

## Casual Comparative (EX Post Facto) Design Essentials

So, um, unfortunately our speaker for today is not able to be here.

He had, um, a conflict with this meeting that he could not, um, move.

And so we still want to go forward with having a session, but it's less of a presentation, more of a conversation about causal comparative ex uh, ex post facto design.

So, question and answer session, um, particularly to try to illuminate any questions that students have.

Um, we wanna share where some resources are.

So Dr. Rice has done this presentation, a similar presentation, and so I'm gonna show you where that is on the research hub.

And then we also have, um, Dr. Karen Johnson here who serves as a URM and I, I see some other faculty friends in the audience that might be able to jump in and assist as well.

Uh, so we wanted to honor the time that you, that you've made to be part of this conversation.

And then we also wanted to know what your actual questions are, and if we can't answer those questions, we will share the recording of this webinar with Dr. Rice so that he can come back and answer, um, those questions.

So, um, I am going to share my screen here, um, for these few slides that we have.

Uh, and then, um, Dr. Johnson, um, before I share, did you wanna introduce yourself or share anything? Sure, Dr. Smith, I'm Karen Johnson.

I'm a university research methodologist at the university.

My expertise is stronger and qualitative and quantitative, but I think I can help answer some questions that might come up about the ex post facto research design.

And, and as, uh, Dr. Smith has said, we'll show you some resources and remind you that always the best resource for research design is the CDS dissertation guide.

So we can spend some time looking through the ex post facto, uh, comparative, uh, study design, um, in the dissertation guide.

As we have time, let's see how things kind of flow as, as we start to see questions and see how we can be helpful.

And so there's just a couple of slides here, very minimal.

Um, so I will show those.

Also, if you have a question, you can unmute yourself and ask your question.

You can put it in the chat.

I'm trying to monitor all the things on this side.

So if, however you decide you would like to share your question so that we can get that answered or, uh, in the session, or we need to send out to get a answer to your question.

So share the screen here.

So we are doing, oh, hold on just a second.

It is sharing, but now let me put this slide show you.

Okay. So from the beginning, this is our causal comparative ex post facto design question and answer session.

Um, I am Dr. Smith. Dr.

Uh, Johnson introduced herself, sorry, I dunno what I just turned on.

Hold on.

And so what to expect.

So this what to expect.

So we're a review of information from the CDS guide regarding pasal comparative ex post facto design, a tour of resources available in the resource methodology group teams page, and then really some open dialogue, some questions and answers.

We really wanna understand how we can be helpful to you, um, as you're using this design and what questions you have.

So the first thing to look at is using the CVS guide.

And so this QR code, um, provides a link to the CVS central, um, guide.

Um, we always want to highlight that and hallmark that when we are, um, doing these presentations and let you know that that is the most, one of the most important resources that you'll have available to you as you are working through your dissertation, um, and particularly your methodology of your dissertation.

Um, and so I'm gonna come out of this PowerPoint in order to, um, go into the actual guide here most.

So hopefully you can see this guide.

The latest version, um, that I have anyway, is on February.

Lemme make sure this is the latest one I need to go.

Um, I have a paper copy of mine as well, but as you see, they change.

And so it's important to also know where the dissertation guide lives on the web to make sure that you get the correct version of the guide.

Yes, it's the same one that had printed out.

Um, so as you're going through here, this should not be new to everybody, but under quantitative research, design, selection and alignment, oh, let me make, let me check in.

Can you see it? Yes. Okay.

Um, so under quantitative research, design, selection and alignment, we have correlational design experimental and quasi experimental

design, ex post facto, which we're gonna talk about today, factor analysis and Q methodology.

And so let's get into, I wonder if this will, oh, look at there.

Um, so, um, Dr. Johnson, did you wanna talk a little bit about what's here? You're muted if you're speaking.

I was just having trouble getting unmuted. Oh, okay.

So, um, there's actually a previous section, OnX, post facto.

I'm not sure exactly where that is.

Lemme see if I have it open on my computer.

I can go to the table of contents.

Mm-hmm.

Maybe just start on page 32.

32. Okay.

See what we get. Mm-hmm.

Okay. So now that won't work either, so. So, okay.

So as we saw earlier, uh, ex post facto causal comparative research is a quantitative research design.

It is, um, a non-experimental type of quantitative research.

And it is different from correlational in that the independent variables in a ex post facto study cannot be manipulated because they have already occurred.

So let me see if I can give you a quick example of that.

I have one here to share Here. Is this the overview that you might have been looking for? Yes. Okay. So This is, I think, the first information you'll see in the guide.

