WEBVTT

1 00:00:00.000 --> 00:00:02.460 <v ->Dr. Palinkas, and so briefly,</v>

2 00:00:02.460 --> 00:00:04.830 I'll just share that this seminar

3 00:00:04.830 --> 00:00:08.199 is sponsored by the Center for Methods

4 00:00:08.199 --> 00:00:10.170 and Implementation and Prevention Science,

5 00:00:10.170 --> 00:00:12.510 our qualitative methods innovation program

6 00:00:12.510 --> 00:00:14.220 at the Yale School of Public Health,

7 00:00:14.220 --> 00:00:16.950 our Department of Social and Behavioral Sciences,

8 00:00:16.950 --> 00:00:18.801 and the Yale Child Study Center

9 00:00:18.801 --> 00:00:22.299 and our NIH T32 training grant

10 00:00:22.299 --> 00:00:25.233 for implementation science research methods.

11 00:00:26.088 --> 00:00:29.070 And so our qualitative methods innovation program,

12 00:00:29.070 --> 00:00:31.860 this is the second seminar that we've had,

13 00:00:31.860 --> 00:00:34.500 we're deeply grateful and lucky

14 00:00:34.500 --> 00:00:36.720 to have Prof. Palinkas here.

15 00:00:36.720 --> 00:00:39.617 So he's a distinguished professor of social policy

16 00:00:39.617 --> 00:00:44.300 and this Suzanne Dworak-Peck School of Social Work

17 00:00:44.300 --> 00:00:46.500 at the University of Southern California.

18 00:00:46.500 --> 00:00:49.530 He holds secondary appointments in anthropology

19 00:00:49.530 --> 00:00:53.400 and public health sciences at USC.

20 00:00:53.400 --> 00:00:56.613 And as a medical anthropologist myself,

21 00:00:57.990 --> 00:01:01.050 Dr. Palinkas' contributions to the field

22 00:01:01.050 --> 00:01:03.130 of implementation science have allowed

23 00:01:03.990 --> 00:01:07.620 for younger scholars like myself and others

24 00:01:07.620 --> 00:01:10.680 to robustly integrate ethnographic

25 00:01:10.680 --> 00:01:13.290 and other innovative methods to help illuminate,

26 00:01:13.290 --> 00:01:16.500 improve and inform healthcare delivery.

27 00:01:16.500 --> 00:01:19.260 Among many innovations, he's developed and packaged

28 00:01:19.260 --> 00:01:22.410 the rapid assessment procedure for clinical ethnography,

29 00:01:22.410 --> 00:01:25.900 and he worked to develop and make accessible

30 00:01:26.803 --> 00:01:29.508 important approaches to improve the implementation

31 00:01:29.508 --> 00:01:30.870 of brief interventions for trauma survivors,

32 00:01:30.870 --> 00:01:34.024 for adolescents accessing mental health services

33 00:01:34.024 --> 00:01:35.790 and for mental health services

34 00:01:35.790 --> 00:01:37.200 that more recently are deployed

35 00:01:37.200 --> 00:01:39.960 in acute care settings during COVID.

36 00:01:39.960 --> 00:01:42.390 And so his current research encompasses

37 00:01:42.390 --> 00:01:43.560 the implementation of child

38 00:01:43.560 --> 00:01:45.810 and adolescent mental health services,

39 00:01:45.810 --> 00:01:48.600 the sustainment of prevention programs and initiatives

40 00:01:48.600 --> 00:01:52.680 and effects of climate change on vulnerable populations.

41 00:01:52.680 --> 00:01:56.850 And I'm sure he'll share with us some of the new ideas

42 00:01:56.850 --> 00:01:59.280 and projects that he has on his mind.

43 00:01:59.280 --> 00:02:01.775 And we look forward to discussions about that

44 00:02:01.775 --> 00:02:04.050 during and after the talk.

45 00:02:04.050 --> 00:02:07.080 And so we're deeply appreciative of him taking the time

46 00:02:07.080 --> 00:02:09.900 to come all the way here and spend the day with us.

47 00:02:09.900 --> 00:02:12.240 And so, I'll hand it over to him.

48 00:02:12.240 --> 00:02:14.460 The title of his seminar is Innovations

49 00:02:14.460 --> 00:02:17.343 and the Use of Mixed Methods and Implementation Research.

50 00:02:19.913 --> 00:02:21.990 <v ->Well, thank you, Ashley.</v>

51 00:02:21.990 --> 00:02:25.190 And it is indeed a pleasure to be here.

52 00:02:25.190 --> 00:02:30.190 In fact, last time I was here was almost 50 years ago,

53 00:02:31.710 --> 00:02:32.940 and that was even before

54 00:02:32.940 --> 00:02:35.220 there was a Yale School of Public Health.

55 00:02:35.220 --> 00:02:36.370 <v ->Oh, wow.</v>

56 00:02:36.370 --> 00:02:40.892 <v ->So it is exciting to be able to be here</v>

57 00:02:40.892 --> 00:02:45.273 and to spend this time with you all.

58 00:02:48.517 --> 00:02:50.220 I was asked to talk about some of the things

59 00:02:50.220 --> 00:02:52.060 that we've been working on

60 00:02:53.825 --> 00:02:57.595 with respect to the use of mixed methods

61 00:02:57.595 --> 00:03:00.780 in implementation research.

62 00:03:00.780 --> 00:03:05.073 And so what I will focus on is,

63 00:03:06.291 --> 00:03:08.470 and just to give you a brief overview about

64 00:03:09.875 --> 00:03:12.810 how mixed methods have been used in implementation research,

65 00:03:12.810 --> 00:03:16.590 and then highlight three particular projects

66 00:03:16.590 --> 00:03:19.927 that I've been working on that illustrate

67 00:03:19.927 --> 00:03:24.927 the use of these methods in addressing important issues

68 00:03:24.960 --> 00:03:29.850 related to implementation of evidence-based interventions,

69 00:03:29.850 --> 00:03:32.730 policies, and programs.

70 00:03:32.730 --> 00:03:36.577 So let me first start by talking about

71 00:03:36.577 --> 00:03:38.643 what mixed methods are.

72 00:03:39.510 --> 00:03:44.510 And typically we call them at a particular methodology,

73 00:03:45.180 --> 00:03:48.900 even though we have methods implies plural.

74 00:03:48.900 --> 00:03:52.380 But it is a methodology for collecting, analyzing,

75 00:03:52.380 --> 00:03:55.860 and mixing both quantitative and qualitative data

76 00:03:55.860 --> 00:03:58.950 in a single study or series of studies.

77 00:03:58.950 --> 00:04:01.860 The idea being that when you combine

78 00:04:01.860 --> 00:04:03.540 the two sets of methods,

79 00:04:03.540 --> 00:04:06.120 you're able to get a much better understanding

80 00:04:06.120 --> 00:04:10.983 of a research problem than either research approach alone.

81 00:04:12.450 --> 00:04:15.570 In combining the methods,

82 00:04:15.570 --> 00:04:18.870 which is the key element to a mixed method,

83 00:04:18.870 --> 00:04:21.510 as opposed to a multi-method study.

84 00:04:21.510 --> 00:04:25.770 It's not merely parallel play where you have somebody

85 00:04:25.770 --> 00:04:27.420 who's doing the quantitative study

86 00:04:27.420 --> 00:04:29.370 and somebody doing the qualitative study

87 00:04:29.370 --> 00:04:31.380 with no interaction.

88 00:04:31.380 --> 00:04:34.110 It's really based on the interaction.

89 00:04:34.110 --> 00:04:36.930 So in a sense, you can think of it as a model of,

90 00:04:36.930 --> 00:04:40.680 as well as a model for interdisciplinary

91 00:04:40.680 --> 00:04:43.233 and even transdisciplinary research.

92 00:04:44.220 --> 00:04:49.140 It also allows you to simultaneously answer confirmatory

93 00:04:49.140 --> 00:04:51.060 and exploratory questions,

94 00:04:51.060 --> 00:04:54.960 thereby you can both generate a theory

95 00:04:54.960 --> 00:04:57.363 and verify it in the same studies.

96 00:04:58.650 --> 00:05:03.650 The elements of mixed methods depend on both the structure,

97 00:05:04.830 --> 00:05:06.600 the function, and the operation.

98 00:05:06.600 --> 00:05:08.790 So in terms of the structure,

99 00:05:08.790 --> 00:05:11.763 how you connect the data in a mixed method study

100 00:05:11.763 --> 00:05:15.960 may depend on timing and the weight and authority

101 00:05:15.960 --> 00:05:18.573 that you assign to each type of method.

102 00:05:19.410 --> 00:05:22.020 You can collect the data simultaneously

103 00:05:22.020 --> 00:05:24.660 as so that you're collecting both quantitative

104 00:05:24.660 --> 00:05:28.080 and qualitative data at the same time.

105 00:05:28.080 --> 00:05:30.720 Or sequentially, where you use one method

106 00:05:30.720 --> 00:05:32.043 followed by the other.

