This paper gives a brief overview of how qualitative and quantitative interviews can be combined to get a fuller picture of a program and its outcomes. This concept is illustrated through a discussion of evaluations of the Employment Intervention Demonstration Program, a multi-site research demonstration project funded by the Substance Abuse Mental Health Services Administration. At the Arizona site, a standardized interview protocol was used to gather quantitative information about 338 participants and outcomes for them. A series of qualitative interviews was held with a smaller subset of participants. Combining the results of the two interview approaches gave a more complete picture of program effectiveness and characteristics. A crosswalk for the two data sets is described. (SLD)
Number & Words: Putting Them Together to Make Sense of a Program’s Outcomes

Michelle Stewart

Presented at the
American Evaluation Association Annual Conference 1999
Chicago, November 1999
Numbers & Words: Putting Them Together to Make Sense of a Program's Outcomes

Michelle Stewart
University of Arizona

Background
The Employment Intervention Demonstration Program (EIDP) is a multi-site research demonstration project funded by Substance Abuse Mental Health Services Administration in 1995. The Arizona site is examining the effectiveness of providing vocational services (supported employment) in conjunction with case management services using a multidisciplinary team approach to integrating services. Mental health consumers were randomly assigned to receive either the integrated teams or brokered vocational services from community service providers. To track the impact of the program in a uniform fashion, all sites are using a standardized interview protocol (the Common Protocol) to interview participants at entrance to the program and thereafter, every six months for two years. Key outcomes for the study include the number of people who return to work and job tenure, as well as satisfaction with the job and impact on life in general.

In 1997, supplemental funding was obtained from the Social Security Administration with the purpose of conducting a series of qualitative interviews with a smaller subset of participants. These interviews focused on the individual’s decision to return to work, experiences with work, and in particular, experiences with receiving Social Security. These two interviews had separate purposes and asked different questions, but had some overlap. This paper is a brief overview of how they can be combined to get a fuller picture of a program and its outcomes.

Samples
The sample for the EIDP was drawn from two case management sites in Phoenix, Arizona. Participants had to have met the state’s definition of serious mental illness and have expressed an interest in working. A total of 338 baseline interviews were conducted with eligible participants.

The subsample for the qualitative interview was drawn from the larger sample of participants; to be eligible, qualitative interviewees only had to have worked at some point during their tenure with the program. A total of 17 qualitative interviews have been completed to date, however, this paper reports on only three of these. The rest were deemed not useful because the interview was not audiotaped, the individuals had not worked more than a couple of days, did not receive Social Security benefits, or had not completed a quantitative interview while at the same job. Additional analyses are planned that will include the entire qualitative sample; the cases presented here are used for illustrative purposes to show how the two types of interviews could be used together.

Methods
Questions included in the Common Protocol were decided by the National Steering Committee for the project. Most of the Common Protocol is made up of well-known standardized instruments such as the Lehman Quality of Life (short version) that provide closed-ended response options for respondents to choose from. The interview is highly structured and quantitative in nature. In contrast, the qualitative questions were developed by the Arizona team as a standardized open-ended interview (Patton, 1990) and is more general in approach. For example, many of the qualitative questions ask respondents about their perceptions and feelings and allow them to respond in their own words.

A cadre of experienced field interviewers well versed in standardized interviewing techniques administered the Common Protocol. A Ph.D.-level anthropologist trained as an ethnographer conducted the qualitative interviews. All the qualitative interviews presented here were audiotaped and transcribed; the transcription quality was spot-checked for accuracy.
Data Analysis & Results

These two interviews were conducted for different purposes, with little forethought given to how they might be combined. Thus, this paper reflects a post hoc approach to combining the two approaches. In the nomenclature of Tashakkori and Teddlie (1998), this represents a “dominant-less dominant” study, in this case the dominant method is quantitative and the smaller component is the qualitative study. The goal was to bring the two interviews together in a complementary fashion (Greene, Caracelli, & Graham, 1989) with information gained from each method elaborating on that from the other.

The first step to integrating these two interviews was to create a crosswalk between them listing what areas were covered by both and in what fashion they were covered (please refer to attached “Crosswalk”). As can be seen in the crosswalk table, there are considerable areas of overlap in the domains covered by quantitative questions taken from the Common Protocol and the standardized open-ended qualitative interview questions. Yet despite the apparent overlap at the level of the domains captured, it is clear that each interview is covering a different aspect of each domain. The qualitative interview covered many of these domains in greater detail than the quantitative interview.

Once the crosswalk was completed, all the transcripts for the three qualitative interviews were read carefully, along with interviewer notes and case summaries where available. Using the domains of the crosswalk, the data from the qualitative and quantitative interviews were examined in iterative fashion. Using each domain as a framework, the results for each were summarized in narrative fashion.

