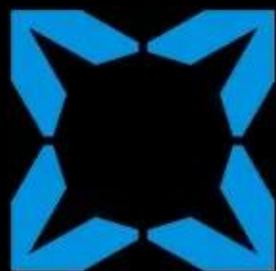
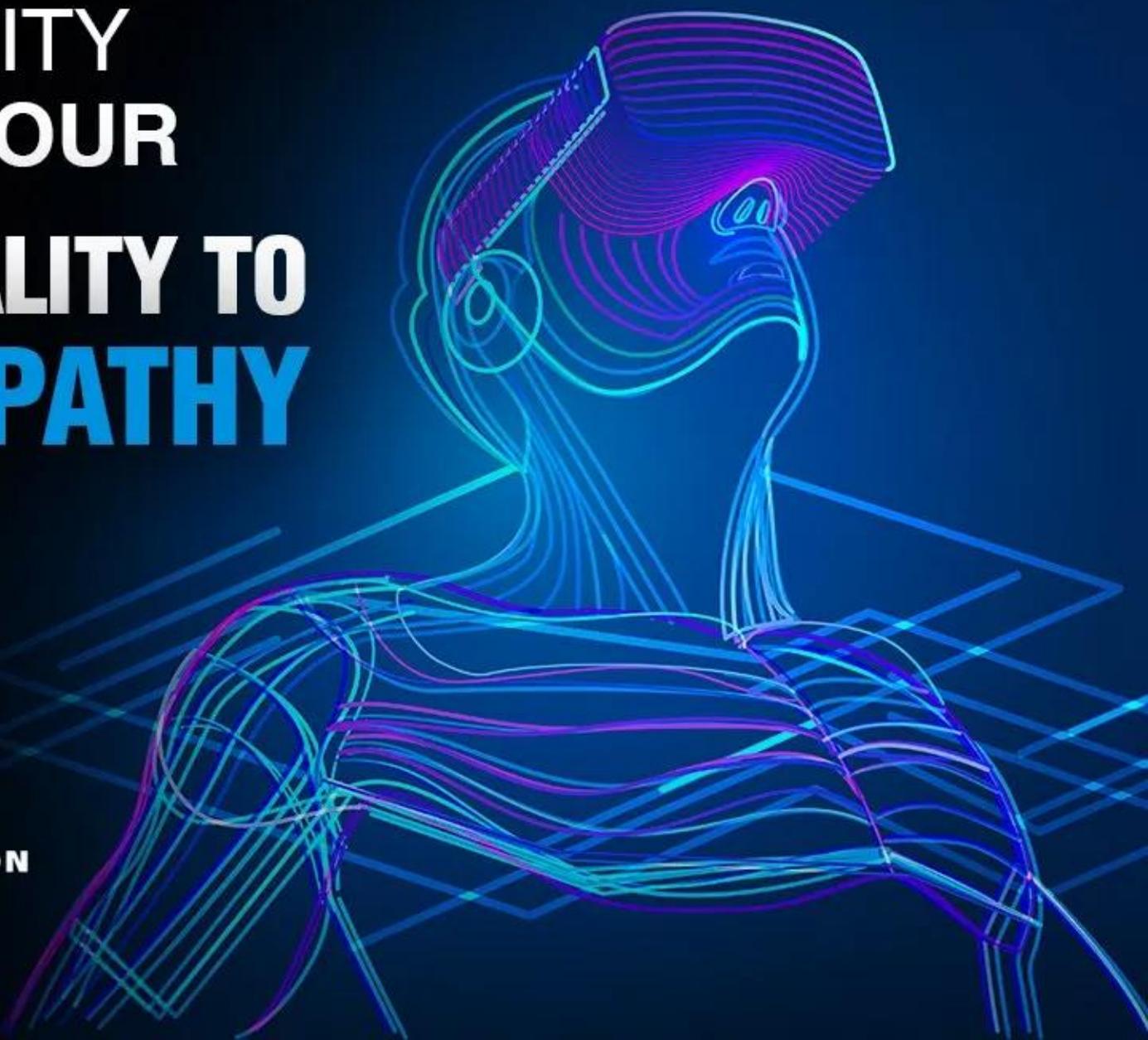


