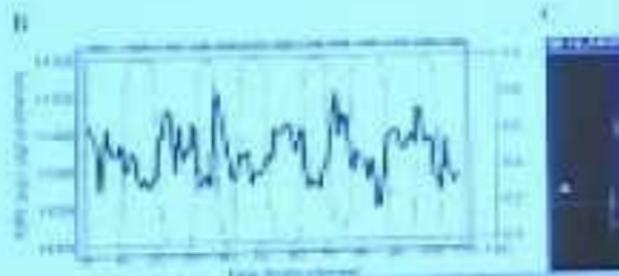


Visual
Stimulation of
Sender
With
Checkerboard
flicker



1
00:00:04,470 --> 00:00:02,149
the healer was verb

2
00:00:07,510 --> 00:00:04,480
verbally instructed with cues to start

3
00:00:09,910 --> 00:00:07,520
and stop the distance intentionality

4
00:00:12,150 --> 00:00:09,920
in a random pattern

5
00:00:13,830 --> 00:00:12,160
so they they were told to start and stop

6
00:00:19,990 --> 00:00:13,840
in a random pattern

7
00:00:27,189 --> 00:00:23,269
now the scanner was a 1.5 tesla

8
00:00:30,550 --> 00:00:27,199
this is a very strong magnetic field

9
00:00:31,990 --> 00:00:30,560
mr imaging system

10
00:00:33,590 --> 00:00:32,000
i might mention that there are some

11
00:00:35,990 --> 00:00:33,600
people that told us

12
00:00:38,470 --> 00:00:36,000
that they lose their psychic abilities

13
00:00:40,069 --> 00:00:38,480

when they go on an mri scanner because

14

00:00:42,869 --> 00:00:40,079

the magnetic field is too strong and

15

00:00:44,790 --> 00:00:42,879

they lose their psychic abilities so

16

00:00:48,470 --> 00:00:44,800

i've heard that before

17

00:00:50,869 --> 00:00:48,480

but anyway with um 1.5 mr imaging system

18

00:00:51,910 --> 00:00:50,879

we can get very nice images

19

00:00:53,990 --> 00:00:51,920

and uh

20

00:00:55,990 --> 00:00:54,000

for those of you involved in brain

21

00:00:58,549 --> 00:00:56,000

imaging these these will make sense to

22

00:01:00,709 --> 00:00:58,559

you if you're involved in brain imaging

23

00:01:03,110 --> 00:01:00,719

these parameters are important to get

24

00:01:05,350 --> 00:01:03,120

good contrast in the brain

25

00:01:09,270 --> 00:01:05,360

related to the blood oxygen level

26

00:01:15,590 --> 00:01:11,910

so then we did fmri analysis of the on

27

00:01:18,870 --> 00:01:15,600

off patterns dictated to the healer

28

00:01:20,950 --> 00:01:18,880

we used fsl from oxford the uk to

29

00:01:23,190 --> 00:01:20,960

analyze the the signal

30

00:01:25,510 --> 00:01:23,200

we have single subject analysis and

31

00:01:32,149 --> 00:01:25,520

group analysis

32

00:01:33,109 --> 00:01:32,159

after we do the single subject analysis

33

00:01:33,910 --> 00:01:33,119

and

34

00:01:36,069 --> 00:01:33,920

then

35

00:01:38,550 --> 00:01:36,079

the results show that in the group

36

00:01:39,749 --> 00:01:38,560

analysis we had two very significant

37

00:01:41,429 --> 00:01:39,759

clusters

38

00:01:42,310 --> 00:01:41,439

now let me tell you again what this

39

00:01:44,789 --> 00:01:42,320

means

40

00:01:47,109 --> 00:01:44,799

this is a group analysis

41

00:01:48,870 --> 00:01:47,119

of the receivers who are inside the

42

00:01:51,590 --> 00:01:48,880

scanner

43

00:01:53,270 --> 00:01:51,600

who are receiving signals from the

44

00:01:55,749 --> 00:01:53,280

healers

45

00:01:58,950 --> 00:01:55,759

so all of the signal comes from the the

46

00:02:02,230 --> 00:01:58,960

receivers not not the senders

47

00:02:03,990 --> 00:02:02,240

and so the the receivers again are are

48

00:02:06,230 --> 00:02:04,000

able to receive the signal from the

49

00:02:08,790 --> 00:02:06,240

healers and we're able to measure the

50

00:02:11,029 --> 00:02:08,800

signal in their brain and we get these

51
00:02:14,470 --> 00:02:11,039
two significant clusters

52
00:02:16,949 --> 00:02:14,480
with a probability of false positive 8.5

53
00:02:17,750 --> 00:02:16,959
times 10 to the minus ninth

54
00:02:23,510 --> 00:02:17,760
so

55
00:02:26,150 --> 00:02:23,520