107 00:05:32.910 --> 00:05:34.860 You can also vary the priority

108 00:05:34.860 --> 00:05:36.720 that you assign to each method,

109 00:05:36.720 --> 00:05:40.200 so that if you're giving priority the qualitative method,

110 00:05:40.200 --> 00:05:43.889 it's indicated by QUAL being in capital letters.

111 00:05:43.889 --> 00:05:45.750 And that similarly,

112 00:05:45.750 --> 00:05:48.360 if you're giving priority to the quantitative methods,

113 00:05:48.360 --> 00:05:52.110 the QUAN is and capital methods, capital letters,

114 00:05:52.110 --> 00:05:55.410 or you can give equal priority to both methods,

115 00:05:55.410 --> 00:05:57.180 even though there are some people who think

116 00:05:57.180 --> 00:05:59.283 that that's not really possible.

117 00:06:00.870 --> 00:06:05.870 The other aspect of mixed methods is the iterative process

118 00:06:06.390 --> 00:06:09.000 of data collection and analysis,

119 00:06:09.000 --> 00:06:13.440 so that you may begin with quantitative methods

120 00:06:13.440 --> 00:06:15.600 to collect the data and analyze it

121 00:06:15.600 --> 00:06:19.980 leading to the collection or analysis of qualitative data,

122 00:06:19.980 --> 00:06:22.980 which leads to further quantitative

123 00:06:22.980 --> 00:06:26.562 data collection and analysis.

124 00:06:26.562 --> 00:06:31.562 This chart shows you the five major uses of mixed methods

125 00:06:34.135 --> 00:06:35.670 in implementation research.

126 00:06:35.670 --> 00:06:40.670 Similar to the typology of mixed method designs

127 00:06:41.008 --> 00:06:43.410 that Creswell and Plano Clark,

128 00:06:43.410 --> 00:06:48.410 who written the stamp, the bible of mixed method research.

129 00:06:50.340 --> 00:06:53.550 There are five major types of mixed method uses

130 00:06:53.550 --> 00:06:56.070 in implementation science.

131 00:06:56.070 --> 00:07:00.090 Convergence, where you are corroborating data

132 00:07:00.090 --> 00:07:05.090 from different sources to come to either similar conclusions

133 00:07:06.402 --> 00:07:11.402 or the quantization of qualitative data.

134 00:07:12.953 --> 00:07:17.953 Complementarity intends to understand a phenomenon

135 00:07:19.117 --> 00:07:24.117 more completely by focusing on the breadth of understanding

136 00:07:24.630 --> 00:07:26.280 through quantitative analysis

137 00:07:26.280 --> 00:07:30.390 but a depth of understanding through qualitative analysis.

138 00:07:30.390 --> 00:07:34.620 Expansion is often used to help explain

139 00:07:34.620 --> 00:07:37.323 the findings from one study.

140 00:07:37.323 --> 00:07:41.940 So you may get a finding from a quantitative analysis

141 00:07:41.940 --> 00:07:45.690 of a survey that produces unexpected results

142 00:07:45.690 --> 00:07:48.960 follow that up with a qualitative study

143 00:07:48.960 --> 00:07:53.490 to come to some explanation to answer the question why

144 00:07:53.490 --> 00:07:57.843 that a quantitative study alone is not designed to answer.

145 00:07:58.830 --> 00:08:02.070 We also use mixed methods for exploration

146 00:08:02.070 --> 00:08:03.003 and development.

147 00:08:04.083 --> 00:08:06.570 Oftentimes, we will use qualitative methods

148 00:08:06.570 --> 00:08:10.447 to identify the way to ask questions in a survey

149 00:08:10.447 --> 00:08:14.402 or to develop hypotheses to be tested

150 00:08:14.402 --> 00:08:18.930 or a framework that guides that hypothesis testing,

151 00:08:18.930 --> 00:08:22.140 and then the quantitative methods

152 00:08:22.140 --> 00:08:26.073 to test the hypothesis or validate the framework.

153 00:08:27.090 --> 00:08:29.730 And then finally, we may use it for sampling,

154 00:08:29.730 --> 00:08:34.680 so that oftentimes on the basis of quantitative data,

155 00:08:34.680 --> 00:08:38.850 we may select participants for qualitative study,

156 00:08:38.850 --> 00:08:42.750 either focus groups or semi-structured interviews.

157 00:08:42.750 --> 00:08:46.800 We can also reverse the process and use qualitative data

158 00:08:46.800 --> 00:08:48.310 to create categories

159 00:08:49.195 --> 00:08:50.880 that can then be compared quantitatively,

160 00:08:50.880 --> 00:08:52.443 which I will show you later.

161 00:08:53.310 --> 00:08:57.647 Each of those functions carries with it

162 00:08:57.647 --> 00:09:01.890 a variation of timing of data collection,

163 00:09:01.890 --> 00:09:05.791 so it may be sequential or concurrent.

164 00:09:05.791 --> 00:09:09.780 And the analysis can occur both,

165 00:09:09.780 --> 00:09:14.780 or the mixing of the data can occur both in data collection

166 00:09:15.028 --> 00:09:20.028 through convergence or analysis and interpretation

167 00:09:20.430 --> 00:09:22.260 through the other methods

168 00:09:22.260 --> 00:09:24.750 or throughout through the sampling.

169 00:09:24.750 --> 00:09:29.750 And they may involve the combination of equal weights of

170 00:09:29.790 --> 00:09:31.830 quantitative and qualitative data

171 00:09:31.830 --> 00:09:35.013 or priority being given to one or the other.

172 00:09:38.613 --> 00:09:43.200 Now, how to decide which function to use.

173 00:09:43.200 --> 00:09:46.200 I usually recommend that when you're seeking answers

174 00:09:46.200 --> 00:09:47.460 to the same question,

175 00:09:47.460 --> 00:09:52.460 use convergence as a strategy for mixing the methods.

176 00:09:52.950 --> 00:09:56.190 When you're seeking answers to related questions,

177 00:09:56.190 --> 00:10:01.050 you may use it for the purpose of complementarity

178 00:10:01.050 --> 00:10:03.720 to gain a comprehensive understanding.

179 00:10:03.720 --> 00:10:07.620 When the findings based on one method raises questions

180 00:10:07.620 --> 00:10:10.798 that can answer be answered by the other method.

181 00:10:10.798 --> 00:10:14.070 The function is expansion.

182 00:10:14.070 --> 00:10:17.970 When the findings based on one method are prerequisite

183 00:10:17.970 --> 00:10:21.810 for the use of another method, such as developing a survey,

184 00:10:21.810 --> 00:10:23.550 then that's development.

185 00:10:23.550 --> 00:10:26.190 And when one method can use to define

186 00:10:26.190 --> 00:10:28.126 or identify participant samples

187 00:10:28.126 --> 00:10:31.020 for collecting and analyzing data,

188 00:10:31.020 --> 00:10:34.113 representing the other method, that is sampling.

189 00:10:35.220 --> 00:10:37.680 There are three ways of mixing quantitative

190 00:10:37.680 --> 00:10:39.656 and qualitative data.

191 00:10:39.656 --> 00:10:42.270 You can merge the data in which you bring

192 00:10:42.270 --> 00:10:46.980 the two types of data to develop your results.

193 00:10:46.980 --> 00:10:51.630 You can connect the data where you take one data

194 00:10:51.630 --> 00:10:56.400 from one method to generate and assist

195 00:10:56.400 --> 00:10:59.100 and generation of data from another method

196 00:10:59.100 --> 00:11:01.020 to obtain your results.

197 00:11:01.020 --> 00:11:04.890 Or you can embed the data, as is typically the case

198 00:11:04.890 --> 00:11:07.080 in randomized controlled trials

199 00:11:07.080 --> 00:11:09.390 where qualitative data may be used

200 00:11:09.390 --> 00:11:12.376 to help explain the process

201 00:11:12.376 --> 00:11:16.560 by which an intervention works or implementation occurs.

202 00:11:16.560 --> 00:11:19.140 And the quantitative data can be used

203 00:11:19.140 --> 00:11:20.850 to describe the outcomes.

204 00:11:20.850 --> 00:11:22.920 <v ->How is that different than merging?</v>

205 00:11:22.920 --> 00:11:23.753 <v ->Pardon?</v>

206 00:11:23.753 --> 00:11:25.160 <v ->How is that different than merging?</v>

207 00:11:26.556 --> 00:11:29.111 <v ->Okay, a good example of merging the data</v>

208 00:11:29.111 --> 00:11:34.111 would be triangulation of quantitative and qualitative data,

209 00:11:34.170 --> 00:11:39.170 whereas embedding the data is each dataset

210 00:11:39.450 --> 00:11:41.231 has a different function.

211 00:11:41.231 --> 00:11:42.630 They're asking different sets of questions,

212 00:11:42.630 --> 00:11:45.300 whereas merging the data is asking the same question.