The objective of the design is to identify causal relationships among variables that cannot be manipulated.

And that's the, that's the key because it's something that's already occurred or something that can't be, uh, manipulated such as age or gender or race, or some experience that has already occurred.

It, um, can be used to determine cause and effect between variables.

So that's how we know it's not qualitative.

So then you can go to, um, where you were a while ago or where I was. Okay.

Yeah. So There we go.

Are you all able to see it? Yes. Yes. Yes. Okay.

Well, uh, Dr. Johnson is, is getting situated.

It looks like there are also some review, uh, videos within this document.

So sometimes when you print it, you, you might forget that it's a live document.

So there are different resources that you can access within here, um, in addition to the webinars that we have that can support you as you're doing this research.

So here's an example of an ex post facto causal comparative research study.

Let's say a researcher wants to examine the effect of socioeconomic status on academic achievement.

Instead of manipulating the socioeconomic status levels, which would be unethical and, and impractical, the researcher selects two existing groups of students, one group from a low socioeconomic status level, and one from a high level, the researcher collects data on academic achievement.

It could be something like GPA or standardized test scores from both groups.

After analyzing the data, the research refines that students from high SES neighborhoods tend to have higher academic achievement compared to students from low SES neighborhoods.

The, the important key here in this example is the researcher did not manipulate the SES levels.

We couldn't, they already exist.

The people already fall into that socioeconomic level.

Mm-hmm. While the study cannot establish causality definitively, it can suggest potential relationship between SES and academic achievement with higher SES being associated with better academic outcomes.

So the reason I wanted to share that specific example is I'm wondering if some of you, uh, might be studying, um, something in education or something similar to this study.

And if you want to talk a little bit to us about what you're thinking about doing in your study or what you may have already, uh, have planned in the early stages.

Is there somebody who wants to share, um, what they're doing with potentially an ex post facto study? Oh, I would, Hi, Angela.

Um, yes, I am, um, doing a study, an education, but it has a little bit of a twist because I am looking at what happens to students academically after a mass school shooting and comparing if those kids looking at this test scores prior to that event and comparing after that event to see if there really is a significant effect on the students.

And if it is something that is immediate, or if it is something that may last a bit in, you know, long term.

'cause there is recent, um, studies out that show students that are affected in that manner are, um, going, uh, maintaining problems a lot longer than what we thought prior with prior research.

So I'm using, yeah. Oh, Go ahead.

So I'm using the standardized test scores, doing a pre and a post analysis.

So, so your independent variable variable would be The, um, well, that's what I'm putting together because, um, is the storm, you

know, how do I, because I'm looking at three schools where students experienced a mass school shooting Mm-hmm.

And they are Columbine, parkland, and SGAs.

Each of those schools presented a unique problem to that situation.

And the reason you chose to use ex post facto was because I can compare, I'm following a belan chem study in which they, uh, did a study in schools out in California, which experienced a mass school shooting, and they used standard state scores to see if the kids were significantly impacted by that event, or, um, was it short term? And, but they did a little different, they did a, um, they looked at schools that had experienced the shooting, and they also looked at schools in the same school district that did not have that experience.

So, so having the experience, having it or not having it was the independent variable in that study. Right.

Yeah. And, and did I understand you correctly that you wanna look at one school and look at the test scores before and after Three schools? Three schools and compare them? Um, that's a little tougher. Yeah.

Um, because it looks like you would have other variables.

You might have some, um, intervening variables, such as other things that happened within the schools.

So each school probably didn't, each district, for example, might have dealt with the shooting in a different way.

There might have been different resources available.

So you'd have to somehow identify what those were and test to make sure that those weren't variables that were affecting your outcome.

Okay. Yeah, because, um, that is the issue that when schools experience an event such as that there is no standard, um, set of rules.

Each school has to develop its own, or they end up contacting the school that ex that went through that event prior to them.

But that doesn't always match up, because if a high school experiences a shooting and an elementary school then experiences, it would be perhaps two different ways of handling the student population, um, to address that issue.

Right. So it sounds like there's lots of possibilities there.

Uh, clearly your archival source of data would be that the test scores, you know, before and afterwards if that's what you want to, to look at, and, and that, that part could be considered exposed facto, although you can use archival data in many different kinds of research studies.

So just the fact that you're using archival data in and of itself doesn't necessarily make it an ex post facto study.

Ex what makes it an ex post facto study is the fact that, um, every student, every district is already, already in the past experienced the mass shootings.

