Some Suggestions for Running a Confession Study

Having now run several versions of confession studies in different ways, there are a number of suggestions that I have that don't always come out clearly in an official write-up. I must admit that even I have been skeptical about the continued positive results that we have gotten in the studies involving longterm health that we have run. However, in talking with subjects and watching the entire procedure, I have come around to believing in the power of writing as a preventive therapy. Despite my optimism, I firmly believe that the success of the study hinges on the following things.

The Experimental Context

1. Establishment of rapport with the subjects by the lead experimenter. All subjects who sign up for the study know that they may be asked to write about extremely personal topics. On the first pre-test day, they are again warned about the nature of the experiment and, among other things, sign a consent form giving us access to their medical records. Over and over again, we urge them not to participate if they have any qualms about the study. Interestingly, no one has ever backed out. The important issue is that they make a substantial commitment to participating in all phases of the experiment.

   During the random assignment to condition, the lead experimenter chats for 2-3 minutes with each subject before talking about the experiment. We try to convey a sense of grave importance of the study and our abiding concern for the subject. When we give the experimental instructions (which are included verbatim in the immune and the coming-to-college manuscripts), we try to be as intense and serious as possible. Our goal is to have the subjects walk out of the room with the belief that they are about to reveal their deepest secrets in an honest way. In a round-about way, I want to impress on you that this is not the kind of study where you read the instructions in a sing-song way.

2. Repeated meetings with the experimenter. On all four days in both trauma studies (and three days in the coming-to-college study), the subjects again met with the lead experimenter alone in his/her office. The same instructions that they had heard the day before were delivered. In every meeting, we pushed the subjects to continue to "get into" their writing as deeply as possible.

   By the way, I think that a study such as this works best if there are multiple writing sessions. I know three and four sessions work. A recent experiment by Ed Murray, Alicia Lamnin, and Chuck Carver (Psychology Department, University of Miami -- see their 1989 paper in Journal of Social and Clinical Psychology) found promising effects for people who wrote two times, separated a week apart.

   Although the evidence is mixed, I think that you will get your best effects if the writing sessions occur on consecutive days rather than spaced at irregular intervals over time. I have found that once people start the study, they tend to think about it, dream about it, and live with it the entire time. It should be noted that in addition to the Murray et al project, we have found that having adults write for four times once per week for four consecutive weeks produced
marginally significant effects for absentee rates (Francis & Pennebaker, 1992). The problem with the study is that our subjects reported that it was difficult entering the writing "mind set" so briefly at such large intervals.

3. Writing in a unique and isolated environment. After subjects talk to the lead experimenter, they are escorted to the assembly line of experimenters (blind to condition) who take them to the writing room, do the timing, measure ANS levels, deliver questionnaires, etc. The writing rooms are small cubicles in the basement. The area is quiet and, once they begin writing, the door is shut to give them the impression of solitude. Based on my confession studies, I am convinced that the more unique the writing situation (i.e., the more removed from the real world), the more likely people will be to express their deepest thoughts and feelings.

Recently, I completed a study where we asked students to write about coming to college or control topics in a large group on 3 consecutive days. This technique was promising because the instructions and writing was done in a less personal setting. Despite the less impactful nature of the project, we found reduced health center visits for 2 months and an increase in GPA in the semester following the experiment (Pennebaker, 1992).

4. Assurance of anonymity and general professional demeanor of the staff. In all of the studies, we have used between 2 and 10 experimenters to help escort people to rooms. The various experimenters have been trained to be friendly and yet serious. Every technique that we can think of aims to give a sense of anonymity. Subjects place their own essays into a large box with a small slit in it; no names are ever used or asked for by the experimenters; subjects are assigned their own ID numbers; when people leave each day, they are thanked profusely and reminded to show up the following day. Finally, I don't want my experimenters to read the essays while the study is going on. Although I read them after each day is completed, I am very careful to avoid knowing who wrote what. Perhaps I'm a bit paranoid, but I think subjects can detect if you have read their essays which undermines the entire premise of the study from their perspective.

