yr)	Trials (n)	Hits (n)	Hits (%)
15–19	4	2	50.0
20–29	102	54	52.9
30–39	136	49	36.1
40–49	49	18	36.7
50–59	25	10	40.0
60–69	42	103	40.8

rather than emails, and here too there was a low effect size, probably for the same reasons: a hit rate of 37.9% compared with 33.3% expected by chance ($p = .001$; $d = 0.1$) (Sheldrake et al., in press).

We expected that the longer the delay in the response of the subject, the lower the hit rate would be. With short delays of less than 3 minutes, hit rates were above chance, and for delays between 3 and 10 minutes, hit rates did indeed drop to chance levels (Table 1). But for delays of over 10 minutes, the hit rates were slightly higher than in trials with less than 3 minutes' delay. A similar pattern was found in our automated SMS tests (Sheldrake et al., in press). However, in neither case was this difference significant. In future studies, it would be possible to introduce random delays into the system so that a wide range of delayed responses could be studied systematically in order to find out whether seemingly telepathic responses fall off with time after the message is sent, or not.

In this experiment, the hit rate in incomplete tests was higher than in the complete tests. Why should this be? One possibility is that subjects had higher hit rates in the first few trials because they were more involved; they may have became bored or impatient with the experiment as time went on. To test this possibility, we compared the hit rate in the first three trials of the completed tests with the later trials. The hit rate was indeed higher in the earlier trials, 43.2% as opposed to 35.2%, but this difference was not statistically significant. Nevertheless, it would be worth finding out in future automated tests whether hit rates are generally higher in earlier trials.

These tests were unsupervised, and therefore the possibility arises that some people were cheating. However, the hit rates were relatively low, and many people scored at or below chance levels; cheating could not have been common, otherwise hit rates would have been much higher. And most people had no motive to cheat; they were curious about their own abilities and wanted to find out how they would fare in the test. Nevertheless, we cannot rule out the possibility that some people cheated some of the time.

The best way to rule out cheating is to carry out supervised tests in which the subjects are filmed continuously, and then the films are examined carefully by an independent evaluator, so that any trials can be disqualified in which subjects receive telephone calls or emails or text messages, or in which a third party passes on any information to them. Procedures of this kind have in fact been used in tests on telephone (Sheldrake & Smart, 2003b), email (Sheldrake & Smart, 2005) and SMS telepathy (Sheldrake et al., in press). Even when all these possible kinds of cheating were ruled out, the hit rates were well above chance.

Unsupervised tests are valuable in their own right for an exploration of a new method, as in the present study, and also for comparison of variables that affect hit rates. In this experiment, we studied only sex and age, and found no significant differences.

This experiment shows that automated email telepathy tests are feasible, but that an email system of this kind is not a good way to test for telepathy simultaneously, which is how it seems to occur in real life (Sheldrake, 2003). All of these trials involved delays between the contact sending the email and the subject guessing who had sent it, during which time the caller's attention has shifted elsewhere. The effect size was low, even in unsupervised trials where cheating was possible. We conclude that this way of studying telepathy is not very effective. The same is true of SMS test systems, which also suffer from built-in delays between the contact sending the message and the subject making a guess.

To avoid the problem of delays, an automated system for testing telepathy must involve the subject making a guess while the contact is focussing on her. Simultaneity could be achieved by means of an automated test for direct telephone telepathy in which randomly selected contacts telephone the subject via the system and are asked to hold on while the subject makes her guess. The line opens up only after the guess has been recorded by the system, and the two can then talk. Our next experiments will involve an automated system of this kind.

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