213 00:11:45.300 --> 00:11:46.350 <v ->I understand. Okay.</v>

214 00:11:47.911 --> 00:11:49.680 <v ->And in fact, as the next slide shows</v>

215 00:11:49.680 --> 00:11:51.000 and answers your question,

216 00:11:51.000 --> 00:11:53.340 merging the data when you're seeking answers

217 00:11:53.340 --> 00:11:57.300 to the same question, connecting it when answering questions

218 00:11:57.300 --> 00:12:01.140 to relate, you're answering related questions sequentially

219 00:12:01.140 --> 00:12:03.870 or embedding it when you're answering questions

220 00:12:03.870 --> 00:12:06.630 that are related simultaneously.

221 00:12:06.630 --> 00:12:10.420 So, you can use mixed methods for a variety of reasons

222 00:12:11.491 --> 00:12:13.950 in implementation research.

223 00:12:13.950 --> 00:12:16.500 We often use them, for example,

224 00:12:16.500 --> 00:12:21.300 to measure intervention or implementation outcomes

225 00:12:21.300 --> 00:12:24.720 in the qualitative methods, as I said earlier,

226 00:12:24.720 --> 00:12:26.490 to measure process.

227 00:12:26.490 --> 00:12:28.710 Or we can use the qualitative methods

228 00:12:28.710 --> 00:12:31.080 to explore the steps of the intervention

229 00:12:31.080 --> 00:12:33.420 and generate a conceptual model

230 00:12:33.420 --> 00:12:35.550 along with testable hypotheses,

231 00:12:35.550 --> 00:12:37.440 and then test those hypotheses

232 00:12:37.440 --> 00:12:39.750 with the quantitative methods.

233 00:12:39.750 --> 00:12:42.360 Many times we use the quantitative measures

234 00:12:42.360 --> 00:12:45.450 to examine the content of an intervention

235 00:12:45.450 --> 00:12:48.630 or its implementation and the qualitative methods

236 00:12:48.630 --> 00:12:52.133 to examine the context in which it occurs.

237 00:12:52.133 --> 00:12:54.540 We can use the quantitative methods

238 00:12:54.540 --> 00:12:58.470 to incorporate the perspectives of the researcher

239 00:12:58.470 --> 00:13:02.640 and the qualitative methods to incorporate the perspectives

240 00:13:02.640 --> 00:13:07.640 of our collaborators, usually the consumers

241 00:13:07.680 --> 00:13:10.800 of the interventions that we're implementing.

242 00:13:10.800 --> 00:13:14.580 And then finally, we often use one set of methods

243 00:13:14.580 --> 00:13:17.280 to address the limitations of the other.

244 00:13:17.280 --> 00:13:20.610 So in implementation research, for example,

245 00:13:20.610 --> 00:13:24.600 when the unit of analysis is a clinic or organization

246 00:13:24.600 --> 00:13:28.380 and issues of power may be compromised

247 00:13:28.380 --> 00:13:33.180 by these limited number of available clinics for analysis,

248 00:13:33.180 --> 00:13:38.040 then validating or confirming the results

249 00:13:38.040 --> 00:13:41.700 from a quantitative analysis using qualitative data

250 00:13:41.700 --> 00:13:46.323 is another rule that mixed methods can play.

251 00:13:49.500 --> 00:13:52.410 So I'm gonna tell you how these methods

252 00:13:52.410 --> 00:13:54.933 were mixed in three particular studies.

253 00:13:55.770 --> 00:14:00.360 The first being a study that we did on the development

254 00:14:00.360 --> 00:14:03.210 of a measure of sustainment

255 00:14:03.210 --> 00:14:06.090 of prevention programs and initiatives,

256 00:14:06.090 --> 00:14:07.710 a study that was funded

257 00:14:07.710 --> 00:14:09.720 through the National Institute Drug Abuse,

258 00:14:09.720 --> 00:14:13.500 where we merged and connected data

259 00:14:13.500 --> 00:14:18.053 using a structure beginning with qualitative data collection

260 00:14:19.230 --> 00:14:22.950 and an analysis to develop a quantitative scale,

261 00:14:22.950 --> 00:14:25.860 testing that quantitative scale,

262 00:14:25.860 --> 00:14:29.904 and then evaluating predictors of sustainment

263 00:14:29.904 --> 00:14:33.393 using qualitative comparative analysis.

264 00:14:34.260 --> 00:14:38.400 The functions being development of a scale or instrument,

265 00:14:38.400 --> 00:14:43.400 convergence of qualitative data from different data sets.

266 00:14:43.410 --> 00:14:46.620 And expansion, using the qualitative data

267 00:14:46.620 --> 00:14:49.770 to explain quantitative findings.

268 00:14:49.770 --> 00:14:52.717 The second study is an implementation

269 00:14:52.717 --> 00:14:57.717 effectiveness hybrid trial that targeted the use

270 00:14:58.350 --> 00:15:02.490 of evidence-based interventions for screening

271 00:15:02.490 --> 00:15:06.270 and brief treatment of post-traumatic stress disorder

272 00:15:06.270 --> 00:15:10.050 and substance use disorders in patients

273 00:15:10.050 --> 00:15:12.510 presenting in trauma centers.

274 00:15:12.510 --> 00:15:16.503 There we embedded and merged the data in a randomized,

275 00:15:17.967 --> 00:15:20.430 what was it, pragmatic clinical trial

276 00:15:20.430 --> 00:15:23.067 with a focus on quantitative data collection

277 00:15:23.067 --> 00:15:26.880 and simultaneously qualitative data collection

278 00:15:26.880 --> 00:15:30.180 for complementarity and sampling.

279 00:15:30.180 --> 00:15:32.580 The third, I forgot to put the title in,

280 00:15:32.580 --> 00:15:37.560 is a study looking at the impact of the COVID pandemic

281 00:15:37.560 --> 00:15:39.965 on policy and practice implementation

282 00:15:39.965 --> 00:15:44.010 of mental health services for children and adolescents

283 00:15:44.010 --> 00:15:48.057 where we merged the data collecting both quantitative

284 00:15:50.220 --> 00:15:54.783 and qualitative data for the purpose of convergence.

285 00:15:55.830 --> 00:16:00.830 From the first study, we were able to, you know,

286 00:16:02.010 --> 00:16:07.010 we focused on the fact that government agencies like SAMHSA,

287 00:16:07.710 --> 00:16:10.657 Substance Abuse Mental Health Services Agency

288 00:16:10.657 --> 00:16:15.300 fund hundreds of projects that are designed

289 00:16:15.300 --> 00:16:20.190 to deliver drug and HIV prevention programs

290 00:16:20.190 --> 00:16:25.187 as well as mental health services like suicide prevention

291 00:16:25.187 --> 00:16:28.951 and treatment of conduct disorders.

292 00:16:28.951 --> 00:16:33.951 But being able to sustain these programs,

293 00:16:34.080 --> 00:16:37.920 even though they're explicitly told to include a plan

294 00:16:37.920 --> 00:16:42.030 for sustainment in the project application

295 00:16:42.030 --> 00:16:45.842 is always an open question because generally we have no way

296 00:16:45.842 --> 00:16:49.080 of determining the likelihood of sustainment

297 00:16:49.080 --> 00:16:52.980 or providing feedback and to agencies

298 00:16:52.980 --> 00:16:56.250 that are trying to sustain their programs.

299 00:16:56.250 --> 00:17:00.720 So the aim of this project was to look at core components

300 00:17:00.720 --> 00:17:04.065 of sustainment and how they relate to one another

301 00:17:04.065 --> 00:17:08.283 across times, so that we can increase the likelihood

302 00:17:08.283 --> 00:17:13.283 of providing useful information that will result in

303 00:17:14.760 --> 00:17:17.840 successful sustainment of these programs.

304 00:17:17.840 --> 00:17:19.530 In this particular project,

305 00:17:19.530 --> 00:17:22.710 we designed a measurement system for monitoring

306 00:17:22.710 --> 00:17:27.600 and giving feedback within SAMHSA and then pilot testing

307 00:17:27.600 --> 00:17:29.970 the predictability of that system

308 00:17:29.970 --> 00:17:32.820 and its feasibility and acceptability.

309 00:17:32.820 --> 00:17:35.880 So in this study, we essentially began

310 00:17:35.880 --> 00:17:39.570 with a series of qualitative interviews

311 00:17:39.570 --> 00:17:44.570 with 45 participants of 10 different SAMHSA funded programs.

312 00:17:45.750 --> 00:17:47.340 And we collected information

313 00:17:47.340 --> 00:17:50.665 using traditional semi-structured interviews,

314 00:17:50.665 --> 00:17:55.665 a free list exercise, which is often used in anthropology

315 00:17:56.850 --> 00:18:01.410 to identify semantic domains that are relevant to the people

316 00:18:01.410 --> 00:18:05.220 that we're working with or studying.

317 00:18:05.220 --> 00:18:10.220 And then a checklist of the consolidated framework

318 00:18:10.740 --> 00:18:12.513 of implementation research.

319 00:18:13.680 --> 00:18:17.790 The results from each of those forms of data collection

320 00:18:17.790 --> 00:18:21.630 were then merged to identify relevant domains

321 00:18:21.630 --> 00:18:26.085 of sustainment for SAMHSA funded grantees.

