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Weekly Community Interviews
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Operational Issues

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To address several key questions in social science research, repeated interviews of individuals drawn from difficult populations are required. This article describes an approach for addressing the challenges associated with longitudinal interview studies, including locating research participants, obtaining reliable and valid interview data over time, and retaining participants across the course of the study. We applied this approach to conduct a study designed to identify changeable risk factors for violence among high-risk people with mental illness. To successfully conduct weekly interviews of these individuals in the community across a 6-month period, we developed a flexible and personalized interview format; carefully selected, trained, and supervised staff; and developed incentives to maximize participant retention. Each of these three steps is discussed as a guide for future longitudinal studies that involve interviewing difficult populations.

Keywords: *weekly interviews; longitudinal studies; high-risk participants; violent subjects; operational issues; methods; data collection; weekly interviews*

This article reports our experiences implementing a research design calling for weekly community interviews of people with mental illness who were predicted to be repeatedly violent. It highlights what we learned about study

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organization and management in the process of trying to accomplish a challenging task. It is about the steps that must occur after the design of a study to implement the design in the field.

Getting repeated observations makes sense in many research situations. Longitudinal interview studies, that is, those with repeated interviews of the same individuals across an extended period, have proven valuable for many areas of social science inquiry, especially in studies of the development of antisocial careers and risk factors for continued involvement in violence (Loeber, Farrington, Stouthamer-Loeber, Moffitt, & Caspi, 2001; Moffitt, Caspi, Harrington, & Milne, 2002; Nagin & Tremblay, 1999; Tremblay, 2000). By having multiple observations within individuals, stronger assertions can be made about how changes in one pattern of behavior are related to the occurrence of particular events or changes in another pattern of behavior. Having a movie of the unfolding of events is more informative than having a few pictures that must be connected through conjectures.

Our study presented an extreme form of the potential advantages and complications connected with repeated interviewing. The purpose of our investigation was to determine how short-term changes in individuals' lives (e.g., alterations in symptoms, relationship quality, or drinking behavior) were associated with violent incidents in a group of repeatedly violent individuals. This required very frequent reporting of behaviors so that a daily record of activities (e.g., violent events, drinking) could be constructed. To this end, we chose to interview a sizeable sample of people with mental illness on a weekly basis for a 6-month period.

Conducting weekly interviews in the community with unstable, transitory, predominantly drug-dependent, and potentially violent individuals is a task that most researchers would take on with considerable (and well-founded) apprehension. Nevertheless, several questions that involve modeling change in social science phenomena (e.g., symptoms, antisocial behavior) require frequent, repeated interviews to accurately capture short-term changes. We found that weekly interviewing could be done successfully with our high-risk group, but only if certain operational challenges were overcome along the way. This article presents the issues that have to be addressed to complete an intensive follow-up study of this sort. Although we will be discussing our experiences in the context of one specific group (repeatedly violent people with a diagnosed mental illness), the challenges we discuss

and the possible solutions are applicable to any high-risk group, particularly those who lead lives that are unstable and who have difficultly maintaining commitments.

THE DESIGN OF THE STUDY

The broad purpose of the study discussed here was to provide information relevant to the design of community-based clinical interventions and legal policy for people with mental illness who are repeatedly involved in violence. Considerable progress has been made in the past two decades on the development of methods for classifying people with mental illness according to their risk for involvement in violence in the community (see Douglas, Ogloff, Nicholls, & Grant, 1999; Monahan et al., 2001; Quinsey, Harris, Rice, & Cormier, 1998). These research programs have produced impressive strategies for assessing the relative risk status of patients seen in the civil and forensic hospital systems.

However, even most individuals with a general high likelihood of involvement in violence are going to be living and treated in the community; being high risk does not translate into indefinite incarceration. To design effective treatment interventions for these individuals in the community, we must develop methods for determining when an individual is at heightened or lowered risk of being involved in violence. Specifically, we must be able to identify (a) when an individual is in an increased or decreased risk state for violence and (b) what factors promote these fluctuations in risk state. If individuals who are repeatedly involved in violence are being treated in the community, clinicians must know what to monitor as indicators of increased risk state and what aspects of the individual's life to focus on to reduce that risk state. The research necessary to generate information on risk state must follow individuals more closely than has been done in prior research to capture any fluctuations in risk for violence over time, as well as the individual and situational correlates of these fluctuations.

