

Quantitative Methods: An Example Program Transcript

NARRATOR: In this program, Dr. George Smeaton discusses his research study, an example of quantitative research. As he describes his study, pay particular attention to the research design, design elements, and decisions that were made during the design process.

GEORGE SMEATON: My research interests have been in interpersonal relationships. I've studied interpersonal attraction a good deal. And I've also studied sexual behavior, particularly unsafe sexual behavior and sexual aggression, sometimes known as acquaintance rape or date rape.

I'd like to talk about one study that I've done that I think you might find interesting. It's a study in which I went to Panama City Beach, Florida, with a colleague, to collect data on the sexual behavior and substance abuse of students engaging in a spring break vacation.

I was interested in studying this because I've always been interested in the factors that relate to unsafe sexual behavior because of its potential for spreading sexually transmitted diseases and contributing to unwanted pregnancies.

There's been a lot of research that indicates that alcohol consumption contributes to this. There's been plenty of studies which have shown that if students are consuming a lot of alcohol that puts them at greater risk for engaging in casual sex that's often unprotected.

And so it occurred to me that if there was a setting or an activity that was really associated with a high level of alcohol consumption, then that particular setting would put the student participants in it at risk for this kind of outcome. So when I thought about that, I thought what would be setting that would really be associated with a lot of that and the one we came to mind immediately was the North American spring break tradition.

The North American spring break tradition is really interesting because it brings hundreds of thousands of students from throughout the United States and Canada to just a few locations Panama City Beach, Daytona Beach, South Padre, Texas, and a couple of places of Mexico.

And they come for a one week vacation over just a six week period of time during the spring. It's been made infamous as being a situation where a great deal of alcohol consumption and casual sexual activity occurs from the media through MTV and through movies, but what's particularly interesting about that is that, if that is a setting where students do engage in a great deal of unprotected sexual activity, because it brings so many people together into one place, it offers the

opportunity for students to encounter sexually transmitted diseases that they might not have encountered in their home campus. And then they would have the opportunity to spread those diseases back to their home campus.

Tourism has been found to be one of the ways in which HIV has been spread throughout the world. And with this population, college students, it may well be that this particular kind of tourist activity, the spring break tradition, is a key way in which HIV and possibly other STDs might be spread through college campuses throughout the country.

I looked into this to see what research had been done and I was really surprised that no one had done any research on this phenomenon, even though hundreds of thousands of students are doing it every year. So it occurred to me then that what was needed was a quantitative study to establish the baseline level of these kinds of behaviors taking place in that setting.

This wouldn't be a study that would directly involve any kind of intervention, but it would have important social change implications because, if we found that students there are in fact engaging in much more substance abuse than would take place at a typical college campus and would be engaging in more unsafe sexual activity, then that would suggest that possibly there could be interventions that could be done on their home campuses, and maybe at these settings, that could possibly reduce the spread of sexually transmitted diseases to college campuses.

After I decided to study this spring break phenomenon, shortly after that I met an individual on my own campus who happened to be a hospitality and tourism professor who had studied the spring break phenomenon from the business perspective. He'd studied the financial impact of spring break destinations on the local economy and things of that nature.

And he was now interested in how various factors such as its location, its climate, even the diligence of law enforcement, contribute to students' decision to choose a particular destination. So when he heard about my interests in studying the sexual behavior and substance abuse of students in spring break, he was really excited about the possibility that the two of us could work together to put a survey together that would answer all of our collective research questions at once.

So, therefore, we decided to do a quantitative survey study to establish baseline data on the kinds of substance abuse questions and sexual behavior questions that I was interested in and the tourism motivation questions that my colleague was interested in.

Once we decided that we wanted to do that approach, we had three things we had to figure out. First of all, we had to put together an instrument. And secondly,

we had to figure out an approach to administering that survey instrument. And then third, we had to determine a sampling method.

The instrument was kind of difficult to put together because no one had done anything. Typically what you would do in that situation is you try to use a measure that's already been used in a previous study. There were no previous studies, so we had to make it up from scratch.

What we wanted to do was we wanted to make sure that when we put the survey together that students wouldn't, when they took a look at the questions, immediately be turned off by some of the more sensitive questions that we were asking.