322 00:18:26.085 --> 00:18:29.715 We use those domains to create a scale

323 00:18:29.715 --> 00:18:34.620 known as the sustainment measurement system scale.

324 00:18:34.620 --> 00:18:39.620 had 42 items, one subscale describing sustainment outcomes,

325 00:18:41.670 --> 00:18:46.670 and then six scales describing determinants of sustainment.

326 00:18:48.120 --> 00:18:50.400 In the next phase of the study,

327 00:18:50.400 --> 00:18:55.400 we then evaluated the validity and reliability of the scale

328 00:18:58.710 --> 00:19:03.710 by collecting data from 200 SAMHSA grantees

329 00:19:04.380 --> 00:19:08.700 representing 145 different organizations that were funded

330 00:19:08.700 --> 00:19:12.090 across seven different SAMSA funded programs.

331 00:19:12.090 --> 00:19:17.090 What we found was a measure that had pretty high

332 00:19:17.940 --> 00:19:20.428 inter-item reliability of 0.93,

333 00:19:20.428 --> 00:19:25.428 but varying degrees of reliability generally satisfactory

334 00:19:25.925 --> 00:19:30.417 to excellent for each of the subscales.

335 00:19:31.410 --> 00:19:35.940 We were also able to distinguish the difference

336 00:19:35.940 --> 00:19:39.840 between each of the predictors

337 00:19:39.840 --> 00:19:42.753 as well as outcomes of sustainability,

338 00:19:43.648 --> 00:19:47.310 particularly the outcomes and whether the program

339 00:19:47.310 --> 00:19:52.080 continued to exist, but were adapted

340 00:19:52.080 --> 00:19:55.083 and continuing to exist in the same form.

341 00:19:55.920 --> 00:19:58.650 And then in the third phase of the study,

342 00:19:58.650 --> 00:20:03.650 we used the methodology of qualitative comparative analysis

343 00:20:04.440 --> 00:20:09.318 to identify pathways of predictors

344 00:20:09.318 --> 00:20:13.680 associated with sustainment.

345 00:20:13.680 --> 00:20:18.510 And we found that as a unit, there were two combinations

346 00:20:18.510 --> 00:20:20.640 that were significant predictors.

347 00:20:20.640 --> 00:20:23.490 So essentially what you're doing

348 00:20:23.490 --> 00:20:27.330 is taking the quantitative data

349 00:20:27.330 --> 00:20:30.600 that we had collected from the 200 participants

350 00:20:30.600 --> 00:20:32.643 in the 145 programs,

351 00:20:33.690 --> 00:20:38.690 and then use the qualitative structured qualitative process

352 00:20:38.698 --> 00:20:43.698 known as QCA to identify community responsiveness

353 00:20:45.570 --> 00:20:47.650 and organizational capacity

354 00:20:48.690 --> 00:20:52.980 when combined with the CFIR process domain

355 00:20:52.980 --> 00:20:56.820 or community responsiveness and organizational capacity

356 00:20:56.820 --> 00:21:01.230 when combined with coalitions, networks, partnerships.

357 00:21:01.230 --> 00:21:05.430 So the reason why this was of interest to us

358 00:21:05.430 --> 00:21:08.970 is because while frameworks like the CFIR

359 00:21:08.970 --> 00:21:12.540 can identify domains of factors

360 00:21:12.540 --> 00:21:16.110 that are predictive of successful sustainment,

361 00:21:16.110 --> 00:21:18.840 they don't prioritize those domains.

362 00:21:18.840 --> 00:21:20.700 And the priority assigned to them

363 00:21:20.700 --> 00:21:23.460 may vary from one context to the next.

364 00:21:25.472 --> 00:21:26.672 <v Participant>Larry, can I just ask,</v>

365 00:21:26.672 --> 00:21:28.200 I mean, wouldn't you prioritize them

366 00:21:28.200 --> 00:21:30.180 based on the strength of their association?

367 00:21:30.180 --> 00:21:33.351 Or maybe I'm not fully understanding.

368 00:21:33.351 --> 00:21:36.270 <v ->Like, so the strength of association alone, you know,</v>

369 00:21:36.270 --> 00:21:39.123 that may tell you independent of everything else,

370 00:21:39.123 --> 00:21:43.260 this predicts for your outcome.

371 00:21:43.260 --> 00:21:47.730 But the reality is that they don't exist independently,

372 00:21:47.730 --> 00:21:49.620 they exist in combinations.

373 00:21:49.620 --> 00:21:53.130 And the QCA is able to mirror that

374 00:21:53.130 --> 00:21:55.110 or to take that into account.

375 00:21:55.110 --> 00:21:55.943 <v Participant>Thanks.</v>

376 00:21:55.943 --> 00:21:58.583 <v ->Can you talk a little bit more about the process of QCA?</v>

377 00:22:00.273 --> 00:22:02.043 <v ->I could.</v>

378 00:22:03.153 --> 00:22:08.153 Essentially, it takes a series of configurations.

379 00:22:11.700 --> 00:22:14.880 So the advantage to QCA

380 00:22:14.880 --> 00:22:18.930 is that you can work with limited samples,

381 00:22:18.930 --> 00:22:22.473 you know, as few as eight to 10, for example.

382 00:22:23.550 --> 00:22:28.550 And it can take either quantitative or qualitative data.

383 00:22:29.760 --> 00:22:32.820 The outcome can be either categorical

384 00:22:32.820 --> 00:22:37.097 in which it can be one form of QCA,

385 00:22:39.923 --> 00:22:43.453 I'm blanking on the type now.

386 00:22:43.453 --> 00:22:46.800 Or it can be inter an interval level measure,

387 00:22:46.800 --> 00:22:51.800 which it's a fuzzy-set analysis.

388 00:22:51.810 --> 00:22:55.650 But it essentially identifies necessary

389 00:22:55.650 --> 00:23:00.650 and sufficient characteristics or conditions

390 00:23:01.770 --> 00:23:05.459 by which combinations of variables

391 00:23:05.459 --> 00:23:07.773 predict the outcome variable.

392 00:23:10.530 --> 00:23:13.380 I could give an entire lecture on QCA,

393 00:23:13.380 --> 00:23:16.380 but since we're getting short on time here,

394 00:23:16.380 --> 00:23:17.610 I thought I'd move on

395 00:23:17.610 --> 00:23:21.429 to what I really wanted to spend time on,

396 00:23:21.429 --> 00:23:25.380 which is a technique now,

397 00:23:25.380 --> 00:23:30.380 which is a mixed method approach to collecting information

398 00:23:31.980 --> 00:23:35.370 and analyzing it in a much shorter period of time

399 00:23:35.370 --> 00:23:40.370 than typically occurs in most implementation research.

400 00:23:40.440 --> 00:23:44.400 So in the context of the next study I'm going to describe,

401 00:23:44.400 --> 00:23:49.170 we developed a process known as a Rapid Assessment

402 00:23:49.170 --> 00:23:54.170 Procedure-Informed Clinical Ethnography or RAPICE for short.

403 00:23:56.220 --> 00:23:59.943 And RAPICE essentially takes two traditions,

404 00:24:00.780 --> 00:24:03.450 often used in anthropology.

405 00:24:03.450 --> 00:24:05.310 The RAPICE assessment procedures,

406 00:24:05.310 --> 00:24:09.270 which is a way of collecting and analyzing information

407 00:24:09.270 --> 00:24:12.510 in a short period of time with clinical ethnography,

408 00:24:12.510 --> 00:24:16.350 a traditional approach to understanding clinical issues

409 00:24:16.350 --> 00:24:21.350 or issues of clinical significance by having clinicians

410 00:24:22.680 --> 00:24:26.790 act as ethnographers or participant observers.

411 00:24:26.790 --> 00:24:30.030 This was intended to meet the requirements

412 00:24:30.030 --> 00:24:33.180 for time-efficient data collection

413 00:24:33.180 --> 00:24:36.659 in pragmatic trials, clinical trials

414 00:24:36.659 --> 00:24:41.290 where you want to have minimal participant burden

415 00:24:42.329 --> 00:24:47.329 and collect qualitative data fairly quickly.

416 00:24:48.870 --> 00:24:52.440 The key to this is that rather than being done

417 00:24:52.440 --> 00:24:56.160 by a single individual, it's done as a team.

418 00:24:56.160 --> 00:24:59.820 So the interaction between ethnographically

419 00:24:59.820 --> 00:25:02.500 trained clinicians or community members

420 00:25:03.960 --> 00:25:06.660 act in the role of participant observers.

421 00:25:06.660 --> 00:25:10.287 And then you have a clinically trained social scientist

422 00:25:10.287 --> 00:25:15.243 who acts as a mixed method consultant or analyst.

423 00:25:16.320 --> 00:25:21.237 It's that combination that occurs in a series of steps

424 00:25:21.237 --> 00:25:24.540 that is intended to provide some consistency

425 00:25:24.540 --> 00:25:28.740 or rigor to the process of data collection and analysis.