We chose to try to conduct weekly interviews to meet our goal of measuring short-term change in behaviors (e.g., drinking or drug use) or shifts in clinical status (e.g., symptomatology) just before or after violent incidents. To succeed, we needed a sample of individuals who would have numerous violent incidents across the follow-up period, an adequately large number of observations within each case to see relationships repeatedly, and a large enough sample of individuals to account for potential effects of individual case characteristics on the patterns observed. Using data from prior work on violence in individuals presenting to a psychiatric emergency room

(Gardner, Lidz, Mulvey, & Shaw, 1996a, 1996b), we constructed a method for identifying potential participants who would have about 10 violent incidents within a 6-month follow up period. We then posited that weekly interviews for this follow-up period (6 months) would provide us with at least 26 potential data points on each person for certain measures, such as symptomatology, that could only be assessed at the weekly level. Using a sample of approximately 130 participants, weekly interviews would then get us approximately 3,400 data points across all participants, a sufficiently large number to obtain relatively stable estimates of case characteristic and behavior pattern interrelationships. Weekly interviewing was also attractive for its ability to reduce the effects of forgetting and telescoping found in recall methods using longer time periods.

This study identified and followed a group of individuals ($N = 132$) who were predicted to be repeatedly involved in violence using a statistical model (Gardner et al., 1996a, 1996b) from a pool of individuals who appeared at the emergency room of an urban psychiatric hospital across a 36-month period. These individuals were drawn from a group that represented approximately 5% of the people appearing in the emergency room during this period. The methods for screening patients for eligibility into the study and their overall level of violence across the follow-up period are described in Skeem, Mulvey, Lidz, Gardner, and Schubert (2002).

We attempted to interview recruited individuals every week for 6 months after their enrollment into the study. It was not possible to schedule weekly interviews in exactly 7-day increments. Therefore, we allowed for a 5- to 9-day window of opportunity from one interview date to the next. An interview that could not be done within 9 days of the previous interview date was considered missed. Interviews covered involvement in violence and changeable risk factors for violence, including the participant's living situation, employment or school activities, positive and negative social support, relationship quality, treatment involvement, contacts with the legal system, drug and alcohol use and symptoms, and mental health symptomatology.

The interviews were conducted in the participant's, or collateral's, homes (59% of the interviews); institutional settings (18%); or other public places, such as restaurants (7%). If other locations could not be arranged, we interviewed by telephone (16%). We also attempted weekly interviews with a collateral reporter, that is, someone named by the participant who would also have knowledge of what went on in his or her life. These collateral reporters were asked only about the life situations and participant behaviors about which they might have knowledge (for example, they were asked about the participant's drinking but were not asked to rate symptomatology). We also

gathered arrest and hospital records for each participant during this time period.

Enrolled individuals and collateral reporters were recruited using a rolling-admission procedure so that the interviewing load could be distributed across the period allocated for the completion of the project. Each of the six interviewers carried a caseload of seven participants. When a participant completed the 26-week follow-up period, a newly enrolled person was assigned to that interviewer. Interviewers were expected to complete 14 interviews a week (with either participants or collateral reporters), and there were approximately 42 active participants in the study at any time.

We were successful at locating and interviewing participants and collaterals. First, we completed 92% of 3,342 possible interviews with enrolled individuals. This high rate of retention was achieved despite formidable obstacles, most notably high levels of substance abuse (86% of the participants used street drugs during their 6-month follow-up period) and transient living situations (this group averaged 4.75 residential moves in the 6-month follow-up period, with more than 50% of the group having 3 or more moves).[1]

Second, we completed 71% of possible interviews with collateral reporters. If we exclude the weeks before a collateral reporter was nominated for the first time and the weeks where a participant was unable to name a collateral reporter (e.g., the participant was so isolated no one knew what went on in his or her life that week), we completed 84% of possible interview weeks with collateral reporters. Thus, even with an optimistic reporting of our collateral-reporter completion rate, it is still well below the success that we experienced interviewing participants. Our impression is that this rate is lower because collateral reporters often had fuller lives than many of our participants, and scheduling an interview time was more of an imposition. Although collateral reporters, similar to participants, had the opportunity to earn $10 per week, collateral reporters may have been less engaged in the interview process than participants because they were not discussing their own life experiences.