that's 10 to the minus ninth is a

56
00:02:28,150 --> 00:02:26,160
significant significance and we got

57
00:02:29,670 --> 00:02:28,160
another cluster of a little less uh

58
00:02:32,470 --> 00:02:29,680
significance

59
00:02:33,110 --> 00:02:32,480
uh and so so we can test the probability

60
00:02:35,110 --> 00:02:33,120
of

61
00:02:36,550 --> 00:02:35,120
using these techniques now this this is

62
00:02:38,869 --> 00:02:36,560
kind of blurry

63
00:02:41,030 --> 00:02:38,879

i have better images than these but

64

00:02:42,869 --> 00:02:41,040

we this is one of the clusters in the

65

00:02:45,190 --> 00:02:42,879

back of the brain

66

00:02:47,990 --> 00:02:45,200

uh that they again this is the group

67

00:02:49,910 --> 00:02:48,000

analysis cluster

68

00:02:53,270 --> 00:02:49,920

and again this is a part of the brain

69

00:02:54,390 --> 00:02:53,280

involved in visual processing and in

70

00:02:56,150 --> 00:02:54,400

imagery

71

00:02:58,150 --> 00:02:56,160

so this is a part of the brain involved

72

00:03:01,190 --> 00:02:58,160

in image processing

73

00:03:02,550 --> 00:03:01,200

even though they got no stimulus except

74

00:03:04,390 --> 00:03:02,560

from the healer

75

00:03:05,990 --> 00:03:04,400

the healer was the only person giving

76

00:03:07,430 --> 00:03:06,000

the stimulus

77

00:03:10,550 --> 00:03:07,440

and they got a signal here in the back

78

00:03:14,630 --> 00:03:12,309

and then we also got a signal in the

79

00:03:17,350 --> 00:03:14,640

front of the brain

80

00:03:21,430 --> 00:03:17,360

in the frontal regions

81

00:03:23,509 --> 00:03:21,440

and so the angular anterior cingulate

82

00:03:25,509 --> 00:03:23,519

is involved in

83

00:03:29,750 --> 00:03:25,519

attention

84

00:03:31,750 --> 00:03:29,760

stimulus so so that's one of the parts

85

00:03:34,390 --> 00:03:31,760

of the brain and also the frontal

86

00:03:37,350 --> 00:03:34,400

regions are involved in a lot of higher

87

00:03:39,910 --> 00:03:37,360

order cognitive processing

88

00:03:41,589 --> 00:03:39,920

so we we get a lot of higher order um

89

00:03:42,869 --> 00:03:41,599

level of

90

00:03:46,149 --> 00:03:42,879

of

91

00:03:48,710 --> 00:03:46,159

cognitive processing including language

92

00:03:51,110 --> 00:03:48,720

so we get a lot of frontal areas uh

93

00:03:52,229 --> 00:03:51,120

involved in language

94

00:03:53,910 --> 00:03:52,239

and so

95

00:03:54,789 --> 00:03:53,920

when we map

96

00:03:56,710 --> 00:03:54,799

those

97

00:03:58,550 --> 00:03:56,720

clusters these are all the different

98

00:04:01,270 --> 00:03:58,560

regions that we get

99

00:04:08,229 --> 00:04:01,280

of activation from those

100

00:04:11,750 --> 00:04:10,149

okay so here's another paper that we

101
00:04:13,509 --> 00:04:11,760
published

102
00:04:15,509 --> 00:04:13,519
again in the journal of alternative and

103
00:04:16,469 --> 00:04:15,519
complementary medicine

104
00:04:18,390 --> 00:04:16,479
and

105
00:04:20,949 --> 00:04:18,400
this was one of the first papers we

106
00:04:23,270 --> 00:04:20,959
published on just a couple of case

107
00:04:25,749 --> 00:04:23,280
reports so the last

108
00:04:28,310 --> 00:04:25,759
details that i showed you involved 11

109
00:04:32,150 --> 00:04:28,320
pairs of subjects whereas this was only

110
00:04:36,870 --> 00:04:34,950
and again we were showed signal in the

111
00:04:39,670 --> 00:04:36,880
back of the brain

112
00:04:41,590 --> 00:04:39,680
and here's the time domain correlation