**SSE COMMUNITY  
DISCUSSION HOUR**

**USING VIRTUAL REALITY TO  
TEST FOR TELEPATHY**



**SOCIETY  
FOR  
SCIENTIFIC  
EXPLORATION**



1  
00:00:09,669 --> 00:00:07,430  
okay so test of telepathy using

2  
00:00:11,830 --> 00:00:09,679  
immersive virtual reality

3  
00:00:13,430 --> 00:00:11,840  
in a sense this was a you know take a

4  
00:00:15,350 --> 00:00:13,440  
quick step back i'm

5  
00:00:16,470 --> 00:00:15,360  
sort of pitching this you know hopefully

6  
00:00:18,310 --> 00:00:16,480  
um you know

7  
00:00:19,910 --> 00:00:18,320  
this isn't too sort of basic for

8  
00:00:21,990 --> 00:00:19,920  
everybody out there but you know it's

9  
00:00:23,509 --> 00:00:22,000  
sort of a general sort of overview and

10  
00:00:26,070 --> 00:00:23,519  
then to talk about the paper that i just

11  
00:00:28,390 --> 00:00:26,080  
published looking at this project

12  
00:00:31,589 --> 00:00:28,400  
and why i thought using virtual reality

13  
00:00:34,950 --> 00:00:31,599

was even a good idea um

14

00:00:37,030 --> 00:00:34,960

so let's moving on here

15

00:00:39,510 --> 00:00:37,040

so telepathy as i'm sure most of you are

16

00:00:40,950 --> 00:00:39,520

aware is this idea that one person can

17

00:00:41,750 --> 00:00:40,960

acquire

18

00:00:45,750 --> 00:00:41,760

or

19

00:00:49,830 --> 00:00:45,760

from the

20

00:00:52,709 --> 00:00:49,840

consciousness of another individual or

21

00:00:55,510 --> 00:00:52,719

another conscious being use it or via a

22

00:00:57,029 --> 00:00:55,520

quote-unquote non-usual route

23

00:00:59,830 --> 00:00:57,039

there are lots of different terms that

24

00:01:01,750 --> 00:00:59,840

are used to describe telepathy include

25

00:01:04,070 --> 00:01:01,760

mental telepathy thought transference

26  
00:01:06,789 --> 00:01:04,080  
mental suggestion mind reading to name

27  
00:01:09,830 --> 00:01:06,799  
but a few um interestingly it's one of

28  
00:01:13,030 --> 00:01:09,840  
the most common or commonly reported

29  
00:01:15,590 --> 00:01:13,040  
experiences when people talk about psy

30  
00:01:18,469 --> 00:01:15,600  
as a sort of generic uh psychological

31  
00:01:21,270 --> 00:01:18,479  
consumers sort of science experiences um

32  
00:01:23,350 --> 00:01:21,280  
and yet it's an extremely difficult it

33  
00:01:25,749 --> 00:01:23,360  
represents a challenge to our

34  
00:01:26,950 --> 00:01:25,759  
understanding of cause and effect you

35  
00:01:30,069 --> 00:01:26,960  
know how

36  
00:01:31,429 --> 00:01:30,079  
how could it be how how could this occur

37  
00:01:32,630 --> 00:01:31,439  
how could

38  
00:01:34,789 --> 00:01:32,640

the thoughts

39

00:01:37,109 --> 00:01:34,799

emotions feelings of one individual be

40

00:01:38,830 --> 00:01:37,119

picked up by another individual at a

41

00:01:41,429 --> 00:01:38,840

distance and certainly a

42

00:01:43,670 --> 00:01:41,439

challenge so over time there have been a

43

00:01:44,950 --> 00:01:43,680

number of paradigms that have explored

44

00:01:47,990 --> 00:01:44,960

this and i just wanted to sort of set

45

00:01:50,069 --> 00:01:48,000

the stage uh here i'm sure most a lot of

46

00:01:52,149 --> 00:01:50,079

you are aware of lots of these different

47

00:01:54,389 --> 00:01:52,159

sort of approaches and they include

48

00:01:55,429 --> 00:01:54,399

things like spontaneous cases what i've

49

00:01:57,350 --> 00:01:55,439

sort of grouped together as

50

00:01:59,749 --> 00:01:57,360

communication and dream telepathy so the

51  
00:02:01,109 --> 00:01:59,759  
spontaneous cases are those ones where

52  
00:02:03,990 --> 00:02:01,119  
individuals may have a sort of

53  
00:02:06,469 --> 00:02:04,000  
impression of danger or alarm often from

54  
00:02:08,710 --> 00:02:06,479  
a loved one or cool cases some of the

55  
00:02:10,550 --> 00:02:08,720  
early cases from ryan's uh work was some

56  
00:02:13,270 --> 00:02:10,560  
very interesting stuff there rupert

57  
00:02:16,070 --> 00:02:13,280  
sheldrake has sort of led the way um in

58  
00:02:17,510 --> 00:02:16,080  
exploring um uh what i would call

59  
00:02:19,030 --> 00:02:17,520  
communication

60  
00:02:21,589 --> 00:02:19,040  
paradigm looking at both telephone

61  
00:02:23,910 --> 00:02:21,599  
telepathy this idea that before we had

62  
00:02:26,309 --> 00:02:23,920  
these these things um we used to have

63  
00:02:27,750 --> 00:02:26,319

those old sort of baker like phones um

64

00:02:29,270 --> 00:02:27,760

that you you know when the phone rang

65

00:02:31,430 --> 00:02:29,280

you'd have that sort of feeling that

66

00:02:33,350 --> 00:02:31,440

you'd know who it was and you know in a

67

00:02:35,430 --> 00:02:33,360

sense it's love i think it's a nice idea

68

00:02:37,670 --> 00:02:35,440

as well because he takes those things

69

00:02:39,350 --> 00:02:37,680

and then it sort of empirically tests

70

00:02:41,110 --> 00:02:39,360

them you know can you then you know can

71

00:02:43,110 --> 00:02:41,120

you assess whether people are or not

72

00:02:44,309 --> 00:02:43,120

more accurate than chance

73

00:02:47,270 --> 00:02:44,319

and they found some really interesting

74

00:02:49,830 --> 00:02:47,280

stuff there also using text and email

75

00:02:52,470 --> 00:02:49,840

there's a huge amount of work on dream

76

00:02:54,150 --> 00:02:52,480

telepathy the idea that an individual

77

00:02:55,910 --> 00:02:54,160

you may be able to sort of

78

00:02:56,949 --> 00:02:55,920

transfer or relate information to an

79

00:02:59,110 --> 00:02:56,959

individual whilst they're in a

80

00:03:01,190 --> 00:02:59,120

particular dream state usually in rem

81

00:03:03,270 --> 00:03:01,200

sleep etc

82

00:03:05,830 --> 00:03:03,280

there's the what i call the obligatory

83

00:03:09,190 --> 00:03:05,840

mention of twin telepathy study and i'd

84

00:03:11,509 --> 00:03:09,200

totally uh recommend guy lyon playfair's

85

00:03:13,350 --> 00:03:11,519

book on twin telepathy when i looked at

86

00:03:15,110 --> 00:03:13,360

this when i was exploring the area and i

87

00:03:17,110 --> 00:03:15,120

was trying to figure out how we could

88

00:03:19,430 --> 00:03:17,120

how we could sort of approach this you

89

00:03:21,030 --> 00:03:19,440

know everybody spoke to me said oh if

90

00:03:22,550 --> 00:03:21,040

you thought about twins and i did look

91

00:03:24,149 --> 00:03:22,560

at some one of the things that i was

92

00:03:25,910 --> 00:03:24,159

fascinated by

93

00:03:28,070 --> 00:03:25,920

definitely there's evidence that the the

94

00:03:30,470 --> 00:03:28,080

twins report this closer connection that

95

00:03:32,630 --> 00:03:30,480

everybody thinks they have but what i

96

00:03:34,949 --> 00:03:32,640

was surprised about is the

97

00:03:36,710 --> 00:03:34,959

almost lack of empirical evidence and

98

00:03:38,309 --> 00:03:36,720

it's not for want of trying as guy

99

00:03:39,910 --> 00:03:38,319

mentioned his book there's a number of

100

00:03:42,070 --> 00:03:39,920

efforts been made but it's actually

101  
00:03:43,910 --> 00:03:42,080  
surprising the lack of any evidence and

102  
00:03:46,149 --> 00:03:43,920  
it's you know not fault of trying so

103  
00:03:46,869 --> 00:03:46,159  
it's certainly an area that's right for

104  
00:03:48,789 --> 00:03:46,879  
uh

105  
00:03:50,149 --> 00:03:48,799  
continued research and what i've called

106  
00:03:52,470 --> 00:03:50,159  
telepathy in the brain so there's a

107  
00:03:54,550 --> 00:03:52,480  
whole field there looking at

108  
00:03:55,830 --> 00:03:54,560  
sort of correlating different uh aspects

109  
00:03:57,509 --> 00:03:55,840  
of the eeg

110  
00:03:59,350 --> 00:03:57,519  
different you know if you think of just

111  
00:04:01,589 --> 00:03:59,360  
the electrical activity of the brain and

112  
00:04:04,070 --> 00:04:01,599  
what they're trying to do there is evoke

113  
00:04:05,910 --> 00:04:04,080

a response in in one person and see if

114

00:04:08,229 --> 00:04:05,920

you can identify a similar sort of

115

00:04:10,149 --> 00:04:08,239

physiological response in another person

116

00:04:12,149 --> 00:04:10,159

and there's been some really interesting

117

00:04:14,229 --> 00:04:12,159

studies there not always replicated or

118

00:04:15,750 --> 00:04:14,239

the one a very nice piece of work by

119

00:04:17,749 --> 00:04:15,760

standish and colleagues

120

00:04:20,390 --> 00:04:17,759

using fmri so functional magnetic

121

00:04:22,550 --> 00:04:20,400

resonance imaging uh looking at changes

122

00:04:24,310 --> 00:04:22,560

in blood oxygenation level dependence so

123

00:04:25,270 --> 00:04:24,320

it's literally blood flow so it's really

124

00:04:26,629 --> 00:04:25,280

nice

125

00:04:27,350 --> 00:04:26,639

idea

126

00:04:29,510 --> 00:04:27,360

now

127

00:04:32,070 --> 00:04:29,520

all of that's background and to me it's

128

00:04:34,390 --> 00:04:32,080

you know when i came to this uh as with

129

00:04:36,950 --> 00:04:34,400

everybody who whom i've spoken to

130

00:04:38,469 --> 00:04:36,960

outside of the field of parapsychology

131

00:04:40,390 --> 00:04:38,479

they're always you know there's not much

132

00:04:41,749 --> 00:04:40,400

work on this so there's no evidence and

133

00:04:43,430 --> 00:04:41,759

yet when you look at that it's a very

134

00:04:45,270 --> 00:04:43,440

very brief snapshot there is a huge

135

00:04:48,070 --> 00:04:45,280

amount of work going on

136

00:04:50,390 --> 00:04:48,080

and the gansfeld is actually i think

137

00:04:52,550 --> 00:04:50,400

probably one of the most robust it seems

138

00:04:54,390 --> 00:04:52,560

to me one of the most robust paradigms

139

00:04:56,230 --> 00:04:54,400

within telepathy

140

00:04:58,390 --> 00:04:56,240

and it's a really interesting idea this

141

00:05:00,950 --> 00:04:58,400

is this notion that what you do is you

142

00:05:03,670 --> 00:05:00,960

take your your pair your sender and your

143

00:05:05,990 --> 00:05:03,680

receiver uh separate rooms and then you

144

00:05:07,510 --> 00:05:06,000

isolate the receiver as you can see down

145

00:05:10,150 --> 00:05:07,520

here in the bottom right this is you

146

00:05:12,070 --> 00:05:10,160

know our sender and our receiver and

147

00:05:14,070 --> 00:05:12,080

generally speaking happens is our

148

00:05:16,230 --> 00:05:14,080

receiver gets sort of put in this sort

149

00:05:18,710 --> 00:05:16,240

of sensory isolation

150

00:05:20,629 --> 00:05:18,720

uh sort of uh set up where they may be

151  
00:05:21,990 --> 00:05:20,639  
you know sitting in a relaxed chair or

152  
00:05:24,390 --> 00:05:22,000  
lying down

153  
00:05:26,230 --> 00:05:24,400  
they have headphones on would play a

154  
00:05:27,990 --> 00:05:26,240  
sort of either a white noise or a pink

155  
00:05:30,870 --> 00:05:28,000  
noise it's that sort of thing

156  
00:05:33,189 --> 00:05:30,880  
sound um they may have these half ping

157  
00:05:34,950 --> 00:05:33,199  
pong balls over their eyes red light

158  
00:05:36,870 --> 00:05:34,960  
shon on their face so they get a sort of

159  
00:05:38,950 --> 00:05:36,880  
diffuse visual field so there's

160  
00:05:41,749 --> 00:05:38,960  
literally this literally is completely

161  
00:05:43,270 --> 00:05:41,759  
sort of cuts off all sensory input and

162  
00:05:45,590 --> 00:05:43,280  
sort of it helps to increase what

163  
00:05:48,230 --> 00:05:45,600

hollington suggested was a receptive

164

00:05:49,430 --> 00:05:48,240

altered state and also um there's some

165

00:05:51,510 --> 00:05:49,440

suggestion that you know what you're

166

00:05:53,590 --> 00:05:51,520

trying to do with this is increase the

167

00:05:57,110 --> 00:05:53,600

signal to noise ratio you know by

168

00:05:59,110 --> 00:05:57,120

decreasing the sort of noise out there

169

00:06:00,870 --> 00:05:59,120

and there's there's quite a staggering

170

00:06:02,469 --> 00:06:00,880

amount i've put you know some being

171

00:06:04,790 --> 00:06:02,479

quite cautious of course but some

172

00:06:06,790 --> 00:06:04,800

positive results uh interestingly uh for

173

00:06:08,390 --> 00:06:06,800

those of you there's a most interesting

174

00:06:11,270 --> 00:06:08,400

meta-analysis mostly interesting most

175

00:06:13,590 --> 00:06:11,280

recent uh patricio trasol d lance storm

176

00:06:15,430 --> 00:06:13,600

uh this one's recently come out it's

177

00:06:18,230 --> 00:06:15,440

just going through the it's really nice

178

00:06:21,110 --> 00:06:18,240

again once again a meta-analysis showing

179

00:06:23,510 --> 00:06:21,120

that a small but significantly robust

180

00:06:25,029 --> 00:06:23,520

effect you know when you look at the the

181

00:06:25,830 --> 00:06:25,039

paradigm here

182

00:06:28,629 --> 00:06:25,840

and

183

00:06:30,390 --> 00:06:28,639

bayesian stats there's definitely

184

00:06:32,710 --> 00:06:30,400

something going on here not everybody

185

00:06:34,550 --> 00:06:32,720

agrees if you look at milton weissman

186

00:06:37,029 --> 00:06:34,560

etc you know they were they have some

187

00:06:38,390 --> 00:06:37,039

contentious ideas there but certainly

188

00:06:40,950 --> 00:06:38,400

there's you know this is a really

189

00:06:43,189 --> 00:06:40,960

interesting paradigm and there's also

190

00:06:44,790 --> 00:06:43,199

associations between things like belief

191

00:06:46,070 --> 00:06:44,800

and the strength of the relationship

192

00:06:47,590 --> 00:06:46,080

between the sender and the recent this

193

00:06:48,629 --> 00:06:47,600

is where i came in and i was thinking

194

00:06:50,230 --> 00:06:48,639

okay

195

00:06:52,469 --> 00:06:50,240

i sort of came from it from a slightly

196

00:06:55,270 --> 00:06:52,479

technical sense in the sense that if i'm

197

00:06:57,189 --> 00:06:55,280

honest we had the kit in the lab and i

198

00:06:58,710 --> 00:06:57,199

had my tech guys were saying you know

199

00:07:00,870 --> 00:06:58,720

can you figure out is there anything you

200

00:07:03,029 --> 00:07:00,880

can do with this and so i was trying to

201  
00:07:04,950 --> 00:07:03,039  
think of of studies that i could use

202  
00:07:07,110 --> 00:07:04,960  
this virtual reality kit that we had or

203  
00:07:08,469 --> 00:07:07,120  
still have it's called the oculus kit

204  
00:07:09,749 --> 00:07:08,479  
and when i looked at this and i was

205  
00:07:12,070 --> 00:07:09,759  
looking at the sort of sender and

206  
00:07:14,550 --> 00:07:12,080  
receiver and it struck me that a lot of

207  
00:07:16,790 --> 00:07:14,560  
the focus is on the receiver

208  
00:07:18,390 --> 00:07:16,800  
the sender often just sits in another

209  
00:07:21,270 --> 00:07:18,400  
room they're looking at a computer

210  
00:07:22,550 --> 00:07:21,280  
screen an image or you know paper image

211  
00:07:24,469 --> 00:07:22,560  
or whatever it is but they're just

212  
00:07:26,710 --> 00:07:24,479  
looking at a target and i thought i

213  
00:07:28,790 --> 00:07:26,720

wonder if we can do anything with that

214

00:07:31,350 --> 00:07:28,800

and so it made me think about you know

215

00:07:33,510 --> 00:07:31,360

you know using virtual reality

216

00:07:35,749 --> 00:07:33,520

okay so first question is why are using

217

00:07:38,230 --> 00:07:35,759

virtual reality in the first place well

218

00:07:40,070 --> 00:07:38,240

um i think and that was partly what the

219

00:07:42,870 --> 00:07:40,080