CHALLENGES OF IMPLEMENTING THIS METHODOLOGY

We believe that success at finding, maintaining contact, and interviewing high-risk research participants requires extensive effort on several key tasks. First, it is necessary to develop an interview format that does not drive participants away, but still yields rich, accurate information. Second, there is the need to hire and keep the right people as interviewers because this is a

demanding and unconventional job. Finally, it is necessary to have monitoring and incentive systems in place to maintain consistent participant involvement. Each of these components was necessary to successfully follow individuals in this study, because success in any one of these tasks affects the likelihood of success at the others.

Interview Format

Our most basic challenge was to construct questions that would consistently elicit accurate information about events and changes in states across the past week. Early on, however, it became apparent that not all information had to, or could be, collected in the same time unit. Just because we were seeing the participant weekly did not mean that every question had to be asked with a 1-week recall. Instead, we collected two types of data: (a) rich, descriptive information about events (such as violent incidents, substance use, treatment, arrests) at a daily level and (b) summary data about the individual's behavior or situation (such as symptoms and relationship quality) at the weekly level.

Finding a balance between obtaining quality data and the burden to participants was an important emphasis from the early stages of the study design. We recognized the need to make the interview session, itself, a positive experience, otherwise we would have difficulty with retention across the 6-month follow-up period.

Our first challenge was to avoid having the interview feel like an unchanging weekly recitation of a series of questions. To accomplish this, we created a short (less than an hour), semistructured weekly interview for both the enroll individuals and the collateral reporters. The interview relied heavily on the interviewers' ability to gather information in a conversational format and then record the information in the proper code. Several aspects of the interview were structured scales (e.g., the Brief Symptom Inventory; Derogatis, 1993), however, and these had to be administered in the same order for each participant after the initial conversational section of the interview.

How does one gather consistent information from participants using a conversational format? Interviewers were trained to begin the interview by engaging the participant in conversation about events over the last week using open-ended questions. They were then given more specific questions to collect specific answers if they had not gotten them from the less formal discussion. Interviewers were discouraged from reading a fixed set of questions at every interview, and a major focus of our interviewer training was on the development of an interviewer's style for using an open-ended, conversational format for data collection. To promote this style, we developed a series

of semantically equivalent versions of questions (exclusive of the structured scales) that could be used to begin the conversation in the various interview domains. For example, to start the conversation regarding the enrolled individual's living situation, the interviewer might say "Last week, you were living at X; where are you living now?" or "So, are you still living at the same place as last week?" or "Have there been any changes in where you lived over the past week?" Each of these slightly different versions of an opening question would steer the conversation toward the desired content.

We also designed the interview materials to promote a conversational style. We created the interview booklet with the questions and answer sheets separated from one another. The structured answer sheet was designed to assure that the data collected was complete and consistent, but it was separated physically in the materials from the prompting questions for each domain. This meant that the interviewer shifted from an interview guide to the coding sheets. Thus, the process involved in obtaining the information was open to some level of interviewer discretion, but we collected a consistent data set. Using this tactic personalized the interview and gave the respondents a bit of control over the flow of the weekly encounter.

It is important to note that the conversational aspects of the interviews with enrolled respondents and collateral reporters tended to become shorter as the weeks of participant involvement passed. The conversations were an explicit task during the early weeks as a method to establish rapport. However, as time went on, the respondents became familiar with the content of the interview, and a connection was established with the interviewer. From that point forward, the conversations and data collection seemed to become separate processes. The informal conversations often occurred in the early part of the session, before the participant and interviewer set about the joint task of recording the week's events.