426 00:25:28.740 --> 00:25:30.933 So, why do we use RAPICE?

427 00:25:32.032 --> 00:25:35.550 If we were to do it the way that ethnographers

428 00:25:35.550 --> 00:25:38.730 were traditionally done, it could take up to a year

429 00:25:38.730 --> 00:25:41.700 just to become familiar with the setting,

430 00:25:41.700 --> 00:25:44.517 learning the language usually done alone

431 00:25:44.517 --> 00:25:47.070 and collecting a lot of data, not all

432 00:25:47.070 --> 00:25:52.020 of which is particularly relevant to the kind of questions

433 00:25:52.020 --> 00:25:55.020 that we ask in implementation science.

434 00:25:55.020 --> 00:25:58.680 It also provides a balance between the role

435 00:25:58.680 --> 00:26:02.382 of the participant and the role of the observer.

436 00:26:02.382 --> 00:26:05.190 So oftentimes we find in ethnography,

437 00:26:05.190 --> 00:26:09.610 someone playing more of a role of one versus the other

438 00:26:10.590 --> 00:26:12.930 and having an imbalance.

439 00:26:12.930 --> 00:26:15.480 And the benefit of ethnographic research,

440 00:26:15.480 --> 00:26:17.520 which is to combine perspectives

441 00:26:17.520 --> 00:26:20.973 that of the insider or emic perspective

442 00:26:20.973 --> 00:26:21.806 and that of the outsider, or etic perspective.

443 00:26:24.824 --> 00:26:26.940 In doing so, the advantage to RAPICE

444 00:26:26.940 --> 00:26:30.202 is that it empowers study participants

445 00:26:30.202 --> 00:26:35.202 this particularly valued for underrepresented groups.

446 00:26:35.678 --> 00:26:40.050 It is now assisting in moving the field

447 00:26:40.050 --> 00:26:44.460 of implementation science to addressing health equity

448 00:26:44.460 --> 00:26:47.490 in a way that it wasn't able to before

449 00:26:47.490 --> 00:26:52.490 because those who are the survivors of disparities are,

450 00:26:54.900 --> 00:26:58.050 have equal weight, carry equal representation

451 00:26:58.050 --> 00:27:01.500 in the process of data collection and analysis.

452 00:27:01.500 --> 00:27:03.870 We now have two versions of RAPICE.

453 00:27:03.870 --> 00:27:07.833 One for clinical settings and one for community settings.

454 00:27:08.760 --> 00:27:13.380 The process of doing it begins with a participant observer

455 00:27:13.380 --> 00:27:17.430 or observers who conducted formal interviews,

456 00:27:17.430 --> 00:27:20.770 do site visits and clinics or communities,

457 00:27:20.770 --> 00:27:25.350 and they may interact with study participants,

458 00:27:25.350 --> 00:27:29.250 attend meetings, observe clinical procedures,

459 00:27:29.250 --> 00:27:32.400 and collect data through informal

460 00:27:32.400 --> 00:27:35.583 and semi-structured interview with participants.

461 00:27:36.941 --> 00:27:39.900 They record that data through field notes,

462 00:27:39.900 --> 00:27:44.900 through logs of data collection activities, field jottings,

463 00:27:45.612 --> 00:27:50.550 and they can digitally record semi-structured interviews

464 00:27:50.550 --> 00:27:52.113 for later transcription.

465 00:27:53.370 --> 00:27:55.710 This information is then presented

466 00:27:55.710 --> 00:27:59.070 to the mixed method consultant who reviews it

467 00:27:59.070 --> 00:28:01.710 and queries the participant observers

468 00:28:01.710 --> 00:28:04.560 to gain a better insight into the data

469 00:28:04.560 --> 00:28:06.540 and its context.

470 00:28:06.540 --> 00:28:08.970 It may also enable the consultant

471 00:28:08.970 --> 00:28:11.850 to ask additional questions that the observer

472 00:28:11.850 --> 00:28:14.970 hadn't thought to ask, for example,

473 00:28:14.970 --> 00:28:17.790 and in an iterative fashion,

474 00:28:17.790 --> 00:28:19.893 enable further data collection.

475 00:28:21.224 --> 00:28:23.800 In the next phase, depending upon the context,

476 00:28:23.800 --> 00:28:28.750 what resources you have available to mixing the methods.

477 00:28:30.510 --> 00:28:32.940 The qualitative data can be subjected

478 00:28:32.940 --> 00:28:36.639 to two phases of analysis.

479 00:28:36.639 --> 00:28:39.120 The first being immersion crystallization,

480 00:28:39.120 --> 00:28:44.120 where you get a holistic representation of the setting,

481 00:28:44.250 --> 00:28:47.430 the activities, the phenomenon of interest,

482 00:28:47.430 --> 00:28:51.330 followed by a more focused thematic content analysis

483 00:28:51.330 --> 00:28:55.800 and perhaps a template analysis if you're doing comparisons

484 00:28:55.800 --> 00:28:59.730 across settings or across groups of individuals.

485 00:28:59.730 --> 00:29:02.700 The participant observer develops

486 00:29:02.700 --> 00:29:05.790 a preliminary interpretation of the meaning

487 00:29:05.790 --> 00:29:07.753 and significance of that data

488 00:29:07.753 --> 00:29:12.753 organized in terms of a set of apriority themes

489 00:29:13.020 --> 00:29:16.230 based on the interview guide or emergent themes

490 00:29:16.230 --> 00:29:18.570 that come from the data collected

491 00:29:18.570 --> 00:29:22.110 and a description of their inner relationships.

492 00:29:22.110 --> 00:29:26.040 The mixed method consultant does something very similar.

493 00:29:26.040 --> 00:29:27.690 And then the two,

494 00:29:27.690 --> 00:29:30.180 the participant observers and the consultant

495 00:29:30.180 --> 00:29:34.830 identified points of convergence and divergence,

496 00:29:34.830 --> 00:29:39.630 and then go through a process of reaching consensus

497 00:29:39.630 --> 00:29:42.300 in much the same way that a team approach

498 00:29:42.300 --> 00:29:45.570 to qualitative data analysis occurs.

499 00:29:45.570 --> 00:29:49.920 If it's not achieved, follow up interviews

500 00:29:49.920 --> 00:29:53.160 or returns to the field site may be necessitated

501 00:29:53.160 --> 00:29:55.260 to collect additional data.

502 00:29:55.260 --> 00:29:59.856 If it is achieved, the consultant may recommend

503 00:29:59.856 --> 00:30:03.810 identification of disconfirming cases

504 00:30:03.810 --> 00:30:07.773 in which additional data collection occurs.

505 00:30:08.670 --> 00:30:12.720 In the end, the interpretation of the study findings

506 00:30:12.720 --> 00:30:16.590 is presented to the participants to confirm validity

507 00:30:16.590 --> 00:30:20.220 and comprehensiveness equivalent to member checking

508 00:30:20.220 --> 00:30:22.143 in qualitative data analysis.

509 00:30:23.580 --> 00:30:27.000 Analyzing the qualitative data using RAPICE

510 00:30:27.000 --> 00:30:30.817 is then integrated with quantitative data

511 00:30:30.817 --> 00:30:33.300 to provide a comprehensive understanding

512 00:30:33.300 --> 00:30:35.973 of implementation process and outcomes.

513 00:30:36.960 --> 00:30:40.350 That way we can use that information

514 00:30:40.350 --> 00:30:41.910 as I will explain later,

515 00:30:41.910 --> 00:30:46.470 to improve the likelihood of successful outcomes.

516 00:30:46.470 --> 00:30:51.470 So in two studies where we applied the RAPICE approach,

517 00:30:52.260 --> 00:30:55.770 we used both the clinical ethnography

518 00:30:55.770 --> 00:30:58.773 and the community ethnography version.

519 00:30:59.657 --> 00:31:02.070 The first study used the clinical ethnography

520 00:31:02.070 --> 00:31:05.848 to look at interventions

521 00:31:05.848 --> 00:31:08.530 targeting post-traumatic stress disorder comorbidity

522 00:31:09.390 --> 00:31:11.867 in trauma care settings.

523 00:31:11.867 --> 00:31:16.770 And this gives you sort of a justification

524 00:31:16.770 --> 00:31:19.110 or the rationale for why we did this study

525 00:31:19.110 --> 00:31:23.010 because each year between the main and a half

526 00:31:23.010 --> 00:31:25.410 and two and a half million people

527 00:31:25.410 --> 00:31:30.410 require inpatient hospitalizations due to injuries,

528 00:31:30.510 --> 00:31:32.160 but they also carry with them

529 00:31:32.160 --> 00:31:36.840 frequently multiple comorbidities including PTSD,

530 00:31:36.840 --> 00:31:40.050 alcohol and drug abuse problems, depression,

531 00:31:40.050 --> 00:31:41.730 chronic medical conditions

532 00:31:41.730 --> 00:31:45.750 that are endemic to this population.