rationale of this study was as well it's

220

00:07:44,950 --> 00:07:42,880

a sort of litmus test

221

00:07:47,270 --> 00:07:44,960

with whether vr could be potentially

222

00:07:50,469 --> 00:07:47,280

useful in this field well i think it

223

00:07:52,550 --> 00:07:50,479

provides us with a very nice

224

00:07:55,510 --> 00:07:52,560

immersive environment to put our

225

00:07:57,270 --> 00:07:55,520

participants in and the phrase i like uh

226

00:07:59,430 --> 00:07:57,280

which i think sort of encapsulates it is

227

00:08:02,390 --> 00:07:59,440

is it provides you with what i call

228

00:08:04,869 --> 00:08:02,400

enhanced ecological validity without

229

00:08:06,550 --> 00:08:04,879

sacrificing experimental control it

230

00:08:09,350 --> 00:08:06,560

gives you a lot more control over what

231

00:08:11,670 --> 00:08:09,360

your participants are exposed to uh in a

232

00:08:13,830 --> 00:08:11,680

safe way and that's particularly useful

233

00:08:17,110 --> 00:08:13,840

if you want to put them in sort of

234

00:08:20,550 --> 00:08:17,120

situations that are highly arousing uh

235

00:08:22,710 --> 00:08:20,560

etc and there's a lot of research in the

236

00:08:24,230 --> 00:08:22,720

stream literature showing that you know

237

00:08:26,070 --> 00:08:24,240

when people are

238

00:08:28,950 --> 00:08:26,080

immersed within a virtual reality

239

00:08:30,710 --> 00:08:28,960

environment their emotional responses

240

00:08:32,389 --> 00:08:30,720

are very very significant so they

241

00:08:35,029 --> 00:08:32,399

they're able to produce you know virtual

242

00:08:37,029 --> 00:08:35,039

reality is able to elicit if you like a

243

00:08:38,949 --> 00:08:37,039

very robust issue response from

244

00:08:40,709 --> 00:08:38,959

individuals

245

00:08:42,310 --> 00:08:40,719

often people exhibit

246

00:08:44,470 --> 00:08:42,320

more or greater

247

00:08:46,710 --> 00:08:44,480

significantly greater recall of

248

00:08:49,030 --> 00:08:46,720

information that they are exposed to in

249

00:08:51,110 --> 00:08:49,040

that virtual environment and once again

250

00:08:52,710 --> 00:08:51,120

they show greater physiological changes

251  
00:08:55,030 --> 00:08:52,720  
compared to staticus so there's

252  
00:08:56,790 --> 00:08:55,040  
certainly a lot of evidence i think that

253  
00:08:59,110 --> 00:08:56,800  
when you immerse people in those

254  
00:09:01,110 --> 00:08:59,120  
environments they they are sort of fully

255  
00:09:02,710 --> 00:09:01,120  
immersed in them and they can be really

256  
00:09:04,949 --> 00:09:02,720  
really useful

257  
00:09:06,790 --> 00:09:04,959  
and so i thought to myself okay well

258  
00:09:08,389 --> 00:09:06,800  
what we should do then it was literally

259  
00:09:10,630 --> 00:09:08,399  
just flipping it around i mean i don't

260  
00:09:12,550 --> 00:09:10,640  
have a we don't have lots of labs and uh

261  
00:09:14,630 --> 00:09:12,560  
i didn't at that time and still don't at

262  
00:09:16,550 --> 00:09:14,640  
the moment have a couch for a receiver

263  
00:09:18,389 --> 00:09:16,560

you know to be able to sort of sensory

264

00:09:21,590 --> 00:09:18,399

isolate them so i thought well the whole

265

00:09:24,389 --> 00:09:21,600

point here is to immerse the sender

266

00:09:26,949 --> 00:09:24,399

in a in a sort of a written environment

267

00:09:29,350 --> 00:09:26,959

so right staring at an image staring at

268

00:09:32,070 --> 00:09:29,360

a screen or a piece of paper

269

00:09:34,710 --> 00:09:32,080

that might depict a particular target

270

00:09:37,829 --> 00:09:34,720

i wanted them to experience that that

271

00:09:39,829 --> 00:09:37,839

whatever it is okay and so the idea is

272

00:09:40,710 --> 00:09:39,839

that the sender would experience sort of

273

00:09:44,790 --> 00:09:40,720

uh

274

00:09:47,190 --> 00:09:44,800

experience

275

00:09:49,590 --> 00:09:47,200

meanwhile the receiver in a completely

276

00:09:50,550 --> 00:09:49,600

separate room would go through a sort of

277

00:09:52,470 --> 00:09:50,560

semi

278

00:09:55,430 --> 00:09:52,480

um

279

00:09:58,230 --> 00:09:55,440

sort of semi uh

280

00:09:59,910 --> 00:09:58,240

uh would you call it anyway

281

00:10:02,710 --> 00:09:59,920

um i'm trying to think of the word and

282

00:10:04,550 --> 00:10:02,720

failing utterly or whatever um but

283

00:10:07,269 --> 00:10:04,560

they're not quite uh in the sensory

284

00:10:09,829 --> 00:10:07,279

isolation but it's all sem semi-isolated

285

00:10:14,150 --> 00:10:09,839

is the phrase i was grappling for badly

286

00:10:15,750 --> 00:10:14,160

so so semi-auto phrase space sorry

287

00:10:18,550 --> 00:10:15,760

as you can see here

288

00:10:20,710 --> 00:10:18,560

our receiver would be i mean this is one

289

00:10:21,910 --> 00:10:20,720

of the tech guys modeling for these um

290

00:10:23,350 --> 00:10:21,920

but obviously these would be different

291

00:10:25,110 --> 00:10:23,360

people so

292

00:10:27,190 --> 00:10:25,120

what would happen is our sender would be

293

00:10:29,350 --> 00:10:27,200

in one lab with the virtual bond you

294

00:10:31,990 --> 00:10:29,360

can't quite see but down here there's a

295

00:10:33,910 --> 00:10:32,000

framework uh that the the sender holds

296

00:10:35,750 --> 00:10:33,920

on to and that's absolutely important

297

00:10:37,350 --> 00:10:35,760

and you'll see why in a minute um and

298

00:10:39,190 --> 00:10:37,360

they can't see anything else around them

299

00:10:40,470 --> 00:10:39,200

there's also an ex there's a researcher

300

00:10:42,230 --> 00:10:40,480

in that lab with them for health and

301  
00:10:45,430 --> 00:10:42,240  
safety reasons

302  
00:10:47,910 --> 00:10:45,440  
eva sits in another lab watches this gif

303  
00:10:49,670 --> 00:10:47,920  
and tries to breathe in time with that

304  
00:10:52,550 --> 00:10:49,680  
meanwhile they're also listening to pink

305  
00:10:54,230 --> 00:10:52,560  
noise now it's not completely isolated

306  
00:10:56,310 --> 00:10:54,240  
in the same way that a sort of typical

307  
00:10:57,670 --> 00:10:56,320  
ganzfeld is and that might be you know

308  
00:10:59,269 --> 00:10:57,680  
might be a weakness of the study and

309  
00:11:01,829 --> 00:10:59,279  
something we come back to

310  
00:11:03,750 --> 00:11:01,839  
okay um so just a little bit of the sort

311  
00:11:05,590 --> 00:11:03,760  
of technical background let me just play

312  
00:11:07,350 --> 00:11:05,600  
this gif here i put that in for you so

313  
00:11:10,230 --> 00:11:07,360

you could see what that gif looks like

314

00:11:11,990 --> 00:11:10,240

um so we managed to recruit pairs of

315

00:11:14,310 --> 00:11:12,000

participants eleven pairs of

316

00:11:16,790 --> 00:11:14,320

participants nine identified as friends

317

00:11:19,670 --> 00:11:16,800

and two were married

318

00:11:22,389 --> 00:11:19,680

we also excuse me we also monitored or

319

00:11:24,389 --> 00:11:22,399

measured uh belief in terms of we used

320

00:11:27,350 --> 00:11:24,399

the revised paranormal belief scale we

321

00:11:29,590 --> 00:11:27,360

had up some kit here two-way radios

322

00:11:31,910 --> 00:11:29,600

headphones to play the pink noise and

323

00:11:34,150 --> 00:11:31,920

gif that the receivers

324

00:11:36,389 --> 00:11:34,160

would be watching whilst they're having

325

00:11:37,590 --> 00:11:36,399

that pink noise played

326

00:11:41,030 --> 00:11:37,600

now

327

00:11:43,910 --> 00:11:41,040

in terms of creating a sort of

328

00:11:45,829 --> 00:11:43,920

target set this took quite uh

329

00:11:47,670 --> 00:11:45,839

i had two guys working with me on i

330

00:11:50,550 --> 00:11:47,680

should have said at the outset um tom

331

00:11:52,629 --> 00:11:50,560

sanford and eric moyo and tom and eric

332

00:11:55,910 --> 00:11:52,639

were spent a lot of time

333

00:11:58,310 --> 00:11:55,920

um identifying clips now the way we did

334

00:12:00,790 --> 00:11:58,320

this is there's a standardized image

335

00:12:02,470 --> 00:12:00,800

database called the iaps database which

336

00:12:04,870 --> 00:12:02,480

is very useful because it already has

337

00:12:06,870 --> 00:12:04,880

ratings for things like arousal and

338

00:12:09,269 --> 00:12:06,880

valence so sort of you know how

339

00:12:11,190 --> 00:12:09,279

stimulating a particular image is and

340

00:12:12,069 --> 00:12:11,200

whether it's positive or negative and

341

00:12:15,670 --> 00:12:12,079

you know

342

00:12:17,829 --> 00:12:15,680

and so what we did is we created sets

343

00:12:20,470 --> 00:12:17,839

of five you know if images as you can

344

00:12:22,870 --> 00:12:20,480

see this is just this represents one set

345

00:12:26,310 --> 00:12:22,880

okay so what we did

346

00:12:28,629 --> 00:12:26,320

based we created ten sets of five images

347

00:12:31,030 --> 00:12:28,639

and all of the images were matched for

348

00:12:33,110 --> 00:12:31,040

valence and arousal we then randomly

349

00:12:36,230 --> 00:12:33,120

allocated you know or identified one of

350

00:12:38,069 --> 00:12:36,240

those uh as the target and there was a

351  
00:12:40,710 --> 00:12:38,079  
bit of give and take here because we had

352  
00:12:42,230 --> 00:12:40,720  
to a lot of it might be based on uh you

353  
00:12:45,269 --> 00:12:42,240  
know whether we could try and get or

354  
00:12:47,110 --> 00:12:45,279  
create a clip a vr clip of of the

355  
00:12:49,509 --> 00:12:47,120  
experience so you know just to give you

356  
00:12:51,110 --> 00:12:49,519  
an idea um hopefully you can see this

357  
00:12:53,430 --> 00:12:51,120  
this is a guy sort of jumping off a

358  
00:12:55,030 --> 00:12:53,440  
cliff skydiving this is the typical sort

359  
00:12:57,350 --> 00:12:55,040  
of roller coaster

360  
00:12:58,550 --> 00:12:57,360  
um i think you call it i'm not sure what

361  
00:13:00,629 --> 00:12:58,560  
you call it in america if it's roller

362  
00:13:03,509 --> 00:13:00,639  
coaster whatever roller coaster hot air

363  
00:13:05,350 --> 00:13:03,519

ballooning this is our chap ski skiing

364

00:13:07,110 --> 00:13:05,360

down the infamous ski slope you know

365

00:13:09,350 --> 00:13:07,120

jumping off the jump at the end and this

366

00:13:12,069 --> 00:13:09,360

is a water slide

367

00:13:13,829 --> 00:13:12,079

so we've got these five clips and what

368

00:13:14,949 --> 00:13:13,839

we did is we identified one as the

369

00:13:17,829 --> 00:13:14,959

target

370

00:13:20,949 --> 00:13:17,839

and let's just move on

371

00:13:23,829 --> 00:13:20,959

we then created a sequence of

372

00:13:26,310 --> 00:13:23,839

of clips where we embedded the targets

373

00:13:28,389 --> 00:13:26,320

in between what we called relaxation

374

00:13:29,670 --> 00:13:28,399

clips and i'll give you an example of

375

00:13:31,590 --> 00:13:29,680

that in a minute this is just to show

376

00:13:33,350 --> 00:13:31,600

you how it works so what would happen is

377

00:13:35,269 --> 00:13:33,360

to put this is the person who gets

378

00:13:37,430 --> 00:13:35,279

put into the vr environment it's a sort

379

00:13:39,750 --> 00:13:37,440

of stand everything has to be set and

380

00:13:42,069 --> 00:13:39,760

was timed because the two

381

00:13:43,990 --> 00:13:42,079

uh participants were sort of operating

382

00:13:47,430 --> 00:13:44,000

independently but we had to sort of time

383

00:13:50,389 --> 00:13:47,440

their responses to coincide

384

00:13:52,150 --> 00:13:50,399

um so our sender would you know see this

385

00:13:54,389 --> 00:13:52,160

relaxing clip of

386

00:13:56,389 --> 00:13:54,399

waves coming up on the beach and they'd

387

00:13:59,269 --> 00:13:56,399

hear the waves and that the idea is that

388

00:14:02,230 --> 00:13:59,279

they relax for 45 seconds then the video

389

00:14:04,870 --> 00:14:02,240

would bleed into a target for 30 seconds

390

00:14:06,470 --> 00:14:04,880

and back to relaxation target and so on

391

00:14:08,470 --> 00:14:06,480

so it'll be five targets and at the end

392

00:14:11,430 --> 00:14:08,480

there'd be another religion bit now i've

393

00:14:13,269 --> 00:14:11,440

got a clip here i want to show you so

394

00:14:14,470 --> 00:14:13,279

let me i'm not going to show you all of

395

00:14:17,269 --> 00:14:14,480

this because it's you know it's rather

396

00:14:19,990 --> 00:14:17,279

boring but hopefully let me just pause

397

00:14:21,829 --> 00:14:20,000

that just for a second so this is uh the

398

00:14:23,269 --> 00:14:21,839

relaxation clip i'll play it in a second

399

00:14:25,590 --> 00:14:23,279

but it's just so i don't have to go over

400

00:14:26,710 --> 00:14:25,600

the audio um you can see it's slightly

401  
00:14:28,550 --> 00:14:26,720  
curved

402  
00:14:30,870 --> 00:14:28,560  
okay and that's because of course what

403  
00:14:34,230 --> 00:14:30,880  
we're doing here is we're mapping that

404  
00:14:36,550 --> 00:14:34,240  
uh 360 degrees image that the vr

405  
00:14:38,389 --> 00:14:36,560  
participants would see onto the 2d

406  
00:14:40,310 --> 00:14:38,399  
screen that you guys can see okay so it

407  
00:14:42,310 --> 00:14:40,320  
looks to be distorted so you know take

408  
00:14:43,990 --> 00:14:42,320  
that into account

409  
00:14:46,150 --> 00:14:44,000  
so if i just play it and i can just turn

410  
00:14:47,590 --> 00:14:46,160  
the sound down maybe so a little bit so

411  
00:14:50,310 --> 00:14:47,600  
you can hear the waves you can see the

412  
00:14:52,230 --> 00:14:50,320  
waves there in the background okay so

413  
00:14:53,509 --> 00:14:52,240

the idea is that i need to keep an eye

414

00:14:55,670 --> 00:14:53,519

on the time because i don't need to go

415

00:14:56,550 --> 00:14:55,680

on to the next one just so the idea is

416

00:14:57,509 --> 00:14:56,560

our

417

00:14:59,189 --> 00:14:57,519

sender

418

00:15:01,590 --> 00:14:59,199

would be sitting you know standing in

419

00:15:03,509 --> 00:15:01,600

the in the lab with vr helmet on they

420

00:15:05,350 --> 00:15:03,519

can look around this is a completely

421

00:15:08,069 --> 00:15:05,360

sort of immersive environment it's nice

422

00:15:10,069 --> 00:15:08,079

sort of blue sky a few clouds the sunset

423

00:15:12,389 --> 00:15:10,079

and the waves the idea is that this was

424

00:15:14,150 --> 00:15:12,399

just them relax and get into

425

00:15:15,990 --> 00:15:14,160

into it and then

426  
00:15:18,069 --> 00:15:16,000  
along would come a

427  
00:15:19,269 --> 00:15:18,079  
target clip so let's move that along a

428  
00:15:20,629 --> 00:15:19,279  
bit

429  
00:15:31,110 --> 00:15:20,639  
and it would bleed into one of the

430  
00:15:35,430 --> 00:15:34,150  
just so you know this is our man skiing

431  
00:15:37,590 --> 00:15:35,440  
the

432  
00:15:43,590 --> 00:15:37,600  
ramp so again

433  
00:15:47,350 --> 00:15:45,110  
and that's why we had to have the frame

434  
00:15:50,389 --> 00:15:47,360  
as well because you know people move

435  
00:15:52,550 --> 00:15:50,399  
see this they're sort of like oh

436  
00:15:54,150 --> 00:15:52,560  
and they jump down way

437  
00:15:56,470 --> 00:15:54,160  
and everything's happy you know

438  
00:15:57,829 --> 00:15:56,480

everyone's you know claps etc and they

439

00:16:00,310 --> 00:15:57,839

get it

440

00:16:03,189 --> 00:16:00,320

so the idea is that you know that's a