The domains of education, Social Security benefits, working, and social support are examined as examples.

Education.

The diagram below illustrates how the data from both sources were utilized to arrive at an integrative summary. From the quantitative interview, very little information can be gained. We know only the level of education they had attained, which allows us to use this variable in making predictions about who returns to work and what type of job they will get, but little else. From the qualitative data, a fuller picture is seen. Education is regarded by all 3 individuals as important, but only 2 more would like to return to school and neither of them has a clear idea about what type of education or training they would pursue. This is important in understanding outcomes of this project because the EIDP did not offer the opportunity to pursue further education or training, its emphasis is on placing participants into the workplace as soon as possible. Future programs may need to take into account that participants may prefer to return to school as a means of improving their employment level, but may need help narrowing down areas of possible study.

Education

- Two had some college and the other high school only
- Want more education
- Not sure what kind
- Education is seen as important

Two individuals felt that very strongly that more education was essential to helping them get a better job while the third one, who had attended two years of college, said although she feels education is important, she was not able to concentrate due to the voices and thus was not interested in pursuing further education. The male, who is working as a job coach in a vocational program, wanted education related to “human nature”. While the female was not sure what she would study, she was certain it would not be computers.

BEST COPY AVAILABLE
**Social Security Benefits**

All three individuals had received Social Security Administration (SSA) benefits at some time, but only two were currently receiving them. One noted that she had not yet seen a reduction in her benefits due to working, but that she expected she would soon. Another said her mother is her payee and she is not aware of any reductions, though she thought her mother was saving her checks in case she had to pay any money back. The male celebrated going off SSA one year ago with his co-workers; the amount he got was gradually reduced over a period of time before that. One complained that SSA sent threatening letters and that she felt intimidated by them. All were grateful to be receiving the benefits to help them live, but one woman did note that sometimes it makes her feel “like a thief and adds to her feelings of worthlessness.”

All three had held various jobs since beginning to receive benefits. Some of these jobs were “off the books” to avoid penalties or loss of their benefits yet enabling them to make some extra cash. One of the women currently receiving Social Security benefits reports receiving part of her salary in cash for that reason. Two of them felt that there needed to be someone at the case management site to support them in applying for benefits and for dealing with the paperwork required if someone returns to work. The 3 had very little knowledge regarding work incentive programs offered by the SSA; most had heard of the trial work period, but little else. None had ever applied for a PASS or IRWE.

**Social Security benefits**

- One person was no longer receiving SSA benefits; the other two got either SSI or SSDI
- Few problems with it
- Mixed feelings about receiving disability
- Have worked on SSA

All 3 had gone had applied for disability benefits during a stressful period (crisis) in their lives and were on it due to their mental illness. They expressed gratitude that they were able to receive them; one woman noted that she had mixed feelings commenting that although she is glad it is there, sometimes it makes her feel “like a thief and it adds to my feelings of worthlessness.” All had had various jobs while receiving benefits, both on and off the books. The male had gone off benefits a year ago because he found full-time employment with benefits; he and his coworkers had a celebration. All reported having received letters from the SSA threatening to terminate their benefits; two of the individuals were not distressed by the letters because they had someone to help them navigate the system that they could rely on.

**Working**

The key outcome for the EIDP is returning participants to the workplace; the expectation is that returning to work will improve the person’s life and will not result in exacerbation of symptoms. This is largely confirmed for these 3 individuals. Based on their comments during the qualitative interview, they indicate that working has been therapeutic for them – by taking their minds off their own problems and in one case, enabling the individual to learn to manage symptoms better. All agree that they are better off financially; their earned income is a substantial portion of their total monthly income.
The decision to return to work was largely due to desire to earn more money, but actually returning to the workplace has raised some anxieties as well. In particular, all 3 commented they had fears about not being seen as competent, or not being able to handle working again. One woman reported experiencing panic attacks initially after returning to work. Interestingly, in the quantitative interview, all agreed they were "very satisfied" (6 on a 7-point scale), but in the interview, one woman said she would be happier in a job where she didn't have to deal with customers face-to-face. Similarly, disclosure of disability to the employer is viewed with mixed feelings. In one case, the woman had decided not to disclose for fear of how her employer might react. In the other two cases, they had disclosed before taking the job and were receiving reasonable accommodations to help them succeed. The reasonable accommodations concerned schedule changes and time off for doctor's appointments. The male reported he wrote down a list of desired accommodations when he was offered the job; all were granted and he is in the process of obtaining formal ADA recognition from his employer by having his psychiatrist document his disability. Yet all 3 expressed lingering concerns over their abilities and competencies. Stigma in the workplace was encountered to a degree. One woman reported feeling she was hired as "damaged goods" and that she was "unwanted" at work; the male reported that although he works in a very supportive environment (the EIDP vocational program itself), he still catches fellow staff members making wisecracks about consumers and occasionally confronts them on it.