**Writing Instructions**

In every experiment, the actual instructions given to the subjects are slightly different. The instructions I have below represent the most recent approach that we take to writing. Note that I now couch the control condition instructions within a time management framework. After a recent study (Spera et al., 1994), I think that time management is probably a complete waste of time, but is a perfect control topic since time management has become a popular movement in both psychology and business.

In most cases, the volunteer is ushered into the office of the lead experimenter. If it is me, I first ask them a few warm-up questions, such as where are they from, how are they liking school and their psychology class. They are then given a broad overview of the study, such as the following:

This study is an extremely important project looking at writing. Over the next four days, you will be asked to write about one of several different topics for 20 minutes each day.
You will first come back to this office where I will talk with you and give you your instructions for the day. You will then be escorted to a small office where you will be alone to write. The person who takes you to the office will close the door which will be your signal to begin writing. At the end of the 20 minutes, the person will knock on your door to let you know that the 20 minutes are up. You will then be given a brief questionnaire to complete, after which you will talk with the person for a couple of minutes.

The only rule we have about your writing is that you write continuously for the entire time. If you run out of things to say, just repeat what you have already written. In your writing, don’t worry about grammar, spelling, or sentence structure. Just write. Different people will be asked to write about different topics. Because of this, I ask that you not talk with anyone about the experiment. Because we are trying to make this a tight experiment, I can’t tell you what other people are writing about or anything about the nature or predictions of the study. Once the study is complete, however, we will tell you everything. Right now, we expect the study to be complete in about 6 weeks.

Another thing is that sometimes people feel a little sad or depressed after writing. If that happens, it is completely normal. Most people say that these feelings go away in an hour or so. If at any time over the course of the experiment you feel upset or distressed, please contact me or any of the other experimenters immediately. (Note all participants receive a sheet with phone numbers).

Another thing. Your writing is completely anonymous and confidential. We ask you to put your subject number on your writing samples when you turn them in. Some people in the past have felt that they didn’t want anyone to read them. That’s OK, too. If you don’t feel comfortable turning in your writing samples, you may keep them. We would prefer if you turned them in, however, because we are interested in what people write. I promise that none of the experimenters, including me, will link your writing to you. The one exception is that if your writing indicates that you intend to harm yourself or others, we are legally bound to match your ID with your name. In the last 5 years that we have been doing studies such as this, it has only happened once. Above all, we respect your privacy. Do you have any questions to this point? Do you still wish to participate?

**Experimental Condition Instructions:**

What I would like to have you write about for the next four days is the most traumatic, upsetting experience of your entire life. In your writing, I want you to really let go and explore your very deepest emotions and thoughts. You can write about the same experience on all four days or about different experiences each day. In addition to a traumatic experience, you can also write about major conflicts or problems that you have experienced or are experiencing now. Whatever you choose to write, however, it is critical that you really delve into your deepest emotions and thoughts. Ideally, we would also like you to write about significant experiences or conflicts that you have not discussed in great detail with others. Remember that you have four days to write. You might tie your personal experiences to other parts of your life. How is it related to your childhood, your parents, people you love, who you are, or who you want to be. Again, in your writing, examine your deepest emotions and thoughts.

(On the second day of writing): How did yesterday’s writing go? Today, I want you to continue writing about the most traumatic experience of your life. It could be the same
topic that you wrote about yesterday or it could be something different. But today, I really want you to explore your very deepest emotions and thoughts...

(On the third day of writing): You have written now for two days. You only have today and tomorrow to finish your writing. As with the first two days, I want you to really explore your deepest thoughts and feelings... (Note that I am trying to get the subjects to continually be aware that this is a finite experiment and that they see the last day coming).

(On the last day of writing): You have survived the first three days, and today is the last one. In your writing today, I again want you to explore your deepest thoughts and feelings about the most traumatic experience of your life. Remember that this is the last day and so you might want to wrap everything up. For example, how is this experience related to your current life and your future? But feel free to go in any direction you feel most comfortable with and delve into your deepest emotions and thoughts...