Right. So I think you would have to spend some time thinking about what kind of quantitative data, um, um, well, I guess if you're just using these test scores, that would be your quantitative data to analyze also attendance, you would have to use it. I'm sorry, go ahead.

Also, attendance, uh, has been noted as a factor in some of the shooting incidents as well.

Um, and I'm sticking with the ninth grade across the board because I'm following the bland chem study, and that was the grade level that they used during their study.

Okay. It sounds like you have a pretty good study that you're using as a resource.

Um, Yeah, because it's archival, like you said, with the test scores pre and post.

It's also, um, report cards that have an effect and, um, attendance pre prior to the event and after the event.

So, so are you thinking that you would want to look at, um, the attendance for example, before and afterwards Mm-hmm. And try to figure out if somehow the shooting was the cause of the difference between the two? Yes. Okay.

All right. But I'm open to what else might be, um, right, Right. Yeah.

Um, it sounds to me like you also could have a correlational study and where you're just sim simply, uh, wanting to determine if there's a correlation between, Between them, Um, students who've experienced mass shootings and test scores.

GPA's attendance, I, I don't want us to get too hung up on the fact that, um, archival data is used in ex post factorial because it's used in so many different kinds of studies.

It really is that everybody falls into an experience or already into a group, it can't be manipulated.

Mm-hmm. So, so I think, I think what you are looking at probably could be go either way.

You just have to be really careful about how you, um, use the, the literature that you find on your study.

So one of the main things when you're trying to design your study is, is to find an expert who's written about how to do that kind of study, and also has done those kinds of studies and study all of that material so that you can support what you want to do in your study by what the experts have done and said is appropriate to do.

And that's really important when you have something that could fit two different studies like this.

Yeah. So I, I think I would recommend that your next step be something like, um, identifying the, uh, experts for ex posts, facto, the experts for correlational, and read what they have written, and then also read some of their studies.

And I think that would be a really good next step, step in helping you decide which of the two would be the most appropriate for the purpose of your study.

Mm-hmm. So, Dr. Johnson, what would be the benefit of doing it as X post facto versus, uh, just a quantitative correlational study? Mm-hmm.

Um, I'm not sure there would be, that's why suggesting that. Okay.

I Understand. Maybe she consider the correlational as well.

Yeah. I, I have Why do you, why, This is why I'm here.

Like, Which way? Because I'm, I'm really correlational, but then I'm also looking at, you know, the X factor as well.

Is there something about the X factor that, you know, attracted you to doing, using that as the methodology? Um, looking at three schools, comparing between them and then within each of the schools.

So it's kind of each school looking at itself, and then the three schools being compared across the board with each other.

Another way to help you decide might be to study the purpose statement of an expo, fact of study.

There's probably even one here in the dissertation guide.

Study the purpose statement of a correlational study and then compare yours to both of those and see which most closely aligns with the purpose of your study.

Yeah. Because it, it seems like, I don't know, just from listening to you that you're trying to demonstrate causality that, uh, I mean, it seems intuitive, but that the, these, uh, you know, horrendous mass shooting events are the cause of the drop in attendance or the cause of the drop in, um, test scores, Right? Mm-hmm.

Right. And intuitively you can certainly, you know, convince yourself that that would be the case, but I don't, I don't know whether you will be able, are you trying to demonstrate causality or just correlation between horrible events and poor test scores? Uh, I'm, I'm trying to actually establish causality, but, um, That's hard to do with that, you know, an experiment, right? It's trying, yeah. I'm trying to see if they are affected, like if is that event such that it has a long-term effect on a student and you can get that through test scores, you know, looking at different types of data, or it didn't bother them at all, and they are scoring where they were, you know, uh, in the last test that they had to take.

So you're, are you gonna look at scores over time then over a number of years? Yes. Okay. Yes. It's pretty complex what you're articulating.

Um, I don't know if there's a way to segment it a little bit, but you're, you're biting off a, a big effort.

I'm sure you realize that.

And, and, and possibly in the literature some of this work has been done.

So understanding what's different about what you're looking at is also probably gonna be important to find your specific gap.

Yeah. Anybody else have any ideas for Angela Or, I don't wanna take up everyone's time, I'm sure. Oh, that's Okay.

I wanna, I wanna read your dissertation when it's done though. Saturday, I would love for you to, Right? Yeah. Um, yeah, because it, it's, you don't wanna take too much as you're saying, um, but you have to get enough so that it is worth the comparison.

Mm-hmm. Right? Yeah, absolutely.

I mean, you always want to, uh, narrow it as much as you can be.

Pull out one aspect of it. It either one of those things.