533 00:31:45.750 --> 00:31:48.720 So the aim of this study was to enhance

534 00:31:48.720 --> 00:31:51.750 the implementation of evidence-based screening

535 00:31:51.750 --> 00:31:55.620 and interventions for PTSD and comorbidity

536 00:31:55.620 --> 00:31:59.466 in 25 level 1 trauma centers nationwide.

537 00:31:59.466 --> 00:32:04.380 We also wanted to impact clinical effectiveness

538 00:32:04.380 --> 00:32:08.146 of patient outcomes while also targeting

539 00:32:08.146 --> 00:32:12.144 national trauma center implementation policies

540 00:32:12.144 --> 00:32:15.333 recommended by the American College of Surgeons.

541 00:32:16.230 --> 00:32:20.220 The focus of this study was on implementation outcomes

542 00:32:20.220 --> 00:32:23.100 using the RE-AIM framework.

543 00:32:23.100 --> 00:32:26.450 Reach, effectiveness, adoption,

544 00:32:26.450 --> 00:32:28.380 implementation and maintenance.

545 00:32:28.380 --> 00:32:32.730 And so what we did was collect both qualitative data

546 00:32:32.730 --> 00:32:36.644 using the RAPICE methodology of having clinicians

547 00:32:36.644 --> 00:32:41.644 act as participant observers and work with myself

548 00:32:43.140 --> 00:32:47.700 to interpret or analyze the data that they collected,

549 00:32:47.700 --> 00:32:49.890 as well as quantitative data

550 00:32:49.890 --> 00:32:54.660 through the National Trauma Center Behavioral health surveys

551 00:32:54.660 --> 00:32:58.346 to identify or create a matrix

552 00:32:58.346 --> 00:33:02.205 of American College of Surgeons policy

553 00:33:02.205 --> 00:33:04.233 and its implementation,

554 00:33:05.370 --> 00:33:08.640 so that the different reach categories

555 00:33:08.640 --> 00:33:12.993 were assessed using both quantitative and qualitative data.

556 00:33:13.948 --> 00:33:18.570 At the same time, we were also using the qualitative data

557 00:33:18.570 --> 00:33:21.464 that we collected through RAPICE

558 00:33:21.464 --> 00:33:26.464 to create categories of implementation quality.

559 00:33:26.623 --> 00:33:31.020 So the qualitative data became quantified

560 00:33:31.020 --> 00:33:34.350 in the assigned scores based on dimensions

561 00:33:34.350 --> 00:33:39.176 of the intervention itself, the leadership engagement,

562 00:33:39.176 --> 00:33:43.830 the adherence to regulatory standards.

563 00:33:43.830 --> 00:33:47.550 So, we had four categories of implementation quality.

564 00:33:47.550 --> 00:33:50.970 Excellent, good, fair and poor.

565 00:33:50.970 --> 00:33:54.564 When we combined the good

566 00:33:54.564 --> 00:33:59.564 and excellent forms of implementation,

567 00:34:00.997 --> 00:34:05.997 what we found is essentially no difference

568 00:34:06.684 --> 00:34:11.684 in the scores that were assigned

569 00:34:12.360 --> 00:34:14.860 to individuals post-treatment

570 00:34:16.500 --> 00:34:21.500 indicating very poor clinical outcomes in conditions

571 00:34:21.570 --> 00:34:25.503 where the implementation of the guidelines was,

572 00:34:27.975 --> 00:34:32.880 actually, it's the exact opposite, we got great outcomes

573 00:34:32.880 --> 00:34:35.550 under good and excellent implementation,

574 00:34:35.550 --> 00:34:38.521 very poor outcomes as indicated by the disparity

575 00:34:38.521 --> 00:34:41.124 between the two sets of measures

576 00:34:41.124 --> 00:34:44.823 under conditions of fair and poor implementation.

577 00:34:46.579 --> 00:34:51.120 The finding was that the clinical outcomes

578 00:34:51.120 --> 00:34:54.600 associated with implementing these guidelines

579 00:34:54.600 --> 00:34:59.600 for screening and treating PTSD and comorbid conditions

580 00:34:59.970 --> 00:35:01.740 produced much better outcomes

581 00:35:01.740 --> 00:35:05.730 when their implementation quality was good or excellent

582 00:35:05.730 --> 00:35:08.223 than when it was fair or poor.

583 00:35:09.900 --> 00:35:14.900 So finally the third study is that had to do a, as I said,

584 00:35:15.390 --> 00:35:18.490 with the impact of the COVID pandemic on child

585 00:35:19.411 --> 00:35:22.770 and adolescent mental health and practice implementation.

586 00:35:22.770 --> 00:35:26.075 As you know, mental health issues

587 00:35:26.075 --> 00:35:29.578 have become of increasing concern

588 00:35:29.578 --> 00:35:32.490 in child and adolescent populations

589 00:35:32.490 --> 00:35:34.590 even before the pandemic.

590 00:35:34.590 --> 00:35:39.590 When the pandemic occurred, those concerns skyrocketed.

591 00:35:39.683 --> 00:35:44.683 The increase was very dramatic, so that there were reports

592 00:35:46.020 --> 00:35:50.100 that up to half of the population of children,

593 00:35:50.100 --> 00:35:52.390 adolescents living in the United States

594 00:35:53.250 --> 00:35:58.250 were experiencing symptoms of severe depression and anxiety.

595 00:35:59.880 --> 00:36:01.740 Visits to emergency room

596 00:36:01.740 --> 00:36:05.220 for mental health crises skyrocketed.

597 00:36:05.220 --> 00:36:10.220 Yet the understanding of how to respond to these issues

598 00:36:12.499 --> 00:36:15.892 by mental health service systems was very limited.

599 00:36:15.892 --> 00:36:17.547 So the intention of this study

600 00:36:17.547 --> 00:36:21.090 was to look at the impact of the pandemic

601 00:36:21.090 --> 00:36:25.680 on implementation of policy and practices at the state level

602 00:36:25.680 --> 00:36:28.950 for preventing and treating mental health problems

603 00:36:28.950 --> 00:36:30.630 in this population,

604 00:36:30.630 --> 00:36:34.380 and then look at the current need and demand for services

605 00:36:34.380 --> 00:36:37.440 as well as the capacity to deliver them.

606 00:36:37.440 --> 00:36:40.380 And how state mental health authorities

607 00:36:40.380 --> 00:36:44.250 were addressing these needs and demand

608 00:36:44.250 --> 00:36:47.006 with a particular focus on telehealth

609 00:36:47.006 --> 00:36:49.863 and its use to deliver services.

610 00:36:51.030 --> 00:36:55.440 So while the last study relied on the RE-AIM framework

611 00:36:55.440 --> 00:36:58.500 to evaluate implementation outcomes,

612 00:36:58.500 --> 00:37:02.430 this study utilized the consolidated framework

613 00:37:02.430 --> 00:37:07.290 for implementation research to look at the process

614 00:37:07.290 --> 00:37:11.403 of implementing evidence-based policies and practice,

615 00:37:12.660 --> 00:37:16.860 We began with conducting semi-structured interviews

616 00:37:16.860 --> 00:37:20.010 with 29 state mental health authorities

617 00:37:20.010 --> 00:37:24.840 and representatives from 21 randomly selected states,

618 00:37:24.840 --> 00:37:29.820 and then using a subgroup of those as participant observers

619 00:37:29.820 --> 00:37:32.194 in their respective states.

620 00:37:32.194 --> 00:37:34.110 So they were not only involved

621 00:37:34.110 --> 00:37:36.390 in collecting data in their states,

622 00:37:36.390 --> 00:37:41.390 but also assisting us in the analysis of that state data.

623 00:37:42.630 --> 00:37:47.220 So, this is a community ethnography approach.

624 00:37:47.220 --> 00:37:52.220 We also stratified the data according to two criteria,

625 00:37:54.360 --> 00:37:56.790 level of unmet need for services

626 00:37:56.790 --> 00:38:01.790 as described by a study that was done

627 00:38:02.369 --> 00:38:06.210 two years prior to this study

628 00:38:06.210 --> 00:38:08.850 and the positivity rate for the coronavirus

629 00:38:08.850 --> 00:38:11.010 at the time that we conducted this study,

630 00:38:11.010 --> 00:38:14.553 which was in the fall of 2020.

631 00:38:16.050 --> 00:38:21.050 What we found, and part of this data involved,

632 00:38:22.800 --> 00:38:27.800 you know, looking at features of the qualitative data

633 00:38:29.010 --> 00:38:34.010 and comparing them across the categories of states

634 00:38:34.500 --> 00:38:38.340 based on unmet need for mental health services

635 00:38:38.340 --> 00:38:40.983 as well as coronavirus positivity.

636 00:38:41.820 --> 00:38:46.820 And some of it was used to provide in-depth understanding

637 00:38:47.070 --> 00:38:49.533 of the process of implementation.