An important point emerged regarding the importance of the psychiatrist in supporting people going back to work. All 3 reported their doctor asked about work and agreed that having the doctor inquire about work was important to them. One woman said she couldn't believe her doctor could remember that she was working.

Both of the people who are satisfied felt their jobs gave them a chance to help other people and that was important to them. Two people would rather work full-time, but currently only one is doing so. All 3 noted that at times it is difficult to get out of bed and go to work. Their advice to vocational staff was to be patient with consumers who are struggling with returning to the workplace. Their advice for other consumers who want to go to work was "go ahead and do it".

Social Support

The quantitative interview includes two subscales (total of 7 questions) pertaining to social relations in the Quality of Life (QOL) section. One subscale asks respondents to rate how satisfied they are with their social relations and the other is an objective rating of the frequency with which they have contact with a friend (or else) who is not a family member. One woman who reported living in a homeless shelter at the time she began her job, also reported having no contact with family and very few friends. As expected, her scores on both the QOL subscales were the lowest: she is the least satisfied with her social life and has the fewest social contacts. In contrast, the male respondent reported he is mostly satisfied with his social life while the final female rated her social life as "mixed" (between mostly satisfied and mostly dissatisfied). The male depends primarily on his wife and the woman on her mother. In both these cases, they reported experiencing social interactions on a daily basis. The figure below illustrates how these two were synthesized.
Conclusions

This synthesis of the qualitative and quantitative interviews gave a fuller picture of the program and its outcomes. Several points are worth highlighting:

➢ As hypothesized, participants report satisfaction with their jobs and view work as therapeutic, though the qualitative data gives a much fuller picture of how work has actually helped them cope with their mental illness
➢ Why do they work: money, feel useful, have a routine, love what they do. As one said “I thought if I was working, I could get my life together.”
➢ Work has not lead to an exacerbation of symptoms, although all reported an increase in anxiety regarding work performance
➢ As seen in the larger quantitative dataset, having held a job in the 5 years prior to joining the program is useful to predict whether or not someone will get a job
➢ The role of the psychiatrist as a member of the multidisciplinary team is far more important in promoting work than previously realized
➢ Social support – particularly having someone encouraging the return to work – appears to play an important role
➢ Dealing with the Social Security Administration can be anxiety-provoking, but this can be lessened by having someone who is knowledgeable and supportive help participants navigate the system
➢ Although the SSA benefits helped them survive, there is some shame and guilt involved in receiving disability benefits and they would prefer to be off them and able to earn their own way

Caveats & Advice

Although this effort to combine the qualitative and quantitative interviews gave added insight, it is not without problems:

➢ It proved very difficult to combine two interviews designed for different purposes – if you are going to use mixed methods, plan for it from the beginning and prepare both the research design and analyses plans accordingly
➢ Requires an iterative process and was time-consuming
➢ The use of open-ended questions with persons with serious mental illness can be somewhat problematic and the interviewer needs to be experienced in conducting qualitative interviews and have some exposure to mental illness