Attendance or test or test scores alone is probably plenty.

One school might be plenty. Um, one grade level plenty.

Yeah, it is. It's ninth grade only.

Yeah. No, all of that's good. Yeah.

The more you narrow the funnel, um, the more doable the research is.

We, we don't have unlimited time or unlimited funds.

The goal is to graduate.

Yes. Yeah.

Is there anyone else who wants to share what they're doing with their study or they're thinking about doing with a possible expo faculty study, or I see several faculty members in, in the audience.

Is there someone who's just simply done expos, factorial research and wants to talk about that? No.

Don't everybody talk at once.

Well, I mean, the reason I'm here is I really wanted to understand the difference between doing a correlational study and doing an ex perspective study.

I'm a little bit more confused than I was before. Okay.

So, so, so the major difference is that in a correlational study, the independent variable does not necessarily have to be something that has already occurred.

Hmm. Ex post facto means after the fact. Oh my God.

So you can't manipulate the independent variable.

Ex post facto nor correlational study are experimental studies, but with an ex post facto, you can show causality.

Mm-hmm.

So then it should be that research design.

I think it could be, yeah.

You know, without, without seeing your problem statement and your purpose statement and your research questions, it's difficult to just say that it's one or the other.

It certainly lends itself to either Exactly. I think everything boils. Oh, this is Patricia. Hi, Patricia. How are you? I'm fine. Uh, Angela, I think everything boil down to your, uh, purpose statement.

And, um, because the more you talk, the more I listen, it is like, there's a little bit of co comparative study there.

There's a little bit of coalition study there, and it, it looks as if you are forcing it into a class, you know? I don't know. It's a little bit of everything.

It, so you have to kind of streamline and look at your problem statement, what is really, what do you really want to find out? Mm-hmm. But the reason I came on a is that, uh, one of my students just did a, uh, cultural comparative study, and I think he graduated, but he defended him out maybe two weeks ago or three weeks ago.

I will recommend you, uh, and it was a very good study.

I recommend, um, you, you, you look at that since it's a UOP, uh, dissertation also, um, you know, just kind of have idea.

Mm-hmm. And, and the main thing, I think you have to go back to your pro your purpose statement and, and make sure you streamline it, because you are looking at, you are going to compare three schools.

Mm-hmm. You know, you're going to look at cost and effect.

Mm-hmm. So the, there's so many variables going around here.

There are so many things you're looking at.

But one thing I'll tell you is your title, your dissertation is just, is just to help you know how to do research.

Don't put everything in one basket. Mm-hmm.

Just, just take a little bit, a little bite and, and graduate.

Yes. And then, and then you can do that big study you want to do, where you want to compare so many things.

Just take a little bite so that with that little bite, you are able to know how to carry out your research to begin with.

And then you can then use that knowledge to do that big study that you want to, because the more, even as you are talking, you seem to be a little bit confused by the direction you want to go.

Mm-hmm. So maybe you should visit your purpose statement again.

Look at the problem you said you, you want to solve and look at the purpose and all that is between you, your chair, and your URMU rm.

We're not here to, we're not here to change stuff for you.

I'm just saying that in order to make it easier for you, because you can go in any of these three direction, no one is right for you.

Uh, no one is right, no one is wrong from what you said, it just depends on the angle you want to go. Mm-hmm.

Yeah. Yeah.

So the, the student I'm talking, uh, the student I, I was telling you his name is, that's his last name.

Um, if, um, I, I, I've had you in class before, so I have your email, I think.

Mm-hmm. So I'm going to email you the name of the student and you can find his dissertation in, in the library online.

Okay, great. That's Okay. Thank You. Small world, that's wonder. Yeah. That's great.

That's great. Angela, I've had you in class before, right? Um, I think I, yeah, I think so. I, I think I have your email.

If, if not, if I don't have your email, you email me and I'll reply.

Okay. Thank you. Yeah, you are welcome.

Thank you, Dr. Koji.

That was all wonderful information. Thank you so much.

You're welcome. Oh, thank you, Dr. Johnson.

'cause that was really good too. Yes. Thank you. Yeah.

So what other questions do we have? Well, I'll try one if nobody else has another question.

Okay. So, because you know, I'm loaded, I could go all that.

Well, that's fine. Angela, if you wanna keep going, go. Oh, no, Go for it. Okay. I, I like to share. I'm good.

So, uh, um, expo factor will work with any of the, uh, programs.

I take it, it's not restricted to education or health or Anything. No, no. That was just an example that I had found today that I thought was pretty clear that, that the participant participants fell into one group or the other as the independent variable, which could not be manipulated.