Control Condition Instructions

What I would like you to write about over the next four days is how you use your time. Each day, I will give you different writing assignments on the way you spend your time. In your writing, I want you to be as objective as possible. I am not interested in your emotions or opinions. Rather I want you to try to be completely objective. Feel free to be as detailed as possible. In today’s writing, I want you to describe what you did yesterday from the time you got up until the time you went to bed. For example, you might start when your alarm went off and you got out of bed. You could include the things you ate, where you went, which buildings or objects you passed by as you walked from place to place. The most important thing in your writing, however, is for you to describe your days as accurately and as objectively as possible.

(On the second day of writing): How did your writing go yesterday? Today, I would like you to describe what you have done today since you woke up. Again, I want you to be as objective as possible to describe exactly what you have done up until coming to this experiment...

(On the third day of writing): Today, I want you to describe in detail what you will do as soon as the experiment is over until you go to bed tonight. For example, you might start by noting that you will walk out of the door, go down the steps, walk across the campus, and so forth.

(On the final day of writing): This is the last day of the experiment. In your writing today, I would like you to describe what you will be doing over the next week...

The Best Dependent Measures

I am a very strong believer in getting objective health indicators, such as health center records for illness, immune markers, etc. Unfortunately, every health indicator has its own drawbacks. In addition to health indicators, it is nice to look for allied measures of well being such as grade point average.
Matching the paradigm to the outcome measure. Over the years, we have had people in our experimental conditions write about a) the most traumatic experiences of their entire lives; b) their deepest thoughts and feelings about coming to college (for college freshmen); c) their deepest thoughts and feelings about getting laid off from their jobs (for an adult male sample recently laid off). Writing about general traumas seems to have the most potent impact on physical health measures. Writing about coming to college, although it affects physical health, is also useful in bringing about college-relevant outcome measures such as grade point average (GPA). Don't expect that writing about general traumas, however, to affect GPA. By the same token, laid-off workers who write about unemployment are likely to get jobs more quickly but may or may not evidence better physical health.

In other words, your writing assignment should be oriented towards your dependent measure. Psychologically, I think that what people write about helps them to understand that particular issue and get on to the important ongoing tasks of their lives. Their important life tasks (e.g., getting married, getting dates) may not be your experimental tasks (improving grades or health).

Health center visits. If you use health center or physician records, your best bet is to use freshman. At SMU, the University of Virginia, and Stanford, I found that 35% of all freshmen went to the health center within the first 6 weeks of the semester. Given this high frequency usage, you can get by with fewer freshman in your design than if you rely on upperclassmen. If you end up using upperclassmen, I think it is a good idea to aim for at least 20 subjects per cell (since you don't have the health center variance you do with freshmen).

Because of confidentiality requirements, I never see the actual student health records. Rather, I have student health center personnel write down the actual dates of each person's visits. The visits are broken into three categories: illness, injury, and other. An illness visit is defined as a visit based on a presenting symptom of some kind, e.g., sore throat, swollen eye, etc. Even if the physicians found that the sore throat was not associated with any specifiable problem, it would be counted as an illness visit. If a person gets a splinter and goes to the health center to get it removed, this would be an injury. However, if the person gets a splinter today but waits to go to the health center for a week (because the person's finger is swollen or green), I would call this an illness visit since the immune system was clearly implicated.

According to my scheme, illness visits for the same problem have to be separated by at least 8 days to count as separate visits. For example, it is common for a person to show up today for a given problem and then is told to return tomorrow to see a specialist. I count these two visits as a single one. Also, many physicians require the person to return in one week for a follow-up. Since these visits are 7 days apart, they count as only one visit. Note that if a person goes to the doctor 3 times in a week for three different problems, then I would record them as having three visits.