638 00:38:50.795 --> 00:38:55.607 So what you see here is, even though we had 21 states,

639 00:38:56.760 --> 00:38:59.880 the increase in demand for services

640 00:38:59.880 --> 00:39:02.760 was high in all of the states

641 00:39:02.760 --> 00:39:07.760 that fell in the high positivity, high level of unmet need,

642 00:39:08.460 --> 00:39:13.230 whereas the lowest rate of increase in demand

643 00:39:13.230 --> 00:39:17.070 occurred in states with low levels of positivity

644 00:39:17.070 --> 00:39:20.370 and low levels of unmet need,

645 00:39:20.370 --> 00:39:23.760 which is pretty much what you would expect.

646 00:39:23.760 --> 00:39:27.630 In terms of capacity, we found that in states

647 00:39:27.630 --> 00:39:32.481 with high unmet need, the decrease in capacity

648 00:39:32.481 --> 00:39:36.290 occurred much higher in those states

649 00:39:36.290 --> 00:39:40.350 than in states with low unmet need.

650 00:39:40.350 --> 00:39:45.000 So we found a disparity in the supply and demand

651 00:39:45.000 --> 00:39:48.810 for mental health services through this study

652 00:39:48.810 --> 00:39:53.340 in that states with high positivity and high unmet need

653 00:39:53.340 --> 00:39:55.590 had the highest increase in demand

654 00:39:55.590 --> 00:39:57.810 for mental health services,

655 00:39:57.810 --> 00:40:02.193 but the lowest capacity for delivering those services.

656 00:40:03.330 --> 00:40:07.320 When we look at the barriers and facilitators

657 00:40:07.320 --> 00:40:10.680 to implementation using the CFIR domains,

658 00:40:10.680 --> 00:40:13.890 we found issues related to telehealth

659 00:40:13.890 --> 00:40:16.110 that presented challenges

660 00:40:16.110 --> 00:40:18.390 to the state mental health authorities,

661 00:40:18.390 --> 00:40:21.818 such as limited access to broadband or internet

662 00:40:21.818 --> 00:40:24.870 or the technology needed for telehealth,

663 00:40:24.870 --> 00:40:28.958 like laptop computers, reluctance to participate,

664 00:40:28.958 --> 00:40:32.730 especially among families because they were unfamiliar

665 00:40:32.730 --> 00:40:36.602 with the practice or not comfortable using the technology

666 00:40:36.602 --> 00:40:40.110 or preferred face-to-face interactions.

667 00:40:40.110 --> 00:40:44.250 At the same time, facilitators included Medicaid waivers

668 00:40:44.250 --> 00:40:46.233 to allow billing for services,

669 00:40:47.160 --> 00:40:49.260 provider training for its use,

670 00:40:49.260 --> 00:40:52.320 information for families on how to use it

671 00:40:52.320 --> 00:40:56.400 and grant funding to provide client access,

672 00:40:56.400 --> 00:41:00.163 either through expanding access to the internet

673 00:41:01.381 --> 00:41:04.293 or access to the technology.

674 00:41:05.340 --> 00:41:09.330 We also found that many providers

675 00:41:09.330 --> 00:41:13.230 intended to continue using these telehealth

676 00:41:13.230 --> 00:41:17.235 or virtual mental health services

677 00:41:17.235 --> 00:41:21.480 because it resulted in fewer appointment cancellations

678 00:41:21.480 --> 00:41:24.480 or no-shows, greater family engagement

679 00:41:24.480 --> 00:41:28.560 and reduce time traveling to provide services.

680 00:41:28.560 --> 00:41:31.980 So I'm just gonna end with a description

681 00:41:31.980 --> 00:41:35.463 of some of the new things that we're doing.

682 00:41:37.350 --> 00:41:42.150 One of the potential for using RAPICE

683 00:41:42.150 --> 00:41:45.060 and other kinds of mixed methods

684 00:41:45.060 --> 00:41:50.060 is not just documenting implementation process and outcomes,

685 00:41:50.700 --> 00:41:55.700 but actually facilitating implementation as a strategy,

686 00:41:55.950 --> 00:41:58.170 much like any of the other strategies

687 00:41:58.170 --> 00:42:03.170 that we employ to ensure successful implementation.

688 00:42:03.960 --> 00:42:06.210 So a formative evaluation, you know,

689 00:42:06.210 --> 00:42:08.250 judges the worth of a program

690 00:42:08.250 --> 00:42:11.070 while the program is in progress,

691 00:42:11.070 --> 00:42:13.761 it can be conducted at any phase of a study

692 00:42:13.761 --> 00:42:18.210 and it focuses on the process itself,

693 00:42:18.210 --> 00:42:22.382 but it can influence the outcomes

694 00:42:22.382 --> 00:42:26.310 if there's feedback from the process

695 00:42:26.310 --> 00:42:29.250 of conducting the formative evaluation.

696 00:42:29.250 --> 00:42:33.960 So its main purpose is to detect deficiencies

697 00:42:33.960 --> 00:42:36.450 in implementation as soon as possible,

698 00:42:36.450 --> 00:42:41.450 so that adjustments can be made to ensure better outcomes.

699 00:42:41.550 --> 00:42:43.386 And it's, you know,

700 00:42:43.386 --> 00:42:45.480 the kind of preliminary research that you do

701 00:42:45.480 --> 00:42:47.100 is also considered formative,

702 00:42:47.100 --> 00:42:50.880 but this is something completely different.

703 00:42:50.880 --> 00:42:53.460 This is formative evaluation.

704 00:42:53.460 --> 00:42:56.340 So this kind of evaluation can be done

705 00:42:56.340 --> 00:42:58.800 either by members of the research team

706 00:42:58.800 --> 00:43:01.080 who have knowledge about the intervention

707 00:43:01.080 --> 00:43:03.030 and performance expectation

708 00:43:03.030 --> 00:43:06.420 or can be done by independent observer

709 00:43:06.420 --> 00:43:10.650 who provides so-called objective assessments.

710 00:43:10.650 --> 00:43:13.440 But perhaps the best approach like RAPICE

711 00:43:13.440 --> 00:43:18.440 is to include both in the process of evaluation.

712 00:43:18.810 --> 00:43:22.380 This diagram gives you an idea of how that would work.

713 00:43:22.380 --> 00:43:25.170 So in a randomized controlled trial

714 00:43:25.170 --> 00:43:28.470 where you're evaluating a intervention

715 00:43:28.470 --> 00:43:30.240 and it's implementation.

716 00:43:30.240 --> 00:43:33.120 With each formative evaluation,

717 00:43:33.120 --> 00:43:37.980 you can influence and potentially improve the outcomes

718 00:43:37.980 --> 00:43:40.410 at the next data collection point,

719 00:43:40.410 --> 00:43:44.160 so that the outcomes are optimal,

720 00:43:44.160 --> 00:43:47.433 optimally constructed by the time the trial ends.

721 00:43:49.984 --> 00:43:51.090 So there are a number of methods

722 00:43:51.090 --> 00:43:53.580 that are out there for doing this.

723 00:43:53.580 --> 00:43:57.000 It's semi-structured interviews with participants,

724 00:43:57.000 --> 00:43:59.430 investigators, service providers,

725 00:43:59.430 --> 00:44:02.557 or ethnographic field observation.

726 00:44:02.557 --> 00:44:07.557 But we're now working on using the RAPICE technique.

727 00:44:08.550 --> 00:44:12.940 We're planning to do that in three major projects

728 00:44:13.819 --> 00:44:15.030 that we've got underway now.

729 00:44:15.030 --> 00:44:19.830 The first being implementation projects on prevention,

730 00:44:19.830 --> 00:44:21.480 treatment, harm reduction

731 00:44:21.480 --> 00:44:24.183 and recovery of opioid use disorders.

732 00:44:25.321 --> 00:44:30.150 A research center that's focused on developing

733 00:44:30.150 --> 00:44:32.790 and implementing a multi-level intervention

734 00:44:32.790 --> 00:44:37.790 to increase vaccination rates in under-resourced communities

735 00:44:40.161 --> 00:44:41.640 for HPV.

736 00:44:41.640 --> 00:44:43.080 And then the third,

737 00:44:43.080 --> 00:44:48.080 a stepped care approach to delivering mental health services

738 00:44:48.420 --> 00:44:53.280 in the aftermath of climate related natural disasters,

739 00:44:53.280 --> 00:44:55.393 extreme weather events,

740 00:44:55.393 --> 00:44:59.880 focusing on wildfires in California and Australia

741 00:44:59.880 --> 00:45:03.870 and typhoons in small island developing states

742 00:45:03.870 --> 00:45:05.730 in the Pacific.

743 00:45:05.730 --> 00:45:09.060 So, that's pretty much where we are.

744 00:45:09.060 --> 00:45:12.921 I hope it gives you some ideas of the potentials

745 00:45:12.921 --> 00:45:17.921 for not only using quantitative and qualitative methods,

746 00:45:18.480 --> 00:45:22.890 but being a little creative in their use

747 00:45:22.890 --> 00:45:24.780 to address important problems

748 00:45:24.780 --> 00:45:26.760 related to implementation for use.