Mm-hmm. And so that's, that's a real clear example of, um, something that has already occurred.

You're already in a group.

Great. Okay. Thanks, Dr. Smith. You said there were some other resource materials in the research methodology team.

Yes, there are show guide. I, yes.

I'm gonna share my screen again.

Let me open it up and then I'll, uh, share my screen so people can see.

Well, it's, it's in two places. Mm-hmm.

Let me just, uh, this Right.

Um, so the version of the CDS guide that we're looking at is on CDS Central.

Mm-hmm. Um, so I clicked it, it's here, the College of Doctoral Studies Dissertation Guide and Alignment Handbook.

Right. So if you click this one, it should pull up this newer, this version that is, um, updated, um, February of 2023.

Mm-hmm. So, um, so that's where that came from.

Yep. Close this. We need to close all the tabs.

Um, so let go in here to the research The billion tabs open.

Sorry, y'all. So if you go on the research hub and you go under events and the event calendar, scroll all the way to the bottom and it'll show you past events.

So we're only looking at the ones in 2023. Mm-hmm.

You'll hit this load board button, I think you have to hit it twice or maybe three times.

Hmm. Or maybe four. Sorry, y'all.

So hit it four times and you'll go here.

Webinar, research problem, purpose, and questions for causal comparative ex post facto design.

So this is the last one that was done on ex post facto, Dr. Frederick Lawrence did that, uh, or this is the title.

I actually thought it was Dr. Rice.

I think it might have been when they were switching, um, when they were switching over.

Mm-hmm. Um, but the video, the recording is here, and also the slides from that webinar.

So when you think about essentials, like this is the first part of the research process.

Mm-hmm. So it might not have everything, but the questions that we're asking in this, that we have, we've been asking in this talk, seem to be applicable to this kind of research problem, purpose, and questions portion of ex post facto.

Okay. So this is what's available on Research hub right now.

Now, the other place I'm gonna show you, I'm gonna open this up, is our, um, research methodology group team site, which most of you're probably a member of.

Mm-hmm. Um, so you should see that here on the side, on the, um, it's the left hand side.

There are channels for each one of, um, for the different types of designs.

Mm-hmm. And you'll notice there's a correlation ex post FTOs channel.

Mm-hmm. And Dr. Rice has posted a lot of resources here and information to link to, um, to schedule appointments with him if you have questions.

Mm-hmm. So he talks about correlational designs.

Um, he responds to messages here.

So if you wanna send him a direct message about ex post facto, a direct question that you might have, um, please remember to, at him.

Um, so in teams, if you do the at sign in their name, that will assure that he gets like a, a, a, a ping or an email that says that that's there, that a question is here, so that he'll come here.

But he, um, responds to those, and I believe he has some information here in the files too.

Yes. So there's some information here about in the files, uh, from him, um, about correlational design. I'm sorry.

Okay. Sorry, I was reading. No.

Oh, she was making notes. I'm, I got this Right. Okay.

Stella, that short verse learning video is likely one of those that's like three to five minutes.

Would you want to show that? That might give a point.

Oh, sure. Another good Introduction one is, let me see what this is.

I think this is one that Frederick did, how to use S ps.

Oh, okay. So that's not what I, nevermind, I thought that was actually on expo. Oh, but that's good.

Yeah. But this is in there. So this is good.

And our goal is to create more short burst learning videos that, that are many introductions to each one of the methods.

Um, so we have this, and then there's one more resource that we just learned about today.

Let me go in here and try to find that resource. Um, uh, this, no, this here.

So this was, uh, put together by, uh, Dr. Nicole Baker.

Um, she did all of this work, so bless her. Mm-hmm.

Um, and it has dissertation resources.

This is the, the, the first thing that you see.

But if you click on research methodology and design resources, she has organized webinars based on topic.

Um, and so talking about problem statement, talking about different things that support you as you're doing your research.

But then she also goes into the research designs as well.

So there are some, um, links to some webinars on causal comparative expos facto, uh, research within this document as well.

This document is linked on the research methodology group webpage, uh, or teams page.

Mm-hmm.

That's right. Right here. This first one here.

So I probably will change the name, but it'll still remain in that position.

The dissertation chapter resources doc, uh, doc.

So if you click on there, the document will open up.

So those are some additional resources that have been, um, the University of Phoenix has been developing for a long time, quite frankly, she done the yeoman's work of pulling it all into one space.

Thanks, Dr. Smith. Those are excellent resources.