References

<table>
<thead>
<tr>
<th>Domain</th>
<th>Quantitative from Common Protocol</th>
<th>Qualitative from Standardized Open-ended interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal history</td>
<td>Date of birth</td>
<td>&gt; Date of Birth&lt;br&gt; &gt; Where born&lt;br&gt; &gt; Where grew up&lt;br&gt; &gt; How long in AZ</td>
</tr>
<tr>
<td>Ethnicity/culture</td>
<td>Ethnicity – categorical variable</td>
<td>&gt; Ethnicity&lt;br&gt; &gt; Number of languages speak</td>
</tr>
<tr>
<td>Education</td>
<td>Years of education – categorical</td>
<td>&gt; Years of education&lt;br&gt; &gt; Do you want more education&lt;br&gt; &gt; What kind of education&lt;br&gt; &gt; How important is more education to get a better job</td>
</tr>
<tr>
<td>Social Security benefits</td>
<td>SSA myth questions – Likert scale&lt;br&gt; Amount of income from SSA benefits</td>
<td>&gt; Receive yes/no&lt;br&gt; &gt; Have you had problems with it?&lt;br&gt; &gt; Were you told you could not work again?&lt;br&gt; &gt; How did you feel about that&lt;br&gt; &gt; Knowledge of work incentive programs&lt;br&gt; &gt; Communication with SSA office&lt;br&gt; &gt; Primary source of information on it&lt;br&gt; &gt; Best way for SSA to get info to MH consumers&lt;br&gt; &gt; How would you rate them?&lt;br&gt; &gt; What one thing would you tell SSA&lt;br&gt; &gt; Feelings about receiving disability payments&lt;br&gt; &gt; Work history since receiving disability benefits&lt;br&gt; &gt; Impact of work on SSA&lt;br&gt; &gt; Problems specifically related to that&lt;br&gt; &gt; Maximum hours can work and keep benefits</td>
</tr>
<tr>
<td>Working</td>
<td>Amount of earned income&lt;br&gt; Work motivation scale – Likert scale&lt;br&gt; Disclosure of disability to employer – yes/no&lt;br&gt; Job satisfaction – Likert scale rating&lt;br&gt; Life better/worse – categorical</td>
<td>&gt; What prompted you to go back to work&lt;br&gt; &gt; Childcare needs&lt;br&gt; &gt; Would you like to work more hours&lt;br&gt; &gt; How did you get the job&lt;br&gt; &gt; How do you feel about the job&lt;br&gt; &gt; What makes you feel like you don't want to go to work&lt;br&gt; &gt; What is perfect/ideal job&lt;br&gt; &gt; Would you rather work full or part-time&lt;br&gt; &gt; Disclosure – who/how/concerns about it&lt;br&gt; &gt; Reasonable accommodations&lt;br&gt; &gt; Discrimination/stigma on the job&lt;br&gt; &gt; Experiences with sexual harassment&lt;br&gt; &gt; Psychiatrist's knowledge of job&lt;br&gt; &gt; Advice for other consumers who want to work</td>
</tr>
<tr>
<td>Vocational services</td>
<td>Satisfaction (Hargreaves) questionnaire – Likert scale</td>
<td>Satisfaction</td>
</tr>
<tr>
<td>---------------------</td>
<td>------------------------------------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>What is most useful about services</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Advice for vocational staff</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Income</th>
<th>Monthly income</th>
<th>Monthly income</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Satisfaction with income (Lehmann Quality of Life) – Likert scale</td>
<td>Enough to pay bills</td>
</tr>
<tr>
<td></td>
<td>Amount of money to spend on self (luxuries)</td>
<td>How are you making it</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Money for luxuries</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Is it financially necessary for you to work</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Social Support</th>
<th>A few questions on social support from the Quality of Life – Likert scale</th>
<th>Who encouraged you to go to work</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Social support questions – who helps you</td>
</tr>
<tr>
<td></td>
<td></td>
<td>What is relationship with one person who helps you most</td>
</tr>
<tr>
<td></td>
<td></td>
<td>How has that relationship changed over time</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Satisfaction with social support</td>
</tr>
</tbody>
</table>
I. DOCUMENT IDENTIFICATION:

Title: Numbers & Words: Putting Them Together to Make Sense of a Program's Outcomes

Author(s): Michelle Stewart

Corporate Source: University of Arizona Community Rehabilitation Division

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign at the bottom of the page.

The sample sticker shown below will be affixed to all Level 1 documents

PERMISSION TO REPRODUCE AND DISSEminate THIS MATERIAL Has BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) and paper copy.

The sample sticker shown below will be affixed to all Level 2A documents

PERMISSION TO REPRODUCE AND DISSEminate THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only.

The sample sticker shown below will be affixed to all Level 2B documents

PERMISSION TO REPRODUCE AND DISSEminate THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Check here for Level 2B release, permitting reproduction and dissemination in microfiche only.

Documents will be processed as indicated provided reproduction quality permits.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Signature: Michelle Stewart

Printed Name/Position/Title: Research Specialist, Sr.

Organization/Address: 721 N. Fourth Ave., Suite 167

Tucson, AZ 85705

Telephone: 520.917.0841

FAX: 520.917.0845

E-Mail Address: vms@u.arizona.edu

Date: 12/1/99
III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:

Address:

Price:

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:

Address:

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

University of Maryland
ERIC Clearinghouse on Assessment and Evaluation
1129 Shriver Laboratory
College Park, MD 20742
Attn: Acquisitions

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

ERIC Processing and Reference Facility
1100 West Street, 2nd Floor
Laurel, Maryland 20707-3598

Telephone: 301-497-4080
Toll Free: 800-799-3742
FAX: 301-953-0263
e-mail: ericfac@inet.ed.gov
WWW: http://ericfac.plccard.csc.com

8 (Rev. 9/97)
JUS VERSIONS OF THIS FORM ARE OBSOLETE.