So again we designed the survey, we were very careful to make sure that we started out with the least sensitive questions, the questions dealing with tourism issues. And then we moved to questions that were slightly more sensitive, alcohol questions, then the illegal drug use questions, and then, finally, the sexual behavior questions.

That way we built the rapport with the respondents. By the time they reached the most sensitive questions, they were very comfortable completing the survey. When we had put together a survey that we were fairly satisfied with, then we brought it to some of our students to get feedback. And that was really an important thing to do because they give us some really good suggestions.

One suggestion, in particular, was we had a question where we ask students how often they drink to the point of getting intoxicated during their spring break vacation. The highest choice we had on that was every day. But our students told us that that wasn't high enough.

That, in fact, students during spring break often get intoxicated more than once a day. Once during the daytime and possibly once in the evening. And they said there are some students who are intoxicated the whole time they're there.

So, as a result, we added more than once a day and all the time to that particular item. So it was really important to get some feedback on our survey from the population that we would like to give it to before we actually administered it.

When it came time to determine how we were going to administer it, the typical way that a survey like that is administered is in large lecture classes. Students are already assembled. They're given the survey maybe at the beginning of class or at the end of class. That's a good way of doing it for a lot of purposes because it's very economical. You can watch over the students to make sure they're taking the survey seriously. And, unlike mail surveys, they're not going to lose the survey or forget to turn it in.

But for this particular study, that didn't work very well because, in any given class, only a small portion would have been on a spring break vacation. And many of them wouldn't have been on one for several years so their memory about it wouldn't have been very clear.

So we concluded that the best way to study this would be to actually go to the setting and administer surveys to students on the spot. It would be more efficient and we'd get better data.

So that was the approach we took. We had to obtain funding from our university to go down there. And we were a little unsure that we would get this funding for this particular study. But to our amazement, they actually gave us everything we wanted except they didn't fund us for payment for the students, the participants.

So we had no idea if, when we went down there, students would take time out of their vacation to complete our survey. But we thought we'd take a chance on it anyway. So we did.

And when we arrived there, we determined our sampling method by, after we kind of looked around the situation, we found that there was two areas where the students were congregated on the beach. They were separate by about a mile.

So what we did then was we'd alternate. One day we'd survey in one place and the other day we'd survey in the other place. We'd start at one end of the beach and we'd survey every single person we encountered. What we'd call that is a convenience sample, strictly speaking.

But because people arrange themselves fairly randomly on the beach, and because we were encountering every single person that we came along, we came up with a fairly representative sample of the students who were on this vacation.

It was amazing. We approached 800 students during a scope of one week and we only had five students who turned us down. And our survey design seemed to work very well because no one who started the survey discontinued it at any point.

Every survey that we gathered was completed. So that approach that we did of starting out with the safe questions and moving to the more objectionable ones seemed to work quite well.

When we returned, we analyzed the data. And we found that students did consume a great deal more alcohol during that setting than would be typically the case in an average week on campus. In fact, the items, more than once a day and all the time, were frequently chosen by students down there. And we could see that was true based on our observations of students on the beach.

With regard to sexual behavior, it was relatively uncommon that people had sexual encounters with people hadn't met before during spring break. But when these things did occur, they were often unprotected.

One interesting finding that we found was that we found that males who had a relationship partner back home were more likely to have sex with a new partner during spring break than males who did not have a steady relationship partner back home. So that indicated that the setting really did have the potential for spreading STDs to people who were not even involved in the activity.

We came up with a lot of good baseline data on these kinds of behaviors from using this quantitative method, but there were a number of questions that we couldn't answer from this approach.

For example, one of the most important questions was, did this setting contribute to this extremely high levels of substance abuse, or did we simply see that the portion of students who are already extremely high users of various kinds of substances were attracted to come to these places in the first place.

So that's something we wouldn't know from our data. We would wonder, maybe, if males with relationship partners at home, if they go on vacations of this nature with a specific intention of having an outside fling, or if that's something that just happens.

We'd wonder, possibly, if students are aware of the risks that are involved in this kind of vacation or maybe they are aware and they're just willing to take those chances. The way to answer those kinds of questions would be to go and do some type of focus group research, or possibly in-depth interviews, qualitative research designs.

And that's something we would like to do as a follow-up to this quantitative study that we did. It was a good first step by means of studying something that had never been studied before. But our data approach still leaves many questions that we need to answer using possibly other approaches.