I'm wondering if any of the other students in the audience, um, have any questions about, um, their research design, whether they're considering ex post facto or something else.

Do you have other questions or concerns that we might be able to address? Or if we can't, we'll share them, uh, with someone who's, who can, Karen, this is Eric.

Um, and I thank Eric. How are you? Everybody? Good to hear from you.

And, um, I'm very grateful to be here.

Um, I just wanted to, I do have a question.

'cause you know, I'm, I'm not familiar with this research technique.

Um, is it, is it something that we could say that could be applied for a study that would be longitudinal? Or would it be better for a study that is sort of like self-contained in a certain snapshot of time? Does that make sense? Mm-hmm. It makes absolute sense.

Um, I'm not sure, uh, I'm trying to think of an example that I might've read or seen where something longitudinal was done.

Um, I'm just, you know, curious. I suppose it could be, uh, just, you know, I'm just keeping in mind that, you know, with ex post facto, we're really looking at something that has already occurred.

Mm-hmm. Okay. So, but like in Angela's situation, I think you, like, you could look at something that's already occurred over a long period of time, though. Right, Right, right. So you could look at something that had occurred, like the school shootings and see how test scores were a different 30 days out, 90 days out, a year out.

That would be a pretty complex study, I think, for a dissertation.

Yeah. I, especially for a person like you, I'm sure you could do that.

Right.

Having the time. Right. Right, right, right.

Exactly. Right, Right. Got it, got it.

Great question. Good. Well, yeah, these have been so invaluable, um, these, uh, weekly methodology, uh, workshops.

Uh, but thank you. Uh, I appreciate it.

Certainly you have, you have a couple coming up, don't you? You know what I'm doing. I think I'm doing a content or not a content analysis.

I think I'm doing a literature review in June, and I, I always look forward to helping people with that.

Awesome. Awesome. Yeah. Good to see you.

Good to see you, Amy. Any other questions? Or even though, even, even if it seems, it might be a question we can't answer, but a question that we can pass on to Dr. Rice, You know, I'm loaded, so Yeah.

I, I can, like, you guys will just resolve my issues and I'll just be able to write when I finish this. This, Uh, hi, Karen. Karen, hi, this is Charlie. How you doing? Good. How are you, Dr. Elliot? Good, good. I

was just gonna mention, I had a student a year, a little over a year ago, um, that did a really nice ex post facto study and looking at drug addiction and drug use in New Jersey.

And she was comparing, uh, I think age, sex, and race.

But, uh, I can put her name in the chat here for everyone if you want to go look it up.

She's mm-hmm. A actually, uh, well, birdie told me that it might be one of the nominees for dissertation of the year.

So, uh, I, I'll put her name in the chat and you can go ahead and, and look up her expo facto study.

It's very well done. That's great.

Thank you. Yeah, And I'm not saying that, 'cause I was her chair, actually her committee said when she finished, she, they told me, they said, Dr.

Elliot, make sure that that gets nominated. So.

Oh, wow. So nice.

That's awesome. I'll, I'll, I'll go ahead.

I'll go ahead and add that in there.

Thank you Dr. Elliot. Sure thing. Yeah, That's, I'm reading a lot, so I'm covered over 200 studies, but you can never get enough with this, you know? Oh, I know. Yeah. Yeah.

Well, it's almost good to see how a UOP student did it.

Mm-hmm. What language they use, what verbiage is used. Yeah.

You know, uh, that I, I would echo all the other faculty members that have said this.

You wanna do a little small piece of pie for your research when you get out, become a pie fanatic, bake all the pies you want to, but cone it down as, as researchable as possible.

The goal is to research, do your o uh, oral defense graduate, and then you can go on and do all kinds of things.

So Advice, focus, Focus, focus, Focus.

Do you think the small pie could just be looking at the standardized test scores, um, between the three different schools and a pre and post three schools look at test scores prior to the event and look at those test scores after the event? Or is that not enough? Yeah. The, the only thing that gives me, I, I'm not the expert.

We have research experts on here.

I'll give you my humble opinion. Mm-hmm.

The, the thing that disturbs me the most about the, the subject is there are multiple variables that could be impacting test scores.

Uh, it, it, it's, it's, uh, you're taking on a very large subject and you, you, let's say you show some sort of difference one year to the next with pre and post shooting.

Is it because of the shooting? Is it because the economy or, you know, there's just a lot of things, but I'm not saying don't do it, but

it's, But it's a snapshot.

Yeah. It's not looking at every test score following that event.

It's, yeah. If it happened, let's say example in Columbine 1999, that's the year you would look at prior to that event.