113
00:04:44,550 --> 00:04:41,600

of that signal

114

00:04:46,870 --> 00:04:44,560

so we we can plot the time course of the

115

00:04:49,749 --> 00:04:46,880

brain signal as a function of time

116

00:04:52,230 --> 00:04:49,759

as they're being as the

117

00:04:53,510 --> 00:04:52,240

person outside the scanner is sending

118

00:04:56,070 --> 00:04:53,520

the stimulus

119

00:04:59,030 --> 00:04:56,080

with in this case with uh the per the

120

00:05:01,270 --> 00:04:59,040

sender was getting checkerboard flicker

121

00:05:03,430 --> 00:05:01,280

board pattern

122

00:05:06,150 --> 00:05:03,440

so in this case it was not a healer it

123

00:05:08,950 --> 00:05:06,160

was this it was just a sender

124

00:05:10,950 --> 00:05:08,960

that was watching a checkerboard flicker

125

00:05:12,710 --> 00:05:10,960

pattern that was randomly going on and

126
00:05:14,310 --> 00:05:12,720
off

127
00:05:16,469 --> 00:05:14,320
and here again we get

128
00:05:21,189 --> 00:05:16,479
activation in the and the occipital

129
00:05:26,390 --> 00:05:23,510
okay now some of these same people also

130
00:05:28,870 --> 00:05:26,400
we did eeg analysis

131
00:05:32,070 --> 00:05:28,880
now the difference with eeg

132
00:05:34,790 --> 00:05:32,080
is that both the sender and the receiver

133
00:05:37,510 --> 00:05:34,800
were hooked up to the cap

134
00:05:39,830 --> 00:05:37,520
they all got this cap with a

135
00:05:41,749 --> 00:05:39,840
16 channels of uh

136
00:05:43,909 --> 00:05:41,759
eeg recording

137
00:05:45,430 --> 00:05:43,919
and in the and in this case we could

138
00:05:46,230 --> 00:05:45,440

record both

139

00:05:54,710 --> 00:05:46,240

the

140

00:05:59,830 --> 00:05:57,270

and we published this liana stannis was

141

00:06:03,189 --> 00:05:59,840

first author on this paper

142

00:06:06,309 --> 00:06:03,199

and in this case we were measuring eeg

143

00:06:08,710 --> 00:06:06,319

evidence of correlated signals

144

00:06:10,870 --> 00:06:08,720

and this is the setup that we had at

145

00:06:13,590 --> 00:06:10,880

baster university

146

00:06:15,029 --> 00:06:13,600

so we had one subject positioned in one

147

00:06:18,390 --> 00:06:15,039

room

148

00:06:20,469 --> 00:06:18,400

and he's he's watching a visual stimulus

149

00:06:22,309 --> 00:06:20,479

we have uh the control center and then

150

00:06:23,590 --> 00:06:22,319

we have another subject

151

00:06:25,749 --> 00:06:23,600

uh

152

00:06:27,430 --> 00:06:25,759

physically isolated from this other

153

00:06:29,430 --> 00:06:27,440

subject

154

00:06:31,029 --> 00:06:29,440

and at one point only one of the

155

00:06:32,830 --> 00:06:31,039

subjects is getting

156

00:06:39,670 --> 00:06:32,840

a

157

00:06:43,909 --> 00:06:40,550

so

158

00:06:47,350 --> 00:06:43,919

i i really like alpha waves because

159

00:06:50,070 --> 00:06:47,360

i've actually used alpha wave therapy

160

00:06:53,909 --> 00:06:50,080

in some of our patients with multiple

161

00:06:55,510 --> 00:06:53,919

sclerosis so i like alpha waves and i

162

00:06:58,070 --> 00:06:55,520

will

163

00:07:00,710 --> 00:06:58,080

show you the results so dean rayden

164

00:07:03,909 --> 00:07:00,720

suggested a technique for us to use

165

00:07:05,830 --> 00:07:03,919

to correlate the difference between eeg

166

00:07:08,070 --> 00:07:05,840

signal between the senders and the

167

00:07:09,990 --> 00:07:08,080

receivers

168

00:07:12,309 --> 00:07:10,000

so we use that technique

169

00:07:15,830 --> 00:07:12,319