The methods for personalizing the interviews were valuable for maintaining participant investment in the process but raised legitimate concerns about the reliability of the data. By encouraging the interviewers to use their broad context-based understanding to know how to phrase questions and what information was adequate for them to record as an answer, we risked obtaining inconsistent data. Four procedures were used to assure reliable as well as valid data. First, we spent an unusually long time (9 days) training the interviewers, several of whom were already very experienced from participation on previous studies. The training included extensive discussion of the goals of the study, relevant background literature, and the particular variables that we wanted to collect. Training also included large amounts of time conducting mock interviews. Interviewers practiced their technique by conducting interviews with each other, other office staff, and pilot patients (volunteers

from an outpatient mental health clinic). These training interviews were observed and critiqued by the other interviewers, by the project coordinator, and at least one of the investigators. Second, the recorded data form from every interview was reviewed thoroughly by the project coordinator for internal consistency. Third, the interview staff met every week with the project coordinator and the investigators to review problems in data collection. Finally, we tape recorded all interviews. Each week, a randomly selected tape was reviewed by the investigators, project coordinator, and interview staff. The weekly staff meeting provided a context for constructive criticism for the interviewer regarding the interview quality and consistency of the information within each interview.

There are, however, potential problems if interview sessions are too positive of an experience for the participant. Because the approach taken here required interviewers to demonstrate a consistent interest in the individual's life for 6 months, we had some concern about what, if any, effect a relationship of this sort would produce on reports of violence and other variables of interest. We had a fear that respondents might want to portray themselves in a positive light for their new friend. Alternatively, we worried that participants' behavior might be influenced by the regular review of their violent incidents. Indeed, if one were constructing an intervention for violent individuals, a key component might be a systematic review of violent encounters and the situations surrounding them with an interested therapist. Finally, we had a concern that interviewers could affect behavior by offering advice or connecting the participant with services. We asked interviewers to walk a fine line, build rapport, and obtain information without offering advice to the participant that might alter the course of events that would occur in his or her life without involvement in this study.

We found that the tension between these two requirements (care but do not interfere) was a consistent source of internal conflict for new interviewers. This is not surprising because one quality of a successful field interviewer is the ability to empathize with others. As a result, an important concept in the training of staff was the need to maintain a delicate balance between their empathetic desire to intervene and the need to remain objective and avoid interfering with the life course of the participants. The process by which the interviewers resolved these conflicts was monitored and supervised every week during staff meetings.

Although it might be expected that repeated interviews with people concerned about their behavior and well-being might have had an affect on their behavior, this appears not to have been the case. Our evidence suggests that our efforts to counteract any influence of frequent interviewing worked. The level of violence, alcohol use, and drug use reported across the 26-week

follow-up period remained flat, indicating no drop off in reporting. If there had been a positive interviewer effect, we would have expected lower levels of these reported behaviors across the follow-up period. The generally flat pattern of reporting indicates that there was no clear intervention effect. Although it could be argued that we might have seen an increase (rather than no change) across the time period, if interviewers had not had an affective connection with the participants, there is no way of testing this argument.

A final challenge related to interview format was ensuring continuity in data from week to week. Because the goal of the study was to construct a stream of data across the entire follow-up period (we wanted a movie rather than a collection of weekly episodes), maintaining continuity across weekly interviews was essential. One method for achieving continuity was to systematically remind the interviewer of what the participant had said in the week prior and allow the interviewer to see if the current responses made sense in light of the interview from the previous week. With information from the previous week's interview, the interviewer could make sure that the interviewee did not, for example, report the same job change in two different weeks. In addition, the interviewer could gather ratings of relationship quality in terms of whether it had improved, stayed the same, or deteriorated since the week before. We accomplished this by working with contracted programmers to develop a system for storing and processing data that printed out each weekly interview response sheet with not only the blank fields for recording answers for the current recall period but also the responses to each question from the interview the prior week. Making this system work required rapid data entry and turn around, so that the entire week's responses would be accessible by the interview scheduled for the next week.

Staffing Issues

Finding people willing and able to conduct interviews in the community with mentally ill individuals likely to be repeatedly involved in violence was no small task. We found that looking for individuals who possessed an academic degree in a particular field mattered less than other characteristics. What seemed more relevant was life experience. There were two types of individuals who succeeded in this work: those with smart ignorance and those in, but not of, the lifestyle. Those with smart ignorance were individuals who recognized that their life experiences were very different from this group of participants, were able to convey a genuine interest in learning about this different lifestyle, and could do so without passing judgment. The group that we describe as in, but not of, the lifestyle were individuals who were personally connected to individuals who lived similar lives to our participants

(via friends, family, or past personal experience) but were not involved in the activities of this lifestyle (e.g., transient living, drug dealing). These individuals might even know the participants or their relatives but would not consider themselves like the participants in any of their daily activities. Each of these two types of interviewers appreciated the difficulties faced by participants and accepted them as people with hard lives rather than as clinical cases with diagnosable problems.