Yeah. What I did find, just starting out and looking, they did not test the following year or the year after.

Oh, Really? Yeah. Did not come back until 2002.

Oh, that makes sense. Yeah.

And then that's the score that I would have to look at as the post example of what happened after that Columbine shooting.

Mm-hmm. Yeah. So, So Dr. Elliot, what you're sharing is though that it, what it's not, there are other factors to that could impact the test scores afterwards in addition to the shooting.

Is that what you're saying? Yes.

And you have to kind of talk about those, talk About that. Yeah.

So how do you, how, how do you control if you could do that? Yeah. Um, for those factors to show the, this impact, whatever, whether it's causality or whether it mm-hmm. Whatever correlation or If or if it is an impact, Or if there's, if there is, yeah.

If there is an impact, because that's what I'm really looking at.

If, if, or is there Yeah.

And even if there's an impact, can we say it's because of the shooting? You know, you can't, right.

Yeah. Yeah. That's the biggest, that's what he's Saying. Yeah. It's because of the shooting.

Because with ex expose factor, you can't randomly assign groups.

So you have to take everybody in that group, You know? But it would be so, because that is the sample population, all of the students in the ninth grade who experienced the mass school shooting. So Yes.

And if you already know that that is already causing a drop in test scores, that means you already know the answer.

And so, you know, why the research, because, um, like, uh, Dr.

Elliot said there are so, so many other factors that affect testing with or without, uh, shooting.

Hmm. So, um, that is just one of the, so many other things, you know, um, and the, the, the population you have one year of the shooting maybe different from another year of the shoot of a shooting, you know? Right. Except somebody, except you just, you know, maybe you have a study here, somebody has another study somewhere else, then maybe you want to just add to the literature and there, with so many stories going on mm-hmm.

Showing that it does definitely cause it.

But, um mm-hmm.

You know, the, the, that's good when it comes to testing, it's, it's just so project. Yeah.

Yeah. It's so Fragile. You know, that's, That's a good point.

Because we have other things could influence and I could write about those factors mm-hmm.

That they may be the influential factors.

'cause I'm even with test scores, I'm not looking at the entire standardized testing of, of all Yeah.

Looking at English language arts and mathematics only.

Yeah. Angela, if I may ask a question not to put you on the spot, that if you don't know, don't worry about it.

Mm-hmm. Do you have a, are you into your problem statement yet? Oh, yeah. So what exactly is the problem statement? Oh, I don't have it all before me.

I wouldn't wanna, I just gen just kind of, and I'm not putting you on the spot problem.

Just the problem is what, Um, if there is a significant, um, impact mm-hmm.

In the aftermath of the math school shooting on ninth grade students in three different high schools, each school experienced a mass shooting the population or those students, ninth grade students.

Yeah. Um, because as I said earlier, I'm following a stu, the study of, uh, Balon Kim, and they did a, I think difference in difference was their model Oh, okay.

Of taking a school district and looking at schools that did experience a shooting and those schools that did not mm-hmm.

And they used standardized test scores to look at that and make a determination what their results were.

Were inconclusive because some of the students were out and did not complete the standardized testing.

So what do you do with those students? You can't really count them. Yeah. Yeah. You have to. Yeah.

So some of that, It's fascinating. It's a fascinating topic and I really appreciate you bringing it up.

It's, it's a great example. Hm.

Yeah. So, so another thing that you might try, Angela is on this, on CDS Central where a lot of the resources are.

Mm-hmm. There's a problem formulation, tutorial.

Oh, that, that's the name of it.

Problem formulation tutorial. I'm gonna Share my screen, uh, Dr. Johnson And can help Us know where that is.

Okay. So, and if you work through that mm-hmm.

That, I think that would be helpful because you, you've done a really great job of describing a situation and, and for, and implying a research question, but I didn't quite hear a problem.

Mm-hmm. A problem with a consequence.

So maybe that would be a, a good next step too, to work through this.

Um, Stella, I think it's under probably doctoral journey.

Doctoral journey. Yeah. Doctoral journey. Uh, And it's Under phase one maybe.

Okay.

This one. Problem formulation.

Yeah. Problem formulation.

Tutorials an excellent presentation by Dr. Sean Boone.

Oh, yeah. On how to develop the problem statement.

Oh, There's purpose research questions and Hypotheses. Well, purpose research as well.

Okay. Yeah. Yeah.

Um, but I would start with that problem formulation tutorial.

Okay. And I do have my problem, purpose and questions, but now I wanna go back over them and make sure, depending upon the, the research design, you know, I've gotta get in alignment.