749 00:45:26.760 --> 00:45:28.527 <v ->Ah, thank you so much.</v>

750 00:45:32.393 --> 00:45:36.377 For people, will we open it up for questions on the laptop?

751 00:45:44.220 --> 00:45:45.570 So, we'll open it up for questions

752 00:45:45.570 --> 00:45:50.570 and Mona hopefully we can hear it or whoever has questions.

753 00:45:52.590 --> 00:45:53.790 <v ->There's nobody online.</v>

754 00:45:56.750 --> 00:45:58.861 <v Participant>I have a question.</v>

755 00:45:58.861 --> 00:46:00.541 So hopefully everybody online can hear the question.

756 00:46:00.541 --> 00:46:01.941 So, thank you so much.

757 00:46:01.941 --> 00:46:03.762 I really enjoyed hearing about the RAPICE technique.

758 00:46:03.762 --> 00:46:05.301 It's really eyeopening.

759 00:46:05.301 --> 00:46:07.773 It reminds me a little bit of this idea

760 00:46:07.773 --> 00:46:09.703 of community based participatory research

761 00:46:09.703 --> 00:46:12.240 and I wonder to what degree that idea comes in,

762 00:46:12.240 --> 00:46:14.370 in other words, the participant observers,

763 00:46:14.370 --> 00:46:17.160 to what degree do they set the purpose

764 00:46:17.160 --> 00:46:20.610 for the research question versus just working

765 00:46:20.610 --> 00:46:23.370 under the forgetting now the name,

766 00:46:23.370 --> 00:46:26.400 the mixed methods consultant to kind of carry out

767 00:46:26.400 --> 00:46:29.820 the designing of the interview guides

768 00:46:29.820 --> 00:46:31.053 or analysis, et cetera.

769 00:46:32.372 --> 00:46:36.300 <v ->So the community based version of RAPICE</v>

770 00:46:36.300 --> 00:46:39.690 is much more explicit in that it does occur

771 00:46:39.690 --> 00:46:43.920 in the clinical ethnography as well.

772 00:46:43.920 --> 00:46:48.920 But in both instances we've engaged community members

773 00:46:49.680 --> 00:46:53.850 or clinicians in identifying the questions to be asked,

774 00:46:53.850 --> 00:46:55.914 the issues to be addressed

775 00:46:55.914 --> 00:46:59.640 and participating in the analysis.

776 00:46:59.640 --> 00:47:03.540 So they, the term co-creation

777 00:47:03.540 --> 00:47:06.243 has become very popular these days.

778 00:47:07.530 --> 00:47:11.370 We have in a community setting adopted what's called

779 00:47:11.370 --> 00:47:15.151 the community partner participatory research approach,

780 00:47:15.151 --> 00:47:18.900 so that it's not just based in the community,

781 00:47:18.900 --> 00:47:23.900 but that the community members are equal partners.

782 00:47:24.150 --> 00:47:28.460 And we've used this not just in implementation studies,

783 00:47:28.460 --> 00:47:33.460 recently we used it in New Orleans and South Louisiana

784 00:47:34.830 --> 00:47:38.160 to look at how community-based organizations

785 00:47:38.160 --> 00:47:42.720 in low income neighborhoods like the Lower Ninth Ward

786 00:47:42.720 --> 00:47:46.017 were and preparing for hurricane season

787 00:47:46.017 --> 00:47:47.317 during the COVID pandemic,

788 00:47:48.560 --> 00:47:52.730 how COVID had impacted their ability to prepare for

789 00:47:54.330 --> 00:47:58.615 and respond to an increased frequency

790 00:47:58.615 --> 00:48:00.270 of more severe hurricanes.

791 00:48:00.270 --> 00:48:04.830 That involved having a community advisory board

792 00:48:04.830 --> 00:48:09.030 from the community, help us design the interviews,

793 00:48:09.030 --> 00:48:13.230 identify people to interview,

794 00:48:13.230 --> 00:48:16.650 and then participate in the analysis of the transcripts

795 00:48:16.650 --> 00:48:17.750 from those interviews.

796 00:48:19.772 --> 00:48:24.270 You know, as I said, one of the things

797 00:48:24.270 --> 00:48:27.570 that we see as a real value to RAPICE

798 00:48:27.570 --> 00:48:30.153 is that it empowers communities.

799 00:48:31.050 --> 00:48:34.500 Rather than simply being passive participants,

800 00:48:34.500 --> 00:48:36.873 they're actively engaged in the process.

801 00:48:38.430 --> 00:48:41.250 <v ->I'm curious to learn a little more in RAPICE,</v>

802 00:48:41.250 --> 00:48:46.250 how are you following the quality of field observations

803 00:48:48.450 --> 00:48:53.450 and field notes and or, you know, from both ends,

804 00:48:53.970 --> 00:48:56.130 from the mixed method consultant

805 00:48:56.130 --> 00:48:57.960 and also the participant observers

806 00:48:57.960 --> 00:49:00.960 that might be newly trained in ethnography

807 00:49:00.960 --> 00:49:03.360 or like conducting interviews and writing field notes

808 00:49:03.360 --> 00:49:04.665 and things like that.

809 00:49:04.665 --> 00:49:06.617 What is of the process?

810 00:49:06.617 --> 00:49:10.827 <v ->So the iterative nature of that is that we,</v>

811 00:49:13.530 --> 00:49:17.820 on a regular schedule review field notes

812 00:49:17.820 --> 00:49:21.270 and any data that's collected.

813 00:49:21.270 --> 00:49:24.150 I then meet with the participant observers

814 00:49:24.150 --> 00:49:27.970 or the consultant meets with the participant observers

815 00:49:31.131 --> 00:49:34.560 and queries them and makes recommendations at that point

816 00:49:34.560 --> 00:49:36.540 about the kinds of information.

817 00:49:36.540 --> 00:49:39.630 I mean, we begin, actually, I should say

818 00:49:39.630 --> 00:49:41.760 begin actually by training them

819 00:49:41.760 --> 00:49:45.030 on how to do participant observation.

820 00:49:45.030 --> 00:49:49.363 So the who, what, when, where, why observation,

821 00:49:50.490 --> 00:49:55.490 how to collect information, how to record it in field notes,

822 00:49:55.560 --> 00:49:59.441 what we expect to see in field notes,

823 00:49:59.441 --> 00:50:03.063 the different types of observation and reflection.

824 00:50:03.900 --> 00:50:07.740 And then we use the information,

825 00:50:07.740 --> 00:50:11.410 the analyst uses the information that is provided to them

826 00:50:12.360 --> 00:50:15.790 to ask additional questions to get a better understanding

827 00:50:16.998 --> 00:50:20.246 of what was observed or what was heard or seen.

828 00:50:20.246 --> 00:50:22.743 From the analyst standpoint,

829 00:50:24.150 --> 00:50:27.515 the check is, the member checking.

830 00:50:27.515 --> 00:50:30.420 So when we come up with a preliminary analysis,

831 00:50:30.420 --> 00:50:34.140 we present it to a group of clinicians

832 00:50:34.140 --> 00:50:36.300 who participated in this study,

833 00:50:36.300 --> 00:50:38.223 who were observed for example,

834 00:50:39.064 --> 00:50:41.940 or we presented to community members

835 00:50:41.940 --> 00:50:46.663 to get their reflections, to get their feedback.

836 00:50:46.663 --> 00:50:51.663 So in a member check, what the analyst does

837 00:50:51.877 --> 00:50:56.877 is review through a member checking process essentially.

838 00:51:01.770 --> 00:51:04.832 Any questions from the ethernet?

839 00:51:04.832 --> 00:51:07.749 (Ashley chuckling)

840 00:51:09.031 --> 00:51:11.093 <v ->It's like class, just a lot of black boxes.</v>

841 00:51:13.404 --> 00:51:16.470 Okay, well, it's one o'clock so I'm mindful

842 00:51:16.470 --> 00:51:21.470 that folks likely need to head off to their next thing.

843 00:51:22.943 --> 00:51:26.920 But please do let us know if you're not on

844 00:51:26.920 --> 00:51:31.920 any of our email lists or interested in learning more about

845 00:51:32.550 --> 00:51:35.730 our qualitative methods innovation program

846 00:51:35.730 --> 00:51:39.750 or just more about CMIPS, contact William Tootle.

847 00:51:39.750 --> 00:51:41.700 And yeah, you can join me one more time

848 00:51:43.696 --> 00:51:46.110 in thanking Prof. Palinkas for his wonderful talk.

849 00:51:46.110 --> 00:51:47.583 Yeah, so thank you, everyone.

850 00:52:01.572 --> 00:52:06.150 Thank you so much. I have so many questions. (chuckles)

851 00:52:06.150 --> 00:52:08.350 <v ->I guess that worked out okay</v>

852 00:52:08.350 --> 00:52:09.870 in spite of the technical challenges.

853 00:52:09.870 --> 00:52:11.130 <v Participant>No, I think it was great. Yeah.</v>

854 00:52:11.130 --> 00:52:13.383 <v ->I have to say that shared.</v>