Health center visits are, in many ways, difficult to deal with in that 20-30 percent of all students will not visit at all during the school year. They are also variable from person to person. In order to boost your statistical power, it is imperative that you get a large pre-experiment baseline of visits. I always like to have at least a two month baseline so that I can properly evaluate the effects of the experiment. This means, of course, that it is usually foolhardy to run
an experiment during the first two months of classes. Only with an adequate baseline can you overcome the large individual variability in the proclivity to visit the doctor.

By the way, health center use drops quite a bit as summer approaches. Summer school subjects are particularly bad risks since their illness incidence is so low and they are in school for such a short period of time. Both at SMU and Stanford, physician visits drop to almost nothing by April. Hence, the best time to run students is between November and February.

Another difficult problem is that SMU is a school that requires students to live in dormitories during their freshman year. Further, the overwhelming majority of students are from other cities. In short, the university health center is the only real option that students have in seeking medical attention. Physician visit information is extremely difficult to get for commuter-based schools. Melanie Greenberg and Arthur Stone (Psychology Department, SUNY-Stony Brook, Stony Brook, NY) have done a nice job of collecting reliable physician use rates by contacting students’ private physicians directly after getting consent of students.

Immune and other physiological markers. A few words about immune measures are in order. If you attempt to collect immune markers, be sure and use a top-quality lab. Many papers have recently been rejected out of hand from good journals because the authors used salivary IgA rather than blood measures. Because immunology is out of my area of expertise, I suggest you contact Jan Kiecolt-Glaser, Department of Psychiatry, Ohio State University, 473 West 12th Ave, Columbus, OH 43210.

My advice is to play around with whatever physiological markers you can afford. Some promising directions have been suggested by Larry Jamner and colleagues using white blood cell counts (Psychosomatic Medicine, 1988). Particularly encouraging are a series of findings by Brian Esterling, Michael Antoni and their colleagues at the University of Miami (Esterling et al., 1990; in press). In their studies, they have focused on latent Epstein-Barr virus reactivation as a measure of immune response to stress. Other blood measures, such as cholesterol, glucose, etc. would be fascinating to examine within this paradigm. Basically, we need a relatively inexpensive measure that goes along a continuous scale instead of relying solely on health center visits.

Self-reports. Be careful about relying on self-reports. Although they are easy to use, they are subject to demand characteristic problems. There is also the problem of large individual differences in the degree to which subjects report feelings stressed and upset. If self-reports are the only avenue available, it is absolutely imperative to get pre-test measures of negative affect -- which can include the Taylor MAS, the Beck Depression Inventory, the Pt scale of the MMPI, or the NA scales that Watson and Tellegen rely on. For a discussion of these issues, see Watson & Pennebaker (Psychological Review, 1989).

Dangers of this paradigm

Running these studies is extremely wearing on me and my other experimenters. You will be shocked and depressed by the horrors that your subjects will reveal. During the course of the study, the subjects are extremely vulnerable and oftentimes depressed. Usually during the
second session, I will preface my introduction to the subjects by asking them how they are feeling. I also make it a point to tell them that it is common for people to become somewhat depressed while participating in the study. The mere fact of learning that feeling sad is normal alleviates some of the anxiety on the subjects' part.

Given the nature of these studies, I only have my very best people debrief. Each debriefing session lasts 20 minutes to an hour. One nasty problem is that the initial debriefing (after the last day of writing) cannot involve telling subjects about the true nature of the study -- i.e., we are looking at longterm health (this was a problem in the Beall study). Nevertheless, I am honest in telling them that I can't tell them the exact nature of the study for fear of biasing our results. Consequently, the debriefing is aimed more at how they are doing now, any problems they have experienced, and the various psychotherapy options available at the university. The ultimate goal of the debriefing at this point is to make the people feel good about the study and the critical role that they have played.

So there you have it. If you have any questions or would like to talk more about your study, feel free to call me. Because I am deeply interested in this general line of research, I would appreciate receiving manuscripts or informal reports concerning findings that rely on the confession paradigm.

**Some Helpful References**