Beyond these general attributes, interviewers also had to have lives that could accommodate a flexible schedule and a willingness to be in potentially dangerous communities. Participants' schedules often required an interview after standard work hours or on a weekend, and the communities where participants could be contacted most easily were often high crime areas.

Recruitment of the right interviewers, however, was only part of the task. Keeping staff motivated and engaged presented additional challenges. Maintaining low staff turnover was important not only to avoid the time consuming process of identifying and training replacements but also to avoid disrupting relationships between participants and interviewers, which we believe were conducive to participant retention. We attempted to motivate and engage staff by providing an environment that included professional opportunity as well as ongoing support.

Our experience has been that providing full-time positions for staff seems to produce a commitment to, and investment in, the project not found with part-time or contract workers. Each of the interviewers hired for this study held a full-time, research associate position, accompanied by a clearly defined set of expected tasks and productivity requirements. Staff were provided with regular quantitative feedback about their performance as measured against the established goals. There was little staff turnover. Of the original six individuals hired to complete this work, two departed early in the data-collection period—one was let go because of poor performance and another departed because the job did not fit well with her career goals. The four individuals hired originally and the two replacement staff all stayed with the project through the end of data collection.

We have also come to recognize the significance of a team approach for this type of work. An atmosphere of cooperation allowed the staff to rely on one another to complete interviews (e.g., if someone was out ill) or to help with other administrative tasks, such as scheduling interviews. Equally important, a strong sense of teamwork allowed staff to rely on each other for support in processing their experiences and for brain storming ideas for finding participants. This was especially apparent when interviewers were moved by a particular respondent's life experiences and feedback from other staff provided comfort and perspective. The team approach was reinforced in

weekly staff meetings in which we reviewed and discussed problems in managing cases, laughed about our difficulties, and shared information about how problems could be managed.

A final, but far from inconsequential, consideration in conducting longitudinal research with high risk participants is the need to ensure the safety of both the interviewing staff and the participants. Having a clear and thoughtful policy for handling potentially dangerous situations (e.g., belligerent respondents, possible child abuse) is a necessity in making interviewers feel like their job is manageable. In addition to informing staff about the legal mandates governing these situations, it is also necessary to convey (before beginning data collection and in ongoing discussions) a clear set of ethical guidelines that will govern project management. The operating principles used in developing our policy and the specifics of the procedures adopted can be found in Monahan, Appelbaum, Mulvey, Robbins, and Lidz (1993). The policy considers two relevant issues: (a) situations when the participant reveals plans to harm self, another, or situations in which the participant is being abused and (b) procedures for ensuring staff safety (things such as carrying cell phones, not doing interviews at night and a rotating on-call schedule to monitor the progress of interviewers as they go from one interview to the next). Clarity regarding these principles and practices helped relieve staff anxiety and promoted open discussion of difficult situations.

Participant Retention

The validity of this investigation depended on having a complete data set. It was critical, therefore, to keep participants coming back for 26 weeks of interviewing. To meet this challenge, we developed a personalized interview with flexible scheduling. In addition to removing potential obstacles related to the process of the interview, we offered tangible incentives for consistent participation and retained staff who conscientiously located and tracked participants.

The most important approaches for meeting this challenge came from thinking about what study involvement felt like for the participants. As noted earlier, we varied the interviews so that each weekly session would not repeat the week before. In addition, we made the participant's convenience a high priority, minimizing barriers to completing interviews by going just about anywhere just about anytime. Staff were hired with the expectation that they would maintain a flexible schedule and that they would travel to the participant, rather than relying on the participant to come to the research office. The majority (76%) of our interviews involved traveling to the participant. The remaining interviews were done over the phone or in the research office, usu-

ally because of a safety recommendation about a potentially dangerous situation in the home (e.g., crack dealing).