Mm-hmm.

Good. Wow. Great discussion.

Absolutely. You're on a good path, Angela.

I think that, well, I think all of the experts out here that are helping me this evening.

Thank you. You've cleared up a lot's. Wonderful.

It's something that I'm 20 minutes from Sandy Hook, so you can see.

Oh, wow. Yeah. Yeah. But we still have to continue.

We have to continue on. So, yeah. Right.

So I think, are there any others that have questions or? We were, we're at six 50, well, 6 55 my time.

Five to the hour, depending on where you're, sorry. Uh oh.

No, it's fine. We have the time and I'm glad that we were able to use it in a way that was beneficial.

So that's always the goal. Yeah.

We have to change it up some we want.

I'm excited. Now I'm gonna pull out a million papers and start going through everything.

So, um, I've been putting in the chat a link to get your feedback.

So this webinar was supposed to be a research design webinar, so we'll just roll with that.

Um, can put the, the, um, the ratings that you choose in there, and also any of your feedback.

How might we make it better? What can we do? Um, or what maybe you liked about this format, even though it's a little bit different than what we traditionally do.

This, Our next webinar is, uh, next week.

Uh, and we're looking at, um, hold on.

Let's see here. We are looking at, actually, we're looking at developing an academic book proposal.

So I think Eric, you're on for one more.

Um, so it's good that you're actually on this call. I may email you back For this. Oh, okay. Yeah, no, that's fine.

I always like doing those. So yeah, That one, I think that one is fun for you.

So I'll send you an email about that one.

Um, and make sure that that, Do you know, um, that's in May, like, uh, early May? No, it's next week. Oh, it's next week. Okay.

April 23rd. Oh, that'll work. That'll Work. Will it work this, this same time? Yeah.

But next Tuesday I'll send that'll work calendar invite just to make sure it's on your calendar.

Sounds good. Okay, thanks.

Uh, so that's our next webinar.

Um, there are of course, other webinars that are occurring, um, within the College of Doctoral studies.

Um, so there's some deep dives.

Um, uh, there's colloquium, if anyone's going to Colloquium, that's this.

So this weekend, uh, Friday and Saturday.

So we, uh, suggest that you look into the research, um, the events page on the research hub.

And it has most of the events that are happening on campus, the units that have their own calendars are, I know the library has its own calendar.

Um, I think everything else, we've been trying to get it all on this events page.

So we really appreciate your time and appreciate you being here.

Appreciate you, um, sending your students and promoting us.

Those faculty that are here, it makes a difference.

And sending them to office hours.

Um, we enjoy spending time with your, with your students, so thank you for that.

Yeah. Dr. Smith, let me say, uh, what a great job you all are doing at the research center.

I, I, I send a lot of students there and yeah.

Uh, I, I, I've gotten nothing but positive feedback from them, so thanks for all you did.

Oh, thank you, Dr. Elliot. I appreciate that. Yeah.

That means, that means a lot.

Um, I always enjoy spending time with them and trying to talk them through different things.

And then of course, I am support for you and I'm support for the URM, so I let them know who signs their dissertation, but I, but I do share some information from my perspective, so, Oh, it's great having you as a resource. So I, I, I concur because I'm one of those students.

Thank you, Angela. I, wonderful, Wonderful. I'm at the, I'm at this stage of my life.

I can freely say, I don't know, call Dr. Smith Honor. Well, that is, I don't feel bad at this, you know, when you're young, you're like, oh yeah, I knew that.

I knew that. Yeah. But after a while, you reach stage, you go, I don't know.

I somebody that knows. So it's great to have you.

Thank you. Thank you very much. Yeah.

Um, so Dr. Johnson, did you have anything else before we close out? I just stuck a quick message in chat. When, when Dr.

Baron was talking a while ago, Andy, we were talking about, um, uh, causality and, and I think I might've said that you can show causality with ex posts facto, and, and you really need, as you had, I indicated earlier, an experiment to show causality, but the researcher infers causality from the statistical results.

Mm-hmm. So it's a little bit different.

I just wanted to make that clarification.

So nobody went away with the wrong information.

I think I stated not quite clearly a while ago.

Perfect. Thank you, Dr. Johnson, for coming and filling in and, um, sharing information.

I really appreciate you for, for doing that. Um, My pleasure.

And, and, and any questions that are here, we will share those with Dr. Rice and also we will post, um, his prior webinar into the teams so that students will have that as a resource as well.

Yeah. Thank you. Good job. Alright. Thank.