441

00:16:05,749 --> 00:16:03,199

very immersive well ideally it's a very

442

00:16:08,710 --> 00:16:05,759

immersive but also um an emotionally

443

00:16:10,389 --> 00:16:08,720

arousing and positive experience for the

444

00:16:11,670 --> 00:16:10,399

sender so the idea is that we wanted to

445

00:16:14,710 --> 00:16:11,680

immerse the sender in this really

446

00:16:16,550 --> 00:16:14,720

positive experience that was slightly um

447

00:16:17,990 --> 00:16:16,560

sort of like an adrenaline experience as

448

00:16:19,110 --> 00:16:18,000

well it would make them feel sort of

449

00:16:19,990 --> 00:16:19,120

like wow

450

00:16:21,269 --> 00:16:20,000

um

451  
00:16:22,550 --> 00:16:21,279  
and of course we wanted to find out

452  
00:16:29,910 --> 00:16:22,560  
whether

453  
00:16:32,069 --> 00:16:29,920  
pick that up so there's an outline of

454  
00:16:33,430 --> 00:16:32,079  
the procedure i'll just take you through

455  
00:16:36,470 --> 00:16:33,440  
it

456  
00:16:37,990 --> 00:16:36,480  
obviously you know if any of this

457  
00:16:40,389 --> 00:16:38,000  
doesn't make sense

458  
00:16:42,629 --> 00:16:40,399  
feel free to ask questions at the end

459  
00:16:45,430 --> 00:16:42,639  
so we recruited our participants in

460  
00:16:47,509 --> 00:16:45,440  
pairs uh we brought them to the lab um

461  
00:16:49,590 --> 00:16:47,519  
we then you know they

462  
00:16:50,870 --> 00:16:49,600  
we got them to exchange a personal item

463  
00:16:53,269 --> 00:16:50,880

at the outset

464

00:16:54,710 --> 00:16:53,279

knew that once the sender was immersed

465

00:16:57,350 --> 00:16:54,720

in that virtual environment we didn't

466

00:16:59,829 --> 00:16:57,360

want them to forget about their their

467

00:17:01,749 --> 00:16:59,839

partner so we got them to exchange

468

00:17:03,110 --> 00:17:01,759

personal items and it was a ring it was

469

00:17:04,630 --> 00:17:03,120

their choice whatever they wanted and

470

00:17:07,510 --> 00:17:04,640

that the idea is they held that in their

471

00:17:09,510 --> 00:17:07,520

hand as a cue as a reminder of their

472

00:17:11,829 --> 00:17:09,520

partner so imagine the two people would

473

00:17:13,429 --> 00:17:11,839

come to the lab and they would complete

474

00:17:14,870 --> 00:17:13,439

the revised paranormal belief scale

475

00:17:16,549 --> 00:17:14,880

separately then they'd exchange a

476

00:17:19,189 --> 00:17:16,559

personal item and then we'd have two

477

00:17:21,590 --> 00:17:19,199

experimenters taking the sender and the

478

00:17:23,429 --> 00:17:21,600

receiver to different labs

479

00:17:25,990 --> 00:17:23,439

and then the sender would get set up in

480

00:17:27,350 --> 00:17:26,000

the vr kit okay and then they would go

481

00:17:28,470 --> 00:17:27,360

through the sequence where they might

482

00:17:30,789 --> 00:17:28,480

see you know

483

00:17:32,230 --> 00:17:30,799

they'd see a set number of videos which

484

00:17:34,470 --> 00:17:32,240

is you know includes targets and each

485

00:17:35,990 --> 00:17:34,480

relaxing scene etc and

486

00:17:38,630 --> 00:17:36,000

what we call the target you know when

487

00:17:40,789 --> 00:17:38,640

they're seeing skiing down the um

488

00:17:42,549 --> 00:17:40,799

ramp for example that's when we told

489

00:17:44,470 --> 00:17:42,559

them that when this is occurring we want

490

00:17:46,870 --> 00:17:44,480

you to sort of think about you know keep

491

00:17:48,870 --> 00:17:46,880

that item in your hand and think about

492

00:17:50,470 --> 00:17:48,880

your partner being with you in that

493

00:17:53,590 --> 00:17:50,480

experience you know try and think of

494

00:17:56,070 --> 00:17:53,600

them and send that to them meanwhile our

495

00:17:57,590 --> 00:17:56,080

receiver is in a separate lab they have

496

00:17:59,990 --> 00:17:57,600

that set up as you saw earlier they've

497

00:18:01,270 --> 00:18:00,000

got the headphones with the pink noise

498

00:18:03,029 --> 00:18:01,280

and they're watching that gif and

499

00:18:04,150 --> 00:18:03,039

they're just relaxing and breathing

500

00:18:06,070 --> 00:18:04,160

they're all

501  
00:18:08,310 --> 00:18:06,080  
thinking of their partner okay and

502  
00:18:10,070 --> 00:18:08,320  
they're trying to just relax and just

503  
00:18:11,430 --> 00:18:10,080  
think of their partner that's all we ask

504  
00:18:14,549 --> 00:18:11,440  
them to do think of the partner and then

505  
00:18:16,630 --> 00:18:14,559  
when the video switches up here so the

506  
00:18:18,390 --> 00:18:16,640  
sender it shifts from say you know

507  
00:18:19,830 --> 00:18:18,400  
skiing down the slope it shifts back to

508  
00:18:22,070 --> 00:18:19,840  
the calm b

509  
00:18:23,029 --> 00:18:22,080  
the sender just relaxes it's like ah

510  
00:18:24,870 --> 00:18:23,039  
breathe

511  
00:18:27,350 --> 00:18:24,880  
and then what happens to the receiver

512  
00:18:29,830 --> 00:18:27,360  
they get a an automatic this is why it

513  
00:18:31,990 --> 00:18:29,840

was important because the computer that

514

00:18:33,430 --> 00:18:32,000

was playing the gif automatically

515

00:18:35,750 --> 00:18:33,440

shifted to

516

00:18:37,590 --> 00:18:35,760

presentation of a set edges you can see

517

00:18:40,710 --> 00:18:37,600

up here on the right so it would show

518

00:18:43,590 --> 00:18:40,720

them a set of of the five images

519

00:18:45,590 --> 00:18:43,600

and ask them to rank those images one to

520

00:18:48,070 --> 00:18:45,600

five in terms of the one you think your

521

00:18:50,390 --> 00:18:48,080

partner had just experienced one being

522

00:18:53,350 --> 00:18:50,400

the most likely five the least likely

523

00:18:54,870 --> 00:18:53,360

etc and they would do that five times

524

00:18:56,390 --> 00:18:54,880

then we would take them to separate

525

00:18:58,950 --> 00:18:56,400

holding rooms so we could swap them

526  
00:19:00,710 --> 00:18:58,960  
around without contact and reverse the

527  
00:19:02,789 --> 00:19:00,720  
procedure so the person who was the

528  
00:19:04,150 --> 00:19:02,799  
sender you know now became the receiver

529  
00:19:05,750 --> 00:19:04,160  
the person who was the receiver now

530  
00:19:07,029 --> 00:19:05,760  
became the sender and at the end they

531  
00:19:09,590 --> 00:19:07,039  
would then repeat

532  
00:19:11,590 --> 00:19:09,600  
complete another set of new trials and

533  
00:19:13,430 --> 00:19:11,600  
do the same sort of procedure again and

534  
00:19:14,470 --> 00:19:13,440  
then we bring them back at the end and a

535  
00:19:16,950 --> 00:19:14,480  
debrief

536  
00:19:18,789 --> 00:19:16,960  
so that's the procedure

537  
00:19:20,390 --> 00:19:18,799  
so uh despite and there was no

538  
00:19:22,630 --> 00:19:20,400

interaction

539

00:19:24,070 --> 00:19:22,640

it wasn't completely isolated didn't

540

00:19:26,070 --> 00:19:24,080

interact with the participants whilst

541

00:19:28,789 --> 00:19:26,080

they were doing their tasks and

542

00:19:31,110 --> 00:19:28,799

certainly the receiver

543

00:19:32,470 --> 00:19:31,120

in and it went from the gif to the you

544

00:19:34,070 --> 00:19:32,480

know presenting them with the target

545

00:19:37,590 --> 00:19:34,080

images and they were supposed to rank

546

00:19:39,350 --> 00:19:37,600

them etc and despite the fact that

547

00:19:43,190 --> 00:19:39,360

i'm laughing say this because it seemed

548

00:19:45,909 --> 00:19:43,200

pretty clear to us and um it seems quite

549

00:19:47,830 --> 00:19:45,919

a simple task you know rank the images

550

00:19:50,549 --> 00:19:47,840

one to five

551  
00:19:53,110 --> 00:19:50,559  
but one person ranks more than one image

552  
00:19:54,070 --> 00:19:53,120  
with with the number one so we excluded

553  
00:19:54,950 --> 00:19:54,080  
him

554  
00:19:56,549 --> 00:19:54,960  
uh

555  
00:19:58,789 --> 00:19:56,559  
and then we just looked at the hit rate

556  
00:20:00,950 --> 00:19:58,799  
so you know one out of five we compared

557  
00:20:03,750 --> 00:20:00,960  
that to mean chance and as you can see

558  
00:20:06,149 --> 00:20:03,760  
here we didn't find an effect you know

559  
00:20:08,310 --> 00:20:06,159  
uh hit rate was 26

560  
00:20:10,549 --> 00:20:08,320  
okay and one sample t test shows that

561  
00:20:12,390 --> 00:20:10,559  
this is not significant um interestingly

562  
00:20:14,470 --> 00:20:12,400  
there was a correlation between hit rate

563  
00:20:16,470 --> 00:20:14,480

and the psi subscale of the revised

564

00:20:18,789 --> 00:20:16,480

paranormal belief scale but nothing else

565

00:20:21,029 --> 00:20:18,799

there's no other correlations but it was

566

00:20:22,710 --> 00:20:21,039

this bit when i saw this and i thought

567

00:20:25,830 --> 00:20:22,720

that's interesting it's not nothing it's

568

00:20:27,909 --> 00:20:25,840

close you know it's like 26 percent

569

00:20:30,070 --> 00:20:27,919

that literally just taking

570

00:20:31,990 --> 00:20:30,080

you know the hit rate and i thought okay

571

00:20:33,350 --> 00:20:32,000

well let's do a bit of exploratory

572

00:20:36,149 --> 00:20:33,360

analysis

573

00:20:38,870 --> 00:20:36,159

so um what i then did is i looked at the

574

00:20:41,270 --> 00:20:38,880

top two ranks okay so now it's you know

575

00:20:43,270 --> 00:20:41,280

whether they identified the target the

576

00:20:44,789 --> 00:20:43,280

top two either one or two

577

00:20:46,710 --> 00:20:44,799

and you know since then i've gone back

578

00:20:48,630 --> 00:20:46,720

and said well okay maybe that wasn't

579

00:20:50,149 --> 00:20:48,640

maybe the whole sort of ranking one to

580

00:20:51,750 --> 00:20:50,159

five you could think of different ways

581

00:20:53,909 --> 00:20:51,760

of doing that but

582

00:20:56,470 --> 00:20:53,919

i can talk about that later but anyway i

583

00:20:58,230 --> 00:20:56,480

went back and did this of course we did

584

00:21:00,789 --> 00:20:58,240

a bond for action just controlling for

585

00:21:02,710 --> 00:21:00,799

inflated type one errors and

586

00:21:04,470 --> 00:21:02,720

lo and behold what we found and this was

587

00:21:07,590 --> 00:21:04,480

one-tailed but it was a significant

588

00:21:10,310 --> 00:21:07,600

effect so uh the hit rate here was 52

589

00:21:12,149 --> 00:21:10,320

when you'd expect a chance uh to be uh

590

00:21:13,669 --> 00:21:12,159

whatever it is i can't remember off the

591

00:21:18,870 --> 00:21:13,679

oh chance you see there it is it's there

592

00:21:21,590 --> 00:21:20,230

so

593

00:21:23,909 --> 00:21:21,600

you know that was encouraging we were

594

00:21:27,110 --> 00:21:23,919

very encouraged by that so

595

00:21:29,270 --> 00:21:27,120

being cautious of course um you know i i

596

00:21:31,510 --> 00:21:29,280

wouldn't say that there's a clear effect

597

00:21:35,350 --> 00:21:31,520

of telepath

598

00:21:37,190 --> 00:21:35,360

you know with some in the literature but

599

00:21:39,909 --> 00:21:37,200

when you look at the top two choices

600

00:21:41,830 --> 00:21:39,919

there's a possible indication you know

601  
00:21:44,310 --> 00:21:41,840  
and there was a pos

602  
00:21:46,789 --> 00:21:44,320  
it's parallel

603  
00:21:49,830 --> 00:21:46,799  
and you know and i think

604  
00:21:50,870 --> 00:21:49,840  
that what part of the deals

605  
00:21:51,830 --> 00:21:50,880  
you know

606  
00:21:58,549 --> 00:21:51,840  
is

607  
00:22:01,029 --> 00:21:58,559  
test could we use virtual reality um

608  
00:22:03,190 --> 00:22:01,039  
to test for telepathy could be a useful

609  
00:22:05,029 --> 00:22:03,200  
paradigm you know could we develop this

610  
00:22:07,669 --> 00:22:05,039  
in certain ways and i think as a you

611  
00:22:09,590 --> 00:22:07,679  
know as a sort of toe in the water uh

612  
00:22:11,590 --> 00:22:09,600  
you know test i think this produced some

613  
00:22:13,270 --> 00:22:11,600

really interesting findings um there's

614

00:22:14,710 --> 00:22:13,280

lots of

615

00:22:16,630 --> 00:22:14,720

ideas

616

00:22:18,149 --> 00:22:16,640

you know we've got about tapes forward

617

00:22:19,909 --> 00:22:18,159

there's lots of issues of course you

618

00:22:21,430 --> 00:22:19,919

know this is very much a sort of

619

00:22:25,510 --> 00:22:21,440

exploratory

620

00:22:27,590 --> 00:22:25,520

sort of you know pilot test if you like

621

00:22:29,430 --> 00:22:27,600

so there are a number of issues of

622

00:22:31,909 --> 00:22:29,440

course when we reflect back on that you

623

00:22:35,190 --> 00:22:31,919

know we assume that those targets used

624

00:22:37,909 --> 00:22:35,200

were arousing um in the sense uh that we

625

00:22:39,590 --> 00:22:37,919

use those from the iaps database and uh

626

00:22:41,510 --> 00:22:39,600

you know they they were identified as

627

00:22:43,750 --> 00:22:41,520

arousing but we took no physiological

628

00:22:45,110 --> 00:22:43,760

measures um so that's an assumption and

629

00:22:46,870 --> 00:22:45,120

certainly you know that's something we

630

00:22:48,789 --> 00:22:46,880

could easily measure in the future so we

631

00:22:50,470 --> 00:22:48,799

could go and in fact one of the things

632

00:22:52,870 --> 00:22:50,480

that we we thought about as well is that

633

00:22:53,590 --> 00:22:52,880

you could almost you could look at the

634

00:22:56,470 --> 00:22:53,600

uh

635

00:22:59,190 --> 00:22:56,480

well at potential changes in physiology

636

00:23:01,029 --> 00:22:59,200

of both sender and receiver so you know

637

00:23:03,029 --> 00:23:01,039

looking at arousal levels there could be

638

00:23:05,110 --> 00:23:03,039

really interesting it was a bit of an

639

00:23:06,630 --> 00:23:05,120

intense trial sequence you know as it

640

00:23:09,110 --> 00:23:06,640

was you know for the senders it was

641

00:23:11,029 --> 00:23:09,120

literally in a relaxed target relaxed

642

00:23:13,190 --> 00:23:11,039

target really you know so it might be

643

00:23:15,110 --> 00:23:13,200

better to have one or two targets come

644

00:23:17,029 --> 00:23:15,120

back another day run a few more trials

645

00:23:19,110 --> 00:23:17,039

you know and so on so that could have

646

00:23:20,149 --> 00:23:19,120

been an issue

647

00:23:22,630 --> 00:23:20,159

was

648

00:23:25,909 --> 00:23:22,640

to some extent well to a great extent

649

00:23:27,990 --> 00:23:25,919

was dictated by our ability to find

650

00:23:29,909 --> 00:23:28,000

virtual reality clips

651  
00:23:32,470 --> 00:23:29,919  
um we bought a couple we managed to

652  
00:23:34,310 --> 00:23:32,480  
snaffle a few off the internet um and it

653  
00:23:37,430 --> 00:23:34,320  
was a challenge we don't have

654  
00:23:39,830 --> 00:23:37,440  
like a 60 camera to create our own clips

655  
00:23:42,470 --> 00:23:39,840  
and part of part of our hope with this

656  
00:23:44,070 --> 00:23:42,480  
is to try and get some sort of uh

657  
00:23:46,070 --> 00:23:44,080  
research projects off the ground where

658  
00:23:47,830 --> 00:23:46,080  
we can start you know now we were

659  
00:23:49,990 --> 00:23:47,840  
suggesting that that you know this is

660  
00:23:51,830 --> 00:23:50,000  
worth exploring we could try and apply

661  
00:23:53,269 --> 00:23:51,840  
for grant to get that sort of kit but at

662  
00:23:55,909 --> 00:23:53,279  
you know at this moment in time we don't

663  