and we got a regression

170

00:07:18,309 --> 00:07:15,840

with a significance of 0.000

171

00:07:21,510 --> 00:07:18,319

0.011

172

00:07:23,990 --> 00:07:21,520

so this is a regression analysis

173

00:07:27,990 --> 00:07:24,000

between the sender signal and the

174

00:07:32,950 --> 00:07:30,870

and so when you do a correlation

175

00:07:34,870 --> 00:07:32,960

it's kind of scattered

176

00:07:37,830 --> 00:07:34,880

but there is a significant correlation

177

00:07:39,350 --> 00:07:37,840

between the senders and the receivers

178

00:07:41,189 --> 00:07:39,360

so the pink line is kind of the

179

00:07:43,670 --> 00:07:41,199

regression line

180

00:07:46,950 --> 00:07:43,680

and all these individual dots

181

00:07:50,550 --> 00:07:46,960

is one dot from the the sender receiver

182

00:07:56,150 --> 00:07:53,990

so this was a significant effect

183

00:07:58,309 --> 00:07:56,160

correlating signals between the senders

184

00:08:00,629 --> 00:07:58,319

and the receivers

185

00:08:04,150 --> 00:08:00,639

who were isolated isolated from one

186

00:08:08,629 --> 00:08:06,390

but now the the group again in the group

187

00:08:10,070 --> 00:08:08,639

at baster university helped us to choose

188

00:08:12,230 --> 00:08:10,080

these people

189

00:08:13,510 --> 00:08:12,240

who who claim to have a connection with

190

00:08:15,430 --> 00:08:13,520

their partner

191

00:08:17,749 --> 00:08:15,440

so these people claim to have a

192

00:08:19,909 --> 00:08:17,759

connection

193

00:08:20,950 --> 00:08:19,919

and so some of them are more gifted than

194

00:08:22,950 --> 00:08:20,960

others

195

00:08:25,830 --> 00:08:22,960

and they could repeat the effect over

196

00:08:28,869 --> 00:08:25,840

and over again whereas some of them had

197

00:08:31,589 --> 00:08:28,879

more of a weak correlation

198

00:08:34,630 --> 00:08:31,599

so just as as with everything you have

199

00:08:38,550 --> 00:08:34,640

the gifted and then the semi-gifted

200

00:08:42,389 --> 00:08:40,389

so these findings support previous

201
00:08:45,509 --> 00:08:42,399
research on distance healing suggesting

202
00:08:47,269 --> 00:08:45,519
that human intentions may direct may

203
00:08:49,350 --> 00:08:47,279
directly affect others in ways that are

204
00:08:51,670 --> 00:08:49,360
not entirely understood

205
00:08:55,910 --> 00:08:51,680
but with a functional imaging and with

206
00:08:58,790 --> 00:08:55,920
eeg we can we can study these effects

207
00:09:01,269 --> 00:08:58,800
and we can measure a signal in their

208
00:09:01,279 --> 00:09:16,230
so i'll stop with that

209
00:09:16,240 --> 00:09:24,790
okay

210
00:09:24,800 --> 00:09:30,070
we have time for quite a few questions

211
00:09:33,829 --> 00:09:31,670
you mentioned at the beginning of your

212
00:09:35,910 --> 00:09:33,839
talk that uh you when you had us raise

213
00:09:38,230 --> 00:09:35,920

our right hand that would have left

214

00:09:40,150 --> 00:09:38,240

brain stimulation right

215

00:09:41,670 --> 00:09:40,160

i had been to

216

00:09:44,150 --> 00:09:41,680

kind of a healing demonstration some

217

00:09:45,590 --> 00:09:44,160

years ago with donna eden and she chose

218

00:09:47,350 --> 00:09:45,600

people in the audience to demonstrate a

219

00:09:48,710 --> 00:09:47,360

principle and she said they had

220

00:09:52,550 --> 00:09:48,720

homolateral

221

00:09:53,750 --> 00:09:52,560

means your right brain is working with

222

00:09:57,030 --> 00:09:53,760

your right hand