We also offered monetary incentives. Participants received a weekly payment of $10 for completing an interview. This modest payment was coupled with a lottery drawing that was held during the data-collection period. To be eligible for the lottery drawing, a participant had to complete 23 of the 26 weekly interviews. If the participant met this criterion, he or she was eligible for one of four cash prizes ranging from $100 to $500. Participants meeting the entry criterion were notified during their last interview and again 1 week in advance of the drawing. Notification close to the date of the drawing served not only as reminder but also as a way to verify locating information. Although participants were not invited to be present for the drawing (we did not think a room full of potentially violent individuals, most of whom would not win, was a wise idea), the entire lottery-drawing process was videotaped and date and time stamped to guard against possible accusations of fraud. Immediately following the drawing, the winners were located, and the cash prize was hand delivered to them. We held two drawings (one halfway through data collection and one at the end) to reduce the amount of time between a participant's completion of the follow-up interviews and the time of the drawing.

It is difficult to assess the impact of this lottery drawing on retention. Our impression is that it had the greatest impact on those respondents who were close to meeting the 23-week criterion. That is, knowing that missing one or two more interviews would mean elimination from the drawing did provide incentive to complete the remaining interviews. However, even repeated reminders of the lottery eligibility requirements did not seem to motivate participants who missed interviews more often.

A final potential barrier to participant retention involves physically losing track of participants. Keeping track of participants involves different priorities for conducting weekly interviews than for conducting interviews at less frequent intervals. Our training for previous longitudinal studies with interviews that occurred bimonthly or biannually emphasized the need to establish contact in multiple domains of the person's life (e.g., work, relatives, school, treatment programs) and the use of multiple methods for locating participants (e.g., phone calls, letters, personal visits, and official databases). Weekly interviews, however, require greater reliance on fewer methods because of time constraints. In this study, a phone call was the first method for reaching the participant. If that call was not successful, however, the interviewer visited the participant's home or neighborhood hangouts shortly thereafter. The most useful contacts were those that had immediate access to the enrolled individual (family or friend versus a school personnel or treat-

ment provider), and getting in touch with these people face-to-face was one of the few efficient methods for tracking down the participant in a short time. Setting up the interview as a regularly scheduled weekly appointment worked with only a small percentage of participants.

Our strong impression from these experiences is that no monetary incentive program is as important to retention as are the skills and commitment of staff. The crucial element for all longitudinal work, using either 1-week recall or longer periods, seems to be the persistence of staff in finding and connecting with participants. Enhancing these skills through training for the specific demands of weekly interviews is necessary to capitalize on this resource. Proactive and multifaceted efforts by staff make the difference in retention. Building a system to encourage and support these efforts is a key component of maintaining participant involvement.

CONCLUSION

We present this approach as a way to obtain valid information when the question of interest requires a fine-grained look at a person's behavior across an extended period. A scan of the literature suggests that a weekly data-collection methodology is rare. Our work has demonstrated that weekly data collection is feasible and potentially valuable, particularly in situations where the dependent variable changes frequently or on short notice. Moreover, it is feasible even with people with little stability in their lives.

When we applied for the funds to conduct this research, the grant reviewers were skeptical about whether this design could be implemented successfully. We have shown that it can. However, the success of this approach rests on creating a semistructured way to elicit specific information, choosing the right personnel, and creating a system that promotes participant retention throughout the course of data collection. This process does not come easily but instead requires consistent monitoring and nurturing. We hope that our experiences make it easier for the next group to take on this rewarding challenge.

NOTE

1. Twenty additional individuals completed a baseline interview but were subsequently dropped from the study. Four of these participants withdrew of their own accord, and 16 were dropped from the study because of a policy that eliminated individuals who missed six or more consecutive weekly interviews. A comparison of the 20 individuals who were dropped with the

132 who completed the study showed no statistically significant differences between the groups on most characteristics at enrollment. However, the group that was dropped and those that remained in the study for the entire follow-up period did differ significantly in the number of violent incidents reported. A ratio of the number of violent incidents reported to the number of completed interviews suggests that the dropped group was more violent ($M = 7.5$, $SD = 7.9$ vs. $M = 16.6$, $SD = 15.6$; see Skeem et al., 2002, for these analyses).

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