00:23:57,830 --> 00:23:55,919

have that and it might be that longer

664

00:23:59,350 --> 00:23:57,840

more immersive environments might be

665

00:24:00,870 --> 00:23:59,360

better

666

00:24:02,950 --> 00:24:00,880

and it may be that you know the target

667

00:24:06,070 --> 00:24:02,960

pool was too similar as well you know

668

00:24:08,149 --> 00:24:06,080

because every one of those uh um well

669

00:24:11,269 --> 00:24:08,159

the target and the decoys were all of a

670

00:24:13,510 --> 00:24:11,279

similar arousal level um and all of the

671

00:24:14,950 --> 00:24:13,520

targets were similarly arousing they

672

00:24:17,990 --> 00:24:14,960

were just different types so it was like

673

00:24:20,950 --> 00:24:18,000

a motorbike uh racing around the tt

674

00:24:23,990 --> 00:24:20,960

men's uh isle of man uh jumping off a

675

00:24:25,430 --> 00:24:24,000

cliff hanging space walk

676

00:24:27,669 --> 00:24:25,440

skiing down the slope you know they're

677

00:24:30,549 --> 00:24:27,679

all very sort of um sort of adrenaline

678

00:24:32,230 --> 00:24:30,559

inducing uh uh positive experiences well

679

00:24:34,149 --> 00:24:32,240

i'm saying positive i mean some you know

680

00:24:37,830 --> 00:24:34,159

we had to flag those things up that

681

00:24:39,669 --> 00:24:37,840

these these uh experiences are

682

00:24:41,430 --> 00:24:39,679

quite concerned about our participants

683

00:24:43,269 --> 00:24:41,440

you know because they're quite immersive

684

00:24:46,149 --> 00:24:43,279

and we had to ensure that somebody

685

00:24:48,070 --> 00:24:46,159

stayed with the with the vr participant

686

00:24:49,590 --> 00:24:48,080

all the time as i say for health and

687

00:24:50,870 --> 00:24:49,600

safety because they tend to move about a

688

00:24:52,870 --> 00:24:50,880

bit you've got to have this sort of

689

00:24:54,230 --> 00:24:52,880

stable frame to them for them to hold on

690

00:24:56,630 --> 00:24:54,240

to

691

00:24:58,390 --> 00:24:56,640

um so other things we can think about is

692

00:25:00,310 --> 00:24:58,400

you know do we have too many too few

693

00:25:02,470 --> 00:25:00,320

trials i mean it's not many trials at

694

00:25:04,630 --> 00:25:02,480

all uh you know five trials per

695

00:25:07,269 --> 00:25:04,640

participant and in fact i was looking at

696

00:25:09,909 --> 00:25:07,279

the most recent hot off the press not

697

00:25:12,870 --> 00:25:09,919

quite still under review uh analysis by

698

00:25:15,830 --> 00:25:12,880

patricio uh and they argue that you know

699

00:25:18,310 --> 00:25:15,840

you'd need about 320 trials per study

700

00:25:20,549 --> 00:25:18,320

unless you selectively recruit your

701  
00:25:22,630 --> 00:25:20,559  
participants in which case you may be

702  
00:25:24,710 --> 00:25:22,640  
able to reduce that down to about 50

703  
00:25:26,070 --> 00:25:24,720  
trials so you know that would be an

704  
00:25:27,350 --> 00:25:26,080  
interesting idea maybe in the future

705  
00:25:29,350 --> 00:25:27,360  
what we do is we go back and we

706  
00:25:31,590 --> 00:25:29,360  
selectively recruit you know run a sort

707  
00:25:34,149 --> 00:25:31,600  
of pilot selectively recruit those who

708  
00:25:37,590 --> 00:25:34,159  
seem to do well and then you know run a

709  
00:25:39,750 --> 00:25:37,600  
much more robust sort of 50 trial study

710  
00:25:43,669 --> 00:25:39,760  
maybe we need more time for receivers to

711  
00:25:45,190 --> 00:25:43,679  
relax and maybe even adhere more closely

712  
00:25:47,269 --> 00:25:45,200  
for the receiver to the gansfeld

713  
00:25:48,710 --> 00:25:47,279

paradigm uh one of the things i've

714

00:25:51,110 --> 00:25:48,720

talked with uh colleague up at

715

00:25:54,310 --> 00:25:51,120

northampton cal cooper about because

716

00:25:56,710 --> 00:25:54,320

they have taken delivery of these

717

00:25:59,590 --> 00:25:56,720

sensory isolation tanks

718

00:26:01,269 --> 00:25:59,600

floatation tanks uh and so one of my

719

00:26:03,669 --> 00:26:01,279

hopes is that you know i could imagine a

720

00:26:05,909 --> 00:26:03,679

situation whereby we've got a sender

721

00:26:08,870 --> 00:26:05,919

down here in canterbury with the vr kit

722

00:26:11,029 --> 00:26:08,880

on and a receiver up in northampton you

723

00:26:12,470 --> 00:26:11,039

know in the sensory isolation tank

724

00:26:14,950 --> 00:26:12,480

and you know maybe we could setting up

725

00:26:16,950 --> 00:26:14,960

that way so you know as well i mean that

726

00:26:19,190 --> 00:26:16,960

raises issues of its of its own of

727

00:26:21,269 --> 00:26:19,200

course because it's very unlikely that

728

00:26:23,510 --> 00:26:21,279

we're going to be able to recruit

729

00:26:26,149 --> 00:26:23,520

pairs of individuals to do that so there

730

00:26:29,190 --> 00:26:26,159

might be a trade-off in terms of you

731

00:26:31,430 --> 00:26:29,200

know how well we can match those up

732

00:26:33,029 --> 00:26:31,440

and you know the measure of success i

733

00:26:35,190 --> 00:26:33,039

talked a little bit about that so you

734

00:26:37,190 --> 00:26:35,200

know initially i just thought we'd focus

735

00:26:39,510 --> 00:26:37,200

on hit rates but when we went back and

736

00:26:41,430 --> 00:26:39,520

and looked again in a slightly more

737

00:26:43,510 --> 00:26:41,440

um

738

00:26:45,190 --> 00:26:43,520

i think probably a slightly more

739

00:26:46,870 --> 00:26:45,200

uh open way

740

00:26:49,029 --> 00:26:46,880

but probably a slightly more honest way

741

00:26:51,269 --> 00:26:49,039

as well because

742

00:26:54,070 --> 00:26:51,279

i suppose it's an assumption

743

00:26:57,110 --> 00:26:54,080

that in telepathy

744

00:26:59,269 --> 00:26:57,120

well quote unquote you know telepathy if

745

00:27:00,070 --> 00:26:59,279

such a thing exists and if it works that

746

00:27:07,190 --> 00:27:00,080

the

747

00:27:08,390 --> 00:27:07,200

right target you know it's always 100

748

00:27:10,310 --> 00:27:08,400

whereas you know of course that's that's

749

00:27:13,510 --> 00:27:10,320

a bit of a nonsense it would make much

750

00:27:16,310 --> 00:27:13,520

more sense to have say six six options

751  
00:27:18,389 --> 00:27:16,320  
or six you know six target ops and then

752  
00:27:20,710 --> 00:27:18,399  
look at the top three and then make it

753  
00:27:23,350 --> 00:27:20,720  
run some sort of binomial because you

754  
00:27:25,510 --> 00:27:23,360  
know i think it's much more likely that

755  
00:27:27,350 --> 00:27:25,520  
you know the the the you know that that

756  
00:27:28,870 --> 00:27:27,360  
the target may be the first or the

757  
00:27:30,230 --> 00:27:28,880  
second or the third you know because

758  
00:27:33,190 --> 00:27:30,240  
it's not always going to be the case

759  
00:27:35,350 --> 00:27:33,200  
that person has to get the target 100

760  
00:27:36,950 --> 00:27:35,360  
so measure of success in terms of hit

761  
00:27:39,190 --> 00:27:36,960  
rates versus ranking that's definitely

762  
00:27:41,269 --> 00:27:39,200  
something we need to rethink as well

763  
00:27:42,950 --> 00:27:41,279

okay so that's probably enough of me i

764

00:27:44,549 --> 00:27:42,960

just want to say thanks to tom and

765

00:27:46,950 --> 00:27:44,559

thanks to eric for helping out with this

766

00:27:49,750 --> 00:27:46,960

a special thanks to mark and richard our

767

00:27:52,070 --> 00:27:49,760

tech guys here at canterbury who uh what

768

00:27:55,029 --> 00:27:52,080

encouraged me basically to utilize this

769

00:27:57,590 --> 00:27:55,039

kit and help me set the whole thing up

770

00:28:00,149 --> 00:27:57,600

and it was very logistically long-winded

771

00:28:02,389 --> 00:28:00,159

if i'm honest um it's uh

772

00:28:04,710 --> 00:28:02,399

it's something i would like to continue

773

00:28:07,750 --> 00:28:04,720

but it's a challenge

774

00:28:08,950 --> 00:28:07,760

like like so much of parapsychological

775

00:28:11,110 --> 00:28:08,960

research

776

00:28:14,149 --> 00:28:11,120

uh i see three raised hands already so

777

00:28:16,549 --> 00:28:14,159

let's see who we got here

778

00:28:21,990 --> 00:28:16,559

um i'm going to start with uh margaret

779

00:28:27,669 --> 00:28:23,990

can you hear me

780

00:28:29,750 --> 00:28:27,679

yes okay good um yeah i was curious um i

781

00:28:31,590 --> 00:28:29,760

i've been in groups where we do guided

782

00:28:34,149 --> 00:28:31,600

meditation and that can really bring

783

00:28:36,230 --> 00:28:34,159

people down and they can sink and then

784

00:28:38,630 --> 00:28:36,240

images can start rising up does anyone

785

00:28:42,789 --> 00:28:38,640

use that sort of technique for bringing

786

00:28:45,510 --> 00:28:42,799

people deep in and then testing pairs or

787

00:28:48,549 --> 00:28:45,520

or is that in the ganzfeld

788

00:28:50,950 --> 00:28:48,559

um not that i i mean certainly i know

789

00:28:52,870 --> 00:28:50,960

dean radian has done a lot of work with

790

00:28:55,750 --> 00:28:52,880

people who meditate but not necessarily

791

00:28:58,389 --> 00:28:55,760

in to these studies but i know that um

792

00:29:01,430 --> 00:28:58,399

meditators generally you know have this

793

00:29:03,110 --> 00:29:01,440

you know very very focused ability uh to

794

00:29:05,750 --> 00:29:03,120

attend to information that's that's you

795

00:29:07,830 --> 00:29:05,760

know that's a given um but there's i'm

796

00:29:10,149 --> 00:29:07,840

not sure there's much evidence there

797

00:29:11,750 --> 00:29:10,159

i'm not you know that it would it may

798

00:29:12,630 --> 00:29:11,760

have a benefit but

799

00:29:14,630 --> 00:29:12,640

i mean

800

00:29:16,389 --> 00:29:14,640

the honest answer is that's an empirical

801  
00:29:19,110 --> 00:29:16,399  
question and i would love you know if i

802  
00:29:21,190 --> 00:29:19,120  
could just get hold of i know 30

803  
00:29:23,990 --> 00:29:21,200  
pairs of meditators then i'd happily

804  
00:29:24,710 --> 00:29:24,000  
test them um yeah at the moment

805  
00:29:28,470 --> 00:29:24,720  
no

806  
00:29:30,630 --> 00:29:28,480  
i think bill benson will understand this

807  
00:29:33,029 --> 00:29:30,640  
one um

808  
00:29:35,029 --> 00:29:33,039  
the telepathy experiments

809  
00:29:36,710 --> 00:29:35,039  
do the participants ever feel a need to

810  
00:29:38,470 --> 00:29:36,720  
transfer an image so if they're just

811  
00:29:40,630 --> 00:29:38,480  
arousing you know what i mean there's a

812  
00:29:43,110 --> 00:29:40,640  
lot of the the spontaneous there's a

813  
00:29:44,470 --> 00:29:43,120

need the connection and so trying to

814

00:29:46,470 --> 00:29:44,480

design an experiment where there's a

815

00:29:47,430 --> 00:29:46,480

need to transfer you know what i'm

816

00:29:48,870 --> 00:29:47,440

saying

817

00:29:51,990 --> 00:29:48,880

yeah yeah that's a really interesting

818

00:29:54,549 --> 00:29:52,000

idea and you know and possibly

819

00:29:57,510 --> 00:29:54,559

you know maybe virtual reality is it

820

00:29:58,630 --> 00:29:57,520

might well provide a sing

821

00:30:01,110 --> 00:29:58,640

for that

822

00:30:03,430 --> 00:30:01,120

um as an aside let me just give you an

823

00:30:05,909 --> 00:30:03,440

example okay so in um a colleague of

824

00:30:07,590 --> 00:30:05,919

mine uh ross up at greenwich is doing

825

00:30:09,269 --> 00:30:07,600

work on scope aesthesia this is this

826

00:30:11,029 --> 00:30:09,279

idea that you can feel when people are

827

00:30:12,870 --> 00:30:11,039

staring at you

828

00:30:14,549 --> 00:30:12,880

and one of the one of the things that

829

00:30:17,029 --> 00:30:14,559

you know that plays into this is that

830

00:30:18,870 --> 00:30:17,039

sort of the the eq the validity of of

831

00:30:21,830 --> 00:30:18,880

the setting you know because when we do

832

00:30:24,389 --> 00:30:21,840

these things in the lab is it's not very

833

00:30:26,070 --> 00:30:24,399

um realistic you know putting people

834

00:30:28,070 --> 00:30:26,080

standing them in front of a well

835

00:30:30,630 --> 00:30:28,080

whatever you want to call it a one-way

836

00:30:32,149 --> 00:30:30,640

win you know and then having them just

837

00:30:34,070 --> 00:30:32,159

face away and then stare at them or

838

00:30:35,669 --> 00:30:34,080

something like that um

839

00:30:39,350 --> 00:30:35,679

you know and i know ross did some work

840

00:30:42,230 --> 00:30:39,360

where he literally filmed people as they

841

00:30:43,990 --> 00:30:42,240

walked down a sort of dark alley around

842

00:30:45,510 --> 00:30:44,000

at the back end of their university of

843

00:30:46,789 --> 00:30:45,520

niche and they found some really

844

00:30:48,950 --> 00:30:46,799

interesting effects because that's a

845

00:30:51,269 --> 00:30:48,960

sort of environment where if somebody

846

00:30:52,389 --> 00:30:51,279

were watching you you might be quite

847

00:30:54,870 --> 00:30:52,399

aware of it

848

00:30:56,789 --> 00:30:54,880

um now it's really it's a very very

849

00:30:58,630 --> 00:30:56,799

challenging situation because it raises

850

00:30:59,830 --> 00:30:58,640

lots of ethical issues and all that sort

851  
00:31:01,669 --> 00:30:59,840  
of stuff so

852  
00:31:04,149 --> 00:31:01,679  
i could imagine

853  
00:31:05,590 --> 00:31:04,159  
virtual reality would be a a really

854  
00:31:08,870 --> 00:31:05,600  
useful way

855  
00:31:10,389 --> 00:31:08,880  
of putting people in settings that were

856  
00:31:12,070 --> 00:31:10,399  
um i'm trying to i'm trying to think of

857  
00:31:14,470 --> 00:31:12,080  
a nice way of saying this it's sort of

858  
00:31:15,669 --> 00:31:14,480  
um you know whatever it might be scary

859  
00:31:18,149 --> 00:31:15,679  
or uh

860  
00:31:20,070 --> 00:31:18,159  
you know you might feel might think oh

861  
00:31:22,549 --> 00:31:20,080  
goodness me this noise is it's dark

862  
00:31:23,830 --> 00:31:22,559  
order but of course there's no no harm

863  
00:31:25,509 --> 00:31:23,840

going to happen to the participants we

864

00:31:28,070 --> 00:31:25,519

have to be very careful of all that so i

865

00:31:30,149 --> 00:31:28,080

think virtual reality may be an option

866

00:31:32,470 --> 00:31:30,159

where we could explore some of these i

867

00:31:36,149 --> 00:31:32,480

mean at the at the moment it's a it's in

868

00:31:38,870 --> 00:31:36,159

its infancy and that's what i would say

869

00:31:40,310 --> 00:31:38,880

okay all right thank you

870

00:31:41,669 --> 00:31:40,320

thank you margaret

871

00:31:42,950 --> 00:31:41,679

all right we did have a couple more

872

00:31:44,950 --> 00:31:42,960

raised hands but i'm going to go to the

873

00:31:46,789 --> 00:31:44,960

q a box and we'll take we'll take a

874

00:31:49,029 --> 00:31:46,799

question from there uh something been

875

00:31:50,789 --> 00:31:49,039

upvoted and i do encourage everybody to

876

00:31:52,149 --> 00:31:50,799

go and look at the questions and and

877

00:31:52,950 --> 00:31:52,159

upvote the ones that want to be answered

878

00:31:55,029 --> 00:31:52,960

because i don't think we're gonna have

879

00:31:56,789 --> 00:31:55,039

time for all of them um but right now in

880

00:31:57,669 --> 00:31:56,799

the number one slot maryland schlitz

881

00:32:00,149 --> 00:31:57,679

asks

882

00:32:02,470 --> 00:32:00,159

a great study uh are you seeing any

883

00:32:05,350 --> 00:32:02,480

contamination in the imagery by seeing

884

00:32:07,990 --> 00:32:05,360

the beach scene as relaxation

885

00:32:10,310 --> 00:32:08,000

do they have images of beach

886

00:32:11,990 --> 00:32:10,320

no nobody reported that you know we

887

00:32:13,750 --> 00:32:12,000

didn't have anything with that

888

00:32:16,710 --> 00:32:13,760

not at all

889

00:32:20,470 --> 00:32:16,720

okay but that you know having said that

890

00:32:22,470 --> 00:32:20,480

um you know again sort of if we so uh

891

00:32:23,190 --> 00:32:22,480

it's a nice idea and you're going back

892

00:32:26,830 --> 00:32:23,200

to

893

00:32:29,990 --> 00:32:26,840

this may well be an artifact of how we

894

00:32:32,630 --> 00:32:30,000

um obtained responses which was you know

895

00:32:34,549 --> 00:32:32,640

the receiver would see five images you

896

00:32:36,630 --> 00:32:34,559

know and so in a way we could arrange

897

00:32:38,070 --> 00:32:36,640

what they were feeding back on so one of

898

00:32:39,909 --> 00:32:38,080

the things we thought about you know

899

00:32:41,590 --> 00:32:39,919

which would be nice going forwards is

900

00:32:43,110 --> 00:32:41,600

you could imagine rather than or you

901  
00:32:45,110 --> 00:32:43,120  
could do both you could uh have the

902  
00:32:47,029 --> 00:32:45,120  
receiver sit and then do the sort of

903  
00:32:49,350 --> 00:32:47,039  
mentation what's going through their

904  
00:32:52,149 --> 00:32:49,360  
head any images that come to mind

905  
00:32:53,590 --> 00:32:52,159  
and so on then show them the targets you

906  
00:32:55,830 --> 00:32:53,600  
know the target along with the decoys

907  
00:32:57,990 --> 00:32:55,840  
and they rank them so we might then

908  
00:32:59,509 --> 00:32:58,000  
maybe the beach might come out but you

909  
00:33:01,830 --> 00:32:59,519  
know that didn't happen this time but as

910  
00:33:03,830 --> 00:33:01,840  
i say maybe like an artifact of the sort

911  
00:33:06,310 --> 00:33:03,840  
of constrained way that the sort of

912  
00:33:08,870 --> 00:33:06,320  
forced recognition paradigm that was

913  
00:33:16,470 --> 00:33:08,880

okay i'm going to pass the mic to ching

914

00:33:20,310 --> 00:33:18,470

okay where is my

915

00:33:23,029 --> 00:33:20,320

camera okay

916

00:33:25,029 --> 00:33:23,039

thank you so my question is that so in

917

00:33:25,990 --> 00:33:25,039

this um

918

00:33:27,509 --> 00:33:26,000

uh

919

00:33:30,470 --> 00:33:27,519

so tellingly

920

00:33:32,789 --> 00:33:30,480

experiment the the receiver is always

921

00:33:35,990 --> 00:33:32,799

almost often in putting in a sensory

922

00:33:38,549 --> 00:33:36,000

isolation so basically uh under the

923

00:33:40,870 --> 00:33:38,559

condition under a hypothesis that the

924

00:33:43,590 --> 00:33:40,880

receiver is going to pick up a signal

925

00:33:46,950 --> 00:33:43,600

out of a kind of very low noise so what

926  
00:33:49,509 --> 00:33:46,960  
if i'm just asking what if the receiver

927  
00:33:51,990 --> 00:33:49,519  
is also given a set of vr

928  
00:33:54,950 --> 00:33:52,000  
and so the sender has a vr receiver has

929  
00:33:57,269 --> 00:33:54,960  
a vr and then they though vrs they are

930  
00:33:59,269 --> 00:33:57,279  
playing absolutely we've already thought

931  
00:34:00,950 --> 00:33:59,279  
about that put them both in exactly the

932  
00:34:03,029 --> 00:34:00,960  
same environment i mean that would be i

933  
00:34:04,470 --> 00:34:03,039  
mean in fact there was a study done and

934  
00:34:05,909 --> 00:34:04,480  
i'm trying to i'm just going to dig out

935  
00:34:07,669 --> 00:34:05,919  
the reference for you

936  
00:34:10,149 --> 00:34:07,679  
i can remember it off the top of my head

937  
00:34:12,149 --> 00:34:10,159  
which i can't and

938  
00:34:15,349 --> 00:34:12,159

i can't remember the guy's name

939

00:34:16,790 --> 00:34:15,359

but it was one study done where a group

940

00:34:19,030 --> 00:34:16,800

of researchers looked at this they

941

00:34:21,430 --> 00:34:19,040

didn't find an effect but they had they

942

00:34:22,470 --> 00:34:21,440

literally had a single trial um and it

943

00:34:23,909 --> 00:34:22,480

was you know i don't think it was very

944

00:34:26,149 --> 00:34:23,919

well designed so

945

00:34:28,470 --> 00:34:26,159

again i think that this is for me this

946

00:34:30,710 --> 00:34:28,480

was like a sort of exploratory idea you

947

00:34:32,470 --> 00:34:30,720

know or an exploration of

948

00:34:35,270 --> 00:34:32,480

is it you know is there any mileage in

949

00:34:37,190 --> 00:34:35,280

using vr in this sort of area i think

950

00:34:39,190 --> 00:34:37,200

there is and i you know what i'd love to

951  
00:34:41,829 --> 00:34:39,200  
have is you know more kits with you know

952  
00:34:43,750 --> 00:34:41,839  
better quality images maybe ones that we

953  
00:34:46,470 --> 00:34:43,760  
could create ourselves but absolutely i

954  
00:34:48,790 --> 00:34:46,480  
think that that you know offers a really

955  
00:34:51,270 --> 00:34:48,800  
interesting uh environment where you

956  
00:34:53,909 --> 00:34:51,280  
could put both sender and receiver in

957  
00:34:55,669 --> 00:34:53,919  
the same environment maybe have then

958  
00:34:58,630 --> 00:34:55,679  
have the sender you know pick up a

959  
00:35:00,069 --> 00:34:58,640  
virtual object and see if the receiver

960  
00:35:01,589 --> 00:35:00,079  
goes to the same op you know something

961  
00:35:02,870 --> 00:35:01,599  
like that you measure it in different

962  
00:35:04,470 --> 00:35:02,880  
ways there are lots of things you can do

963  
00:35:06,230 --> 00:35:04,480

there but yeah that would be a fun that

964

00:35:08,710 --> 00:35:06,240

would definitely be a fun project

965

00:35:10,710 --> 00:35:08,720

anybody out there with vast sums of

966

00:35:14,390 --> 00:35:10,720

money who would like to fund

967

00:35:15,990 --> 00:35:14,400

parapsychical research just let me know

968

00:35:18,870 --> 00:35:16,000

but yes that's a great question thank

969

00:35:19,910 --> 00:35:18,880

you very much thank you

970

00:35:21,750 --> 00:35:19,920

okay

971

00:35:23,030 --> 00:35:21,760

um i'm gonna take another one from the q

972

00:35:24,150 --> 00:35:23,040

a

973

00:35:26,470 --> 00:35:24,160

uh

974

00:35:29,510 --> 00:35:26,480

thank you for your upvotes everyone

975

00:35:30,470 --> 00:35:29,520

the next uh most popular question

976

00:35:33,990 --> 00:35:30,480

um

977

00:35:36,710 --> 00:35:34,000

york is asking for clarification on how

978

00:35:39,030 --> 00:35:36,720

you identify the target and a sequence

979

00:35:42,150 --> 00:35:39,040

of five target clips

980

00:35:43,109 --> 00:35:42,160

random well it's a combination as i said

981

00:35:44,950 --> 00:35:43,119

it's

982

00:35:47,270 --> 00:35:44,960

well pseudo random i suppose to some

983

00:35:49,589 --> 00:35:47,280

extent it was it was driven by

984

00:35:52,230 --> 00:35:49,599

how how easy or difficult it was to find

985

00:35:55,510 --> 00:35:52,240

a vr clip so so

986

00:35:56,950 --> 00:35:55,520

taking a step back we had sets of

987

00:35:58,390 --> 00:35:56,960

five images

988

00:35:59,910 --> 00:35:58,400

those images were matched to evidence

989

00:36:01,670 --> 00:35:59,920  
and arousal according to the iaps

990

00:36:03,670 --> 00:36:01,680  
database so according to them they're

991

00:36:06,230 --> 00:36:03,680  
all sort of um

992

00:36:08,870 --> 00:36:06,240  
you know similarly arousing and

993

00:36:10,470 --> 00:36:08,880  
similarly positive now and i hold my

994

00:36:14,150 --> 00:36:10,480  
hands up and say you know of course

995

00:36:17,430 --> 00:36:14,160  
that's uh static images there is no uh

996

00:36:19,430 --> 00:36:17,440  
database of virtual reality clips

997

00:36:21,270 --> 00:36:19,440  
yet maybe that's something that you know

998

00:36:23,430 --> 00:36:21,280  
if somebody with vast

999

00:36:25,750 --> 00:36:23,440  
resources and and time could do but i

1000

00:36:26,550 --> 00:36:25,760  
mean that you know this is because over

1001  
00:36:29,510 --> 00:36:26,560  
time

1002  
00:36:31,270 --> 00:36:29,520  
researchers um often utilize these sort

1003  
00:36:32,790 --> 00:36:31,280  
of standardized databases of words and

1004  
00:36:36,230 --> 00:36:32,800  
the images because they're really really

1005  
00:36:39,109 --> 00:36:36,240  
useful um so there was no sort of go-to

1006  
00:36:41,670 --> 00:36:39,119  
uh set of images so we use those images

1007  
00:36:43,750 --> 00:36:41,680  
those those static images as a guide and

1008  
00:36:47,670 --> 00:36:43,760  
then it was driven mostly by whether we

1009  
00:36:49,990 --> 00:36:47,680  
could get a vr clip of one of those

1010  
00:36:52,150 --> 00:36:50,000  
since we're talking about uh images and

1011  
00:36:54,470 --> 00:36:52,160  
another question comes from mark urban

1012  
00:36:56,550 --> 00:36:54,480  
lorraine uh he's asking are the five

1013  
00:36:57,990 --> 00:36:56,560

images presented to the receiver all on

1014

00:36:59,829 --> 00:36:58,000

the screen at the same time or

1015

00:37:01,510 --> 00:36:59,839

sequentially all on the screen at the

1016

00:37:03,109 --> 00:37:01,520

same time so it literally has owed it

1017

00:37:04,550 --> 00:37:03,119

you see that that five and then the

1018

00:37:06,550 --> 00:37:04,560

little spaces underneath and they're

1019

00:37:08,950 --> 00:37:06,560

supposed to plug in one two three four

1020

00:37:11,190 --> 00:37:08,960

five that's it they just rank them

1021

00:37:13,670 --> 00:37:11,200

according to you know how they

1022

00:37:15,990 --> 00:37:13,680

one is the the uh experience that they

1023

00:37:18,310 --> 00:37:16,000

think their partner just had five least

1024

00:37:25,750 --> 00:37:18,320

likely

1025

00:37:29,270 --> 00:37:26,710

hey

1026

00:37:31,670 --> 00:37:29,280

super interesting stuff i really really

1027

00:37:35,349 --> 00:37:31,680

want to talk um

1028

00:37:36,630 --> 00:37:35,359

with respect to the high arousal images

1029

00:37:39,910 --> 00:37:36,640

um

1030

00:37:42,710 --> 00:37:39,920

i'm wondering if the immersion

1031

00:37:44,470 --> 00:37:42,720

uh that you're doing on the sender

1032

00:37:46,630 --> 00:37:44,480

could almost be counterproductive in

1033

00:37:50,630 --> 00:37:46,640

some sense right because

1034

00:37:52,069 --> 00:37:50,640

the arousal i could see in missing the

1035

00:37:54,710 --> 00:37:52,079

receiver

1036

00:37:56,390 --> 00:37:54,720

right if you have a loved one that is

1037

00:37:58,630 --> 00:37:56,400

going through some kind of trauma you

1038

00:37:59,990 --> 00:37:58,640

might pick up on that arousal

1039

00:38:02,069 --> 00:38:00,000

but at the same time you could be

1040

00:38:04,950 --> 00:38:02,079

undermining the fidelity

1041

00:38:06,790 --> 00:38:04,960

of the details and

1042

00:38:09,270 --> 00:38:06,800

the reason i say that is from the

1043

00:38:11,910 --> 00:38:09,280

perspective of the sender um you're

1044

00:38:13,750 --> 00:38:11,920

encouraging like a visceral

1045

00:38:15,510 --> 00:38:13,760

uh kind of experience with these high

1046

00:38:18,550 --> 00:38:15,520

arousal images

1047

00:38:21,030 --> 00:38:18,560

and since they're so engrossed in the uh

1048

00:38:22,950 --> 00:38:21,040

activity itself they may be

1049

00:38:24,390 --> 00:38:22,960

sufficiently dedicated to the sending

1050

00:38:27,030 --> 00:38:24,400

process

1051

00:38:28,630 --> 00:38:27,040

right absolutely absolutely

1052

00:38:30,950 --> 00:38:28,640

so i mean that was one of the reasons

1053

00:38:33,190 --> 00:38:30,960

why we had them swap an item at the

1054

00:38:35,270 --> 00:38:33,200

outset and had you know when the sender

1055

00:38:36,550 --> 00:38:35,280

was you know in the vr they would hold

1056

00:38:37,990 --> 00:38:36,560

this up

1057

00:38:40,390 --> 00:38:38,000

and we'd you know sort of emphasize to

1058

00:38:42,550 --> 00:38:40,400

try and remember their partner because

1059

00:38:44,069 --> 00:38:42,560

you know we recognize that to some

1060

00:38:47,030 --> 00:38:44,079

extent when you put someone in this

1061

00:38:48,950 --> 00:38:47,040

situation it's it's distracting

1062

00:38:50,390 --> 00:38:48,960

and immersive and they could completely

1063

00:38:52,390 --> 00:38:50,400

forget about you know all the things

1064

00:38:55,430 --> 00:38:52,400

we've just asked them to do and and just

1065

00:38:57,030 --> 00:38:55,440

go wow this is fun and

1066

00:38:59,030 --> 00:38:57,040

you know which is great but it's got you

1067

00:39:00,630 --> 00:38:59,040

know it doesn't really help us um and it

1068

00:39:03,349 --> 00:39:00,640

may well be that

1069

00:39:06,230 --> 00:39:03,359

um that what we might need to do is run

1070

00:39:08,310 --> 00:39:06,240

through some sort of like a like a

1071

00:39:10,790 --> 00:39:08,320

like a not an equation process but a

1072

00:39:12,790 --> 00:39:10,800

sort of familiarization process so you

1073

00:39:15,030 --> 00:39:12,800

know the person because the other thing

1074

00:39:16,790 --> 00:39:15,040

is this this um the oculus when you wear

1075

00:39:18,230 --> 00:39:16,800

it it's actually quite heavy i mean

1076  
00:39:20,630 --> 00:39:18,240  
you've got these straps on the head and

1077  
00:39:25,190 --> 00:39:20,640  
stuff um but it gets quite warm and it's

1078  
00:39:27,750 --> 00:39:25,200  
quite heavy so it's not ideal um by any

1079  
00:39:29,109 --> 00:39:27,760  
stretch uh but i think there are ways

1080  
00:39:32,390 --> 00:39:29,119  
that we can sort of address some of

1081  
00:39:35,270 --> 00:39:32,400  
those issues to try and bring them back

1082  
00:39:37,430 --> 00:39:35,280  
i'm almost wondering if you can you

1083  
00:39:39,750 --> 00:39:37,440  
really leverage the immersive experience

1084  
00:39:42,950 --> 00:39:39,760  
to enhance the relaxation

1085  
00:39:45,030 --> 00:39:42,960  
and get people in in a in a fine where

1086  
00:39:46,550 --> 00:39:45,040  
they might be more optimal for sending

1087  
00:39:49,349 --> 00:39:46,560  
and then you can even have like a

1088  
00:39:50,950 --> 00:39:49,359

floating still image inside of that

1089

00:39:52,310 --> 00:39:50,960

beach scene for example

1090

00:39:53,990 --> 00:39:52,320

and have them send it and not

1091

00:39:56,069 --> 00:39:54,000

necessarily have to be a high arousal

1092

00:39:58,150 --> 00:39:56,079

image just that you're you're

1093

00:40:00,230 --> 00:39:58,160

encouraging the relaxation process that

1094

00:40:02,230 --> 00:40:00,240

might be conducive for a sender as

1095

00:40:05,270 --> 00:40:02,240

opposed to the exhilaration process that

1096

00:40:07,270 --> 00:40:05,280

might be more conducive for the receiver

1097

00:40:09,109 --> 00:40:07,280

that may well be i mean there's lots

1098

00:40:11,910 --> 00:40:09,119

that we could explore the reason we

1099

00:40:14,069 --> 00:40:11,920

chose high arousal sort of positive

1100

00:40:15,270 --> 00:40:14,079

valence images is because there's quite

1101

00:40:17,109 --> 00:40:15,280

a bit of research in the literature

1102

00:40:20,309 --> 00:40:17,119

showing saying that you know arousing

1103

00:40:22,710 --> 00:40:20,319

images that are if you like not static

1104

00:40:25,030 --> 00:40:22,720

your multi-sensory targets tend to be

1105

00:40:27,510 --> 00:40:25,040

better or people tend to do better with

1106

00:40:28,950 --> 00:40:27,520

these uh yes that was basically it i

1107

00:40:31,510 --> 00:40:28,960

mean

1108

00:40:33,030 --> 00:40:31,520

it's not it's not by any stretch um like

1109

00:40:34,870 --> 00:40:33,040

the end i would you know as i say i

1110

00:40:36,950 --> 00:40:34,880

think i consider this to be sort of the

1111

00:40:39,430 --> 00:40:36,960

beginning i think it's uh you know this

1112

00:40:40,390 --> 00:40:39,440

seems to be suggesting that it could be

1113

00:40:42,470 --> 00:40:40,400

useful

1114

00:40:44,069 --> 00:40:42,480

so let's see where we can take i think

1115

00:40:48,390 --> 00:40:44,079

there's you know really can be taken in

1116

00:40:53,589 --> 00:40:51,109

okay so i've got

1117

00:40:56,470 --> 00:40:53,599

um a lot of questions and comments from

1118

00:40:58,470 --> 00:40:56,480

marilyn flitz and uh she seems to be

1119

00:41:01,030 --> 00:40:58,480

having trouble with the ray's hand

1120

00:41:02,470 --> 00:41:01,040

feature she's having some tech issues so

1121

00:41:04,710 --> 00:41:02,480

we're gonna go through some of her

1122

00:41:07,589 --> 00:41:04,720

questions and comments i'll have to be

1123

00:41:09,430 --> 00:41:07,599

her proxy so uh the first thing uh she

1124

00:41:12,309 --> 00:41:09,440

says that she has a vr setup and would

1125

00:41:14,630 --> 00:41:12,319

love to explore some collaborations

1126

00:41:17,750 --> 00:41:14,640

okay um and

1127

00:41:18,630 --> 00:41:17,760

let's see uh as a couple of suggestions

1128

00:41:20,950 --> 00:41:18,640

um

1129

00:41:23,190 --> 00:41:20,960

she suggests using rating rather than

1130

00:41:24,550 --> 00:41:23,200

ranking for the judging

1131

00:41:26,790 --> 00:41:24,560

okay

1132

00:41:29,030 --> 00:41:26,800

um and suggests that you might not be

1133

00:41:30,790 --> 00:41:29,040

powered for significance instead perhaps

1134

00:41:33,990 --> 00:41:30,800

effect size would be a better way to

1135

00:41:38,069 --> 00:41:36,230

do you have any comment on that no i'm

1136

00:41:40,309 --> 00:41:38,079

happy to go with that

1137

00:41:42,069 --> 00:41:40,319

that's fine it makes sense to me i mean

1138

00:41:44,710 --> 00:41:42,079

you know this was very much a pilot as

1139

00:41:46,790 --> 00:41:44,720

you know with 11 i'm surprised we found

1140

00:41:50,150 --> 00:41:46,800

we found with 11 pairs

1141

00:41:51,829 --> 00:41:50,160

um you know i would much prefer

1142

00:41:53,430 --> 00:41:51,839

you know a more robust study but the

1143

00:41:54,309 --> 00:41:53,440

reality is you know these things it's a

1144

00:41:58,230 --> 00:41:54,319

step

1145

00:42:00,150 --> 00:41:58,240

sense you know you i run this we do this

1146

00:42:02,309 --> 00:42:00,160

first um the

1147

00:42:03,430 --> 00:42:02,319

part of the channel is i'm not sure you

1148

00:42:04,870 --> 00:42:03,440

know obviously if this doesn't make

1149

00:42:06,630 --> 00:42:04,880

sense then you know i'll explain it but

1150

00:42:08,150 --> 00:42:06,640

part of the rationale is us as

1151

00:42:11,349 --> 00:42:08,160

researchers are often trying to get

1152

00:42:13,670 --> 00:42:11,359

funding to run research projects but

1153

00:42:16,230 --> 00:42:13,680

often we have to show a sort of proof of

1154

00:42:18,710 --> 00:42:16,240

concept before we can apply for that

1155

00:42:20,309 --> 00:42:18,720

fund that was really the basis of this

1156

00:42:22,390 --> 00:42:20,319

study it's basically saying i think that

1157

00:42:24,309 --> 00:42:22,400

there's mileage here now what we can try

1158

00:42:26,710 --> 00:42:24,319

and do is apply for some funding to

1159

00:42:28,230 --> 00:42:26,720

different organizations and also to the

1160

00:42:30,150 --> 00:42:28,240

university itself and say you know

1161

00:42:32,390 --> 00:42:30,160

please give us a virtual reality camera

1162

00:42:34,390 --> 00:42:32,400

and other kit etc so you know that's

1163

00:42:36,150 --> 00:42:34,400

that was part of the deal but absolutely

1164

00:42:37,910 --> 00:42:36,160

i mean there's lots of there are you

1165

00:42:39,510 --> 00:42:37,920

know was it there's always more

1166

00:42:41,190 --> 00:42:39,520

questions than answers but you know i

1167

00:42:43,589 --> 00:42:41,200

think this is i think it's also quite a

1168

00:42:45,670 --> 00:42:43,599

fun and interesting area

1169

00:42:49,750 --> 00:42:45,680

speaking of more questions we we have a

1170

00:42:55,109 --> 00:42:52,550

i'm going to pass the mic to carl um i

1171

00:42:58,069 --> 00:42:55,119

hope i said his last name right

1172

00:43:00,550 --> 00:42:58,079

yeah hello david i just thought i'd um

1173

00:43:03,030 --> 00:43:00,560

offer a little commentary about your use

1174

00:43:04,870 --> 00:43:03,040

of the potential use of a float tank

1175

00:43:06,069 --> 00:43:04,880

i went in 30 years ago and all i can

1176

00:43:07,190 --> 00:43:06,079

tell you is

1177

00:43:08,790 --> 00:43:07,200

i didn't

1178

00:43:10,470 --> 00:43:08,800

nothing really happened when i was there

1179

00:43:12,230 --> 00:43:10,480

but when i walked out it felt like

1180

00:43:15,430 --> 00:43:12,240

gravity had been dialed back and i just

1181

00:43:18,069 --> 00:43:15,440

felt like so clean and a couple

1182

00:43:20,309 --> 00:43:18,079

meetings ago someone was saying i think

1183

00:43:22,309 --> 00:43:20,319

it was paul smith about so that the

1184

00:43:23,990 --> 00:43:22,319

cleanest recipient signals were ones

1185

00:43:26,150 --> 00:43:24,000

found when people were

1186

00:43:27,670 --> 00:43:26,160

hundreds of feet under under water in a

1187

00:43:30,390 --> 00:43:27,680

submarine

1188

00:43:32,309 --> 00:43:30,400

so um so i'd encourage you to play with

1189

00:43:36,150 --> 00:43:32,319

that

1190

00:43:38,150 --> 00:43:36,160

anybody in a submarine i mean one of the

1191

00:43:41,750 --> 00:43:38,160

things i'd ask those is your

1192

00:43:43,990 --> 00:43:41,760

experiences in the isolation um tank uh

1193

00:43:46,150 --> 00:43:44,000

was that like was it just one

1194

00:43:48,230 --> 00:43:46,160

uh one-off or is it something that you

1195

00:43:49,829 --> 00:43:48,240

regularly no it was a one-off and i

1196

00:43:51,430 --> 00:43:49,839

didn't really have the knowledge 30

1197

00:43:53,190 --> 00:43:51,440

years ago that i have today

1198

00:43:55,030 --> 00:43:53,200

and the other thing is it was sort of

1199

00:43:58,150 --> 00:43:55,040

like a giant eggshell

1200

00:43:59,670 --> 00:43:58,160

with a gull wing door and in the top of

1201

00:44:02,150 --> 00:43:59,680

it was a um

1202

00:44:04,069 --> 00:44:02,160

was a tv screen

1203

00:44:06,710 --> 00:44:04,079

i mean so that that you could use that

1204

00:44:08,950 --> 00:44:06,720

as option and the idea was they should

1205

00:44:11,430 --> 00:44:08,960

like you were in star wars start star

1206

00:44:13,510 --> 00:44:11,440

trek going warp 10 and the stars were

1207

00:44:14,870 --> 00:44:13,520

going by and you could just kind of like

1208

00:44:17,270 --> 00:44:14,880

doze off

1209

00:44:18,950 --> 00:44:17,280

and so it you know

1210

00:44:20,390 --> 00:44:18,960

while it was happening i just didn't

1211

00:44:23,109 --> 00:44:20,400

really feel anything was really

1212

00:44:24,550 --> 00:44:23,119

happening but when i got out it was like

1213

00:44:26,630 --> 00:44:24,560

wow what just happened to me and it

1214

00:44:27,670 --> 00:44:26,640

wasn't like anything magical it's just i

1215

00:44:30,309 --> 00:44:27,680

felt like

1216

00:44:32,550 --> 00:44:30,319

so clean it was just like i thought whoa

1217

00:44:34,710 --> 00:44:32,560

this is crazy and i didn't really

1218

00:44:37,190 --> 00:44:34,720

have anything to go on right it was kind

1219

00:44:39,030 --> 00:44:37,200

of a gift from a friend so um

1220

00:44:40,790 --> 00:44:39,040

so it just kind of blew me so and then

1221

00:44:43,670 --> 00:44:40,800

if you start thinking about it you're

1222

00:44:45,349 --> 00:44:43,680

sitting in 600 pounds of epsom salts

1223

00:44:47,910 --> 00:44:45,359

does that have something to do with

1224

00:44:50,309 --> 00:44:47,920

anything who knows but

1225

00:44:52,630 --> 00:44:50,319

you know so i just think you and you get

1226  
00:44:55,430 --> 00:44:52,640  
people in a very very relaxed state and

1227  
00:44:57,430 --> 00:44:55,440  
my suspicion is running isolation and

1228  
00:45:00,790 --> 00:44:57,440  
having thought about it it's just

1229  
00:45:02,630 --> 00:45:00,800  
reduced activity you know so it's not so

1230  
00:45:04,150 --> 00:45:02,640  
much you're isolated but just

1231  
00:45:06,309 --> 00:45:04,160  
nothing's going on in your mind is

1232  
00:45:08,069 --> 00:45:06,319  
idling when it's normally

1233  
00:45:10,950 --> 00:45:08,079  
running doing who knows what with all

1234  
00:45:14,069 --> 00:45:10,960  
kinds of distractions so that's my

1235  
00:45:16,950 --> 00:45:14,079  
suspicions and i mean in a way

1236  
00:45:19,109 --> 00:45:16,960  
that's uh again uh it's it's just it's

1237  
00:45:21,750 --> 00:45:19,119  
an empirical question

1238  
00:45:24,069 --> 00:45:21,760

take you know keeping a sender in the vr

1239

00:45:25,990 --> 00:45:24,079

environment and having a receiver you

1240

00:45:28,870 --> 00:45:26,000

could have a receiver in a sort of

1241

00:45:31,109 --> 00:45:28,880

the pink noise and etc

1242

00:45:33,109 --> 00:45:31,119

or you could put them in you know an

1243

00:45:34,710 --> 00:45:33,119

isolation tank i mean the question is

1244

00:45:36,630 --> 00:45:34,720

you know which of these is better i mean

1245

00:45:38,150 --> 00:45:36,640

these for me these are empirical

1246

00:45:41,589 --> 00:45:38,160

questions i i you know i want to know

1247

00:45:45,270 --> 00:45:42,630

okay

1248

00:45:47,829 --> 00:45:45,280

so hold on a second

1249

00:45:49,430 --> 00:45:47,839

um philip brown has a question at the

1250

00:45:50,950 --> 00:45:49,440

top but i'm actually going to hand him

1251

00:45:54,870 --> 00:45:50,960

the mic in the moment but in the

1252

00:45:57,430 --> 00:45:54,880

meantime there's a question from bro

1253

00:46:00,230 --> 00:45:57,440

she says roller coaster may be fun and

1254

00:46:02,390 --> 00:46:00,240

arousing or it might be traumatizing any

1255

00:46:04,710 --> 00:46:02,400

accounting for the difference

1256

00:46:06,950 --> 00:46:04,720

it's an interesting question i mean we

1257

00:46:09,270 --> 00:46:06,960

we had to flag up to our participants at

1258

00:46:11,750 --> 00:46:09,280

the outset that these were what we

1259

00:46:13,750 --> 00:46:11,760

considered to be adrenaline inducing

1260

00:46:14,950 --> 00:46:13,760

experiences

1261

00:46:16,790 --> 00:46:14,960

but we couldn't show them the

1262

00:46:18,309 --> 00:46:16,800

experiences beforehand because otherwise

1263

00:46:20,710 --> 00:46:18,319

you know then you know then we sort of

1264

00:46:22,790 --> 00:46:20,720

ruin the the process but um you know

1265

00:46:24,950 --> 00:46:22,800

that's i mean that's the true because

1266

00:46:26,630 --> 00:46:24,960

you know we did say you know for example

1267

00:46:29,430 --> 00:46:26,640

it involved you know jumping out of an

1268

00:46:30,950 --> 00:46:29,440

airplane or standing on the edge or you

1269

00:46:33,190 --> 00:46:30,960

know climbing up a very tall building so

1270

00:46:35,030 --> 00:46:33,200

if you're afraid of heights or if you're

1271

00:46:37,030 --> 00:46:35,040

um you know if you have if these are

1272

00:46:38,870 --> 00:46:37,040

issues for you then don't participate

1273

00:46:40,470 --> 00:46:38,880

you know so we did sort of flag that up

1274

00:46:41,750 --> 00:46:40,480

and part of our ethics was that we had

1275

00:46:43,349 --> 00:46:41,760

to make that very very clear at the

1276

00:46:44,710 --> 00:46:43,359

outset that it could be

1277

00:46:46,870 --> 00:46:44,720

quite now because there's one i think

1278

00:46:48,550 --> 00:46:46,880

there's a space walk which is if you

1279

00:46:50,069 --> 00:46:48,560

suffer from vertigo you might that might

1280

00:46:51,109 --> 00:46:50,079

be problematic

1281

00:46:53,190 --> 00:46:51,119

um

1282

00:46:54,550 --> 00:46:53,200

yeah it's a challenge i think i mean

1283

00:46:56,150 --> 00:46:54,560

it's an interesting idea i mean it's

1284

00:46:57,829 --> 00:46:56,160

part of my mind is just going down this

1285

00:47:00,150 --> 00:46:57,839

avenue well

1286

00:47:03,670 --> 00:47:00,160

you could imagine i quite like the idea

1287

00:47:06,309 --> 00:47:03,680

of uh of setting people up um

1288

00:47:08,230 --> 00:47:06,319

you know so you could have say pairs

1289

00:47:10,870 --> 00:47:08,240

of of people who suffer from say

1290

00:47:12,870 --> 00:47:10,880

arachnophobia and then you know expose

1291

00:47:14,950 --> 00:47:12,880

one of them to spiders and see if the

1292

00:47:16,710 --> 00:47:14,960

other one responds or something i mean

1293

00:47:19,430 --> 00:47:16,720

again you have to be very cautious how

1294

00:47:21,910 --> 00:47:19,440

you do that ethically but once again my

1295

00:47:22,950 --> 00:47:21,920

point would be that you know vr allows

1296

00:47:24,950 --> 00:47:22,960

you to

1297

00:47:26,150 --> 00:47:24,960

sort of do this in a safe environment

1298

00:47:27,430 --> 00:47:26,160

and you have to be careful quite how

1299

00:47:29,349 --> 00:47:27,440

much you tell your participants you

1300

00:47:31,109 --> 00:47:29,359

don't prime them bias them or whatever

1301  
00:47:33,270 --> 00:47:31,119  
you know but at the same time you can't

1302  
00:47:34,950 --> 00:47:33,280  
just sort of uh you know

1303  
00:47:37,510 --> 00:47:34,960  
shock them

1304  
00:47:39,349 --> 00:47:37,520  
having a heart attacks but i think it's

1305  
00:47:40,870 --> 00:47:39,359  
real scope i really do i think there's

1306  
00:47:50,069 --> 00:47:40,880  
real scope

1307  
00:47:53,990 --> 00:47:51,030  
hello

1308  
00:47:55,670 --> 00:47:54,000  
philip good evening hi david thank you

1309  
00:47:57,670 --> 00:47:55,680  
for your presentation

1310  
00:48:00,230 --> 00:47:57,680  
you're very welcome

1311  
00:48:02,230 --> 00:48:00,240  
the comment that i have is that example

1312  
00:48:03,109 --> 00:48:02,240  
of five images that you gave us there

1313  
00:48:05,910 --> 00:48:03,119

was

1314

00:48:10,150 --> 00:48:05,920

an image of somebody falling off a cliff

1315

00:48:12,790 --> 00:48:10,160

it was a roller coaster uh the ski slope

1316

00:48:14,950 --> 00:48:12,800

and the water slide and i don't remember

1317

00:48:17,270 --> 00:48:14,960

the fifth one but hot air ballooning but

1318

00:48:19,430 --> 00:48:17,280

yeah that's it okay well at least four

1319

00:48:21,990 --> 00:48:19,440

of those images have the sensation of

1320

00:48:24,790 --> 00:48:22,950

so

1321

00:48:27,430 --> 00:48:24,800

or at least i think i think that would

1322

00:48:29,270 --> 00:48:27,440

be the dominant sensation

1323

00:48:30,470 --> 00:48:29,280

of falling so

1324

00:48:33,109 --> 00:48:30,480

i think

1325

00:48:34,549 --> 00:48:33,119

if the sender transmitted the sensation

1326

00:48:38,230 --> 00:48:34,559

falling it would be hard for the

1327

00:48:41,190 --> 00:48:38,240

receiver to decide which of those four

1328

00:48:43,670 --> 00:48:41,200

images would be the correct one

1329

00:48:45,109 --> 00:48:43,680

so i mean that was just one example that

1330

00:48:46,870 --> 00:48:45,119

that you gave us

1331

00:48:48,470 --> 00:48:46,880

uh i don't know what what your other

1332

00:48:50,150 --> 00:48:48,480

examples were but

1333

00:48:51,910 --> 00:48:50,160

i think they would have to be a

1334

00:48:53,829 --> 00:48:51,920

qualitative difference for example

1335

00:48:56,150 --> 00:48:53,839

kicking a ball or

1336

00:48:57,750 --> 00:48:56,160

being attacked by swimming bees or

1337

00:48:59,670 --> 00:48:57,760

things that are really different in a

1338

00:49:00,710 --> 00:48:59,680

qualitative sense that would be easier

1339

00:49:02,870 --> 00:49:00,720

for a

1340

00:49:05,750 --> 00:49:02,880

receiver know i mean that's it

1341

00:49:07,430 --> 00:49:05,760

i i i'm not sure because yes you know i

1342

00:49:09,190 --> 00:49:07,440

would just say that's an empirical

1343

00:49:11,030 --> 00:49:09,200

question you know there are two ways you

1344

00:49:12,309 --> 00:49:11,040

can deal with that i mean i think the

1345

00:49:13,750 --> 00:49:12,319

fact that

1346

00:49:15,190 --> 00:49:13,760

you know as i think it was marilyn who

1347

00:49:16,309 --> 00:49:15,200

was saying earlier on somebody's you

1348

00:49:19,910 --> 00:49:16,319

know one of the things we could

1349

00:49:21,349 --> 00:49:19,920

definitely do is allow the receiver to

1350

00:49:23,589 --> 00:49:21,359

just sort of verbally go through these

1351  
00:49:25,910 --> 00:49:23,599  
mentations so maybe those points would

1352  
00:49:28,470 --> 00:49:25,920  
come out in that both both the

1353  
00:49:29,750 --> 00:49:28,480  
similarities and you know the the fact

1354  
00:49:31,510 --> 00:49:29,760  
that they might pick up on the

1355  
00:49:33,829 --> 00:49:31,520  
relaxating in the beach and stuff like

1356  
00:49:34,870 --> 00:49:33,839  
that but the issue is you know when we

1357  
00:49:38,630 --> 00:49:34,880  
show them

1358  
00:49:40,870 --> 00:49:38,640  
the set the the images um uh and they

1359  
00:49:42,790 --> 00:49:40,880  
have to pick one um you know the

1360  
00:49:44,630 --> 00:49:42,800  
question is do they get the one get the

1361  
00:49:46,069 --> 00:49:44,640  
target right more than chance or even if

1362  
00:49:48,390 --> 00:49:46,079  
we look at the effect sizes i mean

1363  
00:49:50,470 --> 00:49:48,400

that's that's the issue um i think if

1364

00:49:51,829 --> 00:49:50,480

they're a similar i mean i mean in an

1365

00:49:53,349 --> 00:49:51,839

ideal world

1366

00:49:55,190 --> 00:49:53,359

well i don't know

1367

00:49:56,630 --> 00:49:55,200

it's an interesting question

1368

00:49:58,390 --> 00:49:56,640

you know do

1369

00:50:01,109 --> 00:49:58,400

you want them to be sort of sort of

1370

00:50:02,390 --> 00:50:01,119

similar in the sense well possibly

1371

00:50:05,750 --> 00:50:02,400

arousing

1372

00:50:07,430 --> 00:50:05,760

stimulating but perhaps different in as

1373

00:50:08,470 --> 00:50:07,440

a you know not necessarily having the

1374

00:50:11,670 --> 00:50:08,480

same

1375

00:50:13,670 --> 00:50:11,680

trying to think of a way of

1376

00:50:15,750 --> 00:50:13,680

encapsulating all of that

1377

00:50:17,430 --> 00:50:15,760

maybe less movement or something like

1378

00:50:19,589 --> 00:50:17,440

that because all of them well perhaps

1379

00:50:21,670 --> 00:50:19,599

not even less so the hot air ballooning

1380

00:50:23,670 --> 00:50:21,680

probably but movement there's a lot of

1381

00:50:25,270 --> 00:50:23,680

movement going on so maybe you could

1382

00:50:27,349 --> 00:50:25,280

have something more static or something

1383

00:50:29,510 --> 00:50:27,359

like that which you something happens to

1384

00:50:32,549 --> 00:50:29,520

you so but that's you know that's

1385

00:50:34,470 --> 00:50:32,559

definitely true and over time perhaps

1386

00:50:37,109 --> 00:50:34,480

we may be able to build up the database

1387

00:50:39,430 --> 00:50:37,119

of of images and then begin to sort of

1388

00:50:40,870 --> 00:50:39,440

run them and classify them in different

1389

00:50:43,589 --> 00:50:40,880

ways in the same way that you know the

1390

00:50:46,549 --> 00:50:43,599

iaps has already done so we were sort of

1391

00:50:49,589 --> 00:50:46,559

restricted to some extent by well we

1392

00:50:51,270 --> 00:50:49,599

were we were we sort of relied on um

1393

00:50:53,030 --> 00:50:51,280

we made assumptions i suppose is the

1394

00:50:55,430 --> 00:50:53,040

honest answer there we made assumptions

1395

00:50:57,510 --> 00:50:55,440

about the arousal and valence of the

1396

00:50:59,829 --> 00:50:57,520

clips based on the static images and

1397

00:51:01,829 --> 00:50:59,839

that that might be way off we may be off

1398

00:51:03,990 --> 00:51:01,839

base there completely um you know it

1399

00:51:05,750 --> 00:51:04,000

might be looking at an image of a i

1400

00:51:07,670 --> 00:51:05,760

don't know looking at an image of a man

1401  
00:51:10,470 --> 00:51:07,680  
skiing down the slopes you know might be

1402  
00:51:12,950 --> 00:51:10,480  
interesting and arousing but not as you

1403  
00:51:14,870 --> 00:51:12,960  
know stimulating and as arousing as if

1404  
00:51:16,790 --> 00:51:14,880  
you experience it in a vr environment

1405  
00:51:19,349 --> 00:51:16,800  
whereas you know looking or being in a

1406  
00:51:21,510 --> 00:51:19,359  
hot air balloon might not be you know so

1407  
00:51:23,190 --> 00:51:21,520  
whilst they you know static the static

1408  
00:51:26,470 --> 00:51:23,200  
images have similar

1409  
00:51:27,750 --> 00:51:26,480  
arousal ratings the vr clips may be very

1410  
00:51:29,109 --> 00:51:27,760  
very different

1411  
00:51:30,630 --> 00:51:29,119  
so you know that's something else we

1412  
00:51:32,150 --> 00:51:30,640  
would we would need to sort of start to

1413  
00:51:33,030 --> 00:51:32,160

look into

1414

00:51:34,870 --> 00:51:33,040

yeah

1415

00:51:36,710 --> 00:51:34,880

i think

1416

00:51:38,710 --> 00:51:36,720

okay so we're getting close to the hour

1417

00:51:40,150 --> 00:51:38,720

but i got one more raised hand and we've

1418

00:51:42,069 --> 00:51:40,160

got a few more questions but i'm going

1419

00:51:44,230 --> 00:51:42,079

to take one last route hand and one more

1420

00:51:47,190 --> 00:51:44,240

question so i'm passing the mic now to

1421

00:51:50,150 --> 00:51:47,200

york in the meantime uh please please go

1422

00:51:55,589 --> 00:51:50,160

up vote the leftover question so i can

1423

00:51:58,309 --> 00:51:57,190

york good evening

1424

00:52:00,309 --> 00:51:58,319

hi

1425

00:52:01,829 --> 00:52:00,319

yes good evening

1426

00:52:05,270 --> 00:52:01,839

um

1427

00:52:07,510 --> 00:52:05,280

i'm afraid that i am still unclear on

1428

00:52:10,309 --> 00:52:07,520

this question of target selection

1429

00:52:12,710 --> 00:52:10,319

because as i understood your description

1430

00:52:16,790 --> 00:52:12,720

one session consists of

1431

00:52:18,470 --> 00:52:16,800

five different vr clips

1432

00:52:21,990 --> 00:52:18,480

interspersed with

1433

00:52:23,990 --> 00:52:22,000

resting periods of the beach scene yep

1434

00:52:26,309 --> 00:52:24,000

and then your

1435

00:52:29,190 --> 00:52:26,319

uh target identification the ranking you

1436

00:52:30,230 --> 00:52:29,200

you choose to decide

1437

00:52:32,630 --> 00:52:30,240

uh

1438

00:52:34,710 --> 00:52:32,640

no hold on a second what you saw or what

1439

00:52:37,109 --> 00:52:34,720

i gave you was literally one trial so

1440

00:52:37,910 --> 00:52:37,119

there are five trials within that vr

1441

00:52:39,829 --> 00:52:37,920

clip

1442

00:52:41,829 --> 00:52:39,839

where you see like resting beach but

1443

00:52:44,470 --> 00:52:41,839

then there's a target clip beach rest

1444

00:52:46,870 --> 00:52:44,480

target clip and every time that the

1445

00:52:48,950 --> 00:52:46,880

sender sees that target clip after

1446

00:52:51,589 --> 00:52:48,960

they've seen that in that rest phase

1447

00:52:54,069 --> 00:52:51,599

that's when the receiver would see on

1448

00:52:56,069 --> 00:52:54,079

their computer a set of five images

1449

00:52:58,549 --> 00:52:56,079

relate one relating to the

1450

00:52:59,670 --> 00:52:58,559

the target you know four decoys so it'll

1451

00:53:02,630 --> 00:52:59,680

be you

1452

00:53:06,390 --> 00:53:02,640

there are five sets of five if you like

1453

00:53:08,150 --> 00:53:06,400

oh so the receiver needs to make a

1454

00:53:09,430 --> 00:53:08,160

selection of what they think was the

1455

00:53:12,630 --> 00:53:09,440

target

1456

00:53:14,390 --> 00:53:12,640

within the trial period during the 45

1457

00:53:17,030 --> 00:53:14,400

seconds that the

1458

00:53:19,030 --> 00:53:17,040

sender is is relaxing with the beach

1459

00:53:23,030 --> 00:53:19,040

view

1460

00:53:26,710 --> 00:53:25,030

uh

1461

00:53:28,950 --> 00:53:26,720

okay that

1462

00:53:37,829 --> 00:53:28,960

raises a lot of question issues but

1463

00:53:40,309 --> 00:53:38,870

okay

1464

00:53:43,109 --> 00:53:40,319

so let's see what the winning last

1465

00:53:44,150 --> 00:53:43,119

question is

1466

00:53:46,710 --> 00:53:44,160

um

1467

00:53:48,549 --> 00:53:46,720

all right diane asks

1468

00:53:50,790 --> 00:53:48,559

have you thought of recruiting pairs of

1469

00:53:52,150 --> 00:53:50,800

people who always experience telepathy

1470

00:53:56,150 --> 00:53:52,160

together

1471

00:53:58,230 --> 00:53:56,160

in my experience i have particularly

1472

00:53:59,990 --> 00:53:58,240

oh god

1473

00:54:01,990 --> 00:54:00,000

ah

1474

00:54:03,430 --> 00:54:02,000

it's like the twin question it's you

1475

00:54:05,750 --> 00:54:03,440

know whenever it's like when you talk

1476  
00:54:07,510 --> 00:54:05,760  
about telepathy this i wanted like there

1477  
00:54:09,430 --> 00:54:07,520  
should be like a little cup that i could

1478  
00:54:10,630 --> 00:54:09,440  
give out at talks and whoever asked the

1479  
00:54:12,549 --> 00:54:10,640  
twin question

1480  
00:54:14,230 --> 00:54:12,559  
uh yes of course if we've considered

1481  
00:54:15,829 --> 00:54:14,240  
that like we've considered meditators we

1482  
00:54:18,150 --> 00:54:15,839  
considered married couples and the

1483  
00:54:20,790 --> 00:54:18,160  
reality is it's

1484  
00:54:23,510 --> 00:54:20,800  
what i mean what was amazing was how

1485  
00:54:26,309 --> 00:54:23,520  
long it took like three months to get

1486  
00:54:28,549 --> 00:54:26,319  
this 11 people in the lab and

1487  
00:54:31,190 --> 00:54:28,559  
unreal yeah of course we've considered

1488  
00:54:33,430 --> 00:54:31,200

it i just don't have uh you know mad

1489

00:54:35,510 --> 00:54:33,440

hairs or whatever it is or telepathy

1490

00:54:36,470 --> 00:54:35,520

buddies or all that all that stuff i

1491

00:54:38,950 --> 00:54:36,480

mean it's

1492

00:54:40,870 --> 00:54:38,960

i mean actually just as a aside

1493

00:54:42,390 --> 00:54:40,880

you know it raises an important point

1494

00:54:44,789 --> 00:54:42,400

because it's this notion of if you like

1495

00:54:46,789 --> 00:54:44,799

pre-screening participants and one of

1496

00:54:48,549 --> 00:54:46,799

the things from patricio's recent

1497

00:54:49,910 --> 00:54:48,559

analysis is that you know pre-screening

1498

00:54:54,230 --> 00:54:49,920

participants you know if they've got

1499

00:54:58,789 --> 00:54:56,789

less trials and that's a good idea um

1500

00:55:01,750 --> 00:54:58,799

and we've tried that in the past with

1501

00:55:04,390 --> 00:55:01,760

the do other um research on

1502

00:55:06,549 --> 00:55:04,400

um the sort of dem pre-cognitive

1503

00:55:08,710 --> 00:55:06,559

retroactive um

1504

00:55:11,510 --> 00:55:08,720

facilitation stuff

1505

00:55:12,710 --> 00:55:11,520

we tried a pre-screening trial there and

1506

00:55:15,349 --> 00:55:12,720

we i mean we're still we're running

1507

00:55:17,750 --> 00:55:15,359

another one actually uh um in the coming

1508

00:55:19,510 --> 00:55:17,760

year but it's just

1509

00:55:20,070 --> 00:55:19,520

a nightmare trying to get these people

1510

00:55:23,670 --> 00:55:20,080

to come back

1511

00:55:25,270 --> 00:55:23,680

[Laughter]

1512

00:55:26,950 --> 00:55:25,280

getting them to come to the lab is hard

1513

00:55:28,870 --> 00:55:26,960

work getting to getting them to come

1514

00:55:30,950 --> 00:55:28,880

back you know when we don't have like

1515

00:55:33,910 --> 00:55:30,960

large sums of money to pay them is is

1516

00:55:35,589 --> 00:55:33,920

tremendously difficult uh and i i don't

1517

00:55:37,589 --> 00:55:35,599

know um we've tried to hook up with

1518

00:55:39,510 --> 00:55:37,599

various sort of buddhist centers around

1519

00:55:41,109 --> 00:55:39,520

canterbury but just at the moment with

1520

00:55:42,710 --> 00:55:41,119

lockdown it's and that's a challenge you

1521

00:55:45,750 --> 00:55:42,720

know we've been locked down for over a

1522

00:55:48,230 --> 00:55:45,760

year so no lab research everything's

1523

00:55:50,950 --> 00:55:48,240

gone and had to shift online so we've

1524

00:55:52,630 --> 00:55:50,960

been very restricted but yeah of course

1525

00:55:55,270 --> 00:55:52,640

i'd love to do that and

1526

00:55:57,589 --> 00:55:55,280

who wouldn't but the reality is it's

1527

00:55:59,990 --> 00:55:57,599

often a lot more difficult to get these

1528

00:56:03,270 --> 00:56:00,000

people to come to the lab and

1529

00:56:07,670 --> 00:56:03,280

more than once that makes sense well

1530

00:56:11,270 --> 00:56:09,750

well if anything else i mean

1531

00:56:12,870 --> 00:56:11,280

that's exactly it for me that would be

1532

00:56:15,589 --> 00:56:12,880

it i would like i would like this to

1533

00:56:17,109 --> 00:56:15,599

stimulate people to ask more questions

1534

00:56:18,950 --> 00:56:17,119

about you know where what could we use

1535

00:56:20,710 --> 00:56:18,960

this for where could we take it and i

1536

00:56:22,309 --> 00:56:20,720

really do think that

1537

00:56:23,670 --> 00:56:22,319

there's a whole lot of different areas

1538

00:56:26,710 --> 00:56:23,680

where you know

1539

00:56:28,150 --> 00:56:26,720

kicking around ideas for vr kit and you

1540

00:56:29,910 --> 00:56:28,160

know and i think it's a lot of fun and i

1541

00:56:31,190 --> 00:56:29,920

think that aspect of it the fun aspect

1542

00:56:33,510 --> 00:56:31,200

is actually important as well i mean

1543

00:56:35,510 --> 00:56:33,520

i've been 20 years in psychology

1544

00:56:37,589 --> 00:56:35,520

experiments where we literally bore the

1545

00:56:39,030 --> 00:56:37,599

pants off our participants and and i

1546

00:56:41,190 --> 00:56:39,040

think you know parapsychology is no

1547

00:56:43,109 --> 00:56:41,200

different you know endless boring trials

1548

00:56:44,870 --> 00:56:43,119

of this that and i just think if you try

1549

00:56:46,870 --> 00:56:44,880

and make it a bit more fun we might

1550

00:56:47,670 --> 00:56:46,880

actually find some more robust effects

1551

00:56:49,510 --> 00:56:47,680

so

1552

00:56:52,150 --> 00:56:49,520

and if everybody has fun that's a good