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Developing an Outcome Evaluation Instrument for the Bluegrass Domestic Violence Program: The Use of Cognitive Interviews in Questionnaire Development

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RUNNING HEAD: QUESTIONNAIRE DEVELOPMENT

**Developing an Outcome Evaluation Instrument for
the Bluegrass Domestic Violence Program:
The Use of Cognitive Interviews in Questionnaire Development**



Capstone Project, Spring 2008

presented by

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EXECUTIVE SUMMARY

Questionnaires can be useful tools for evaluating program outcomes in human services programs, in that they provide quick, easy-, and inexpensive-to-gather information about the program's success in meeting its objectives. Questionnaires may be easy to use, but they are not necessarily easy to design. If developed using sound methodology, the data gathered from questionnaires can be valid and of use to administrators, board members, direct-service staff, and funders in improving a program's services without a more resource-intensive program evaluation.

An exit questionnaireⁱ was developed to evaluate the Bluegrass Domestic Violence Program's (BDVP) achievement of short-term outcomes. Short-term outcomes for the BDVP were defined using Kentucky Victim Service Standards mandated service provision guidelines for Kentucky Domestic Violence Shelters, as well as through conversations with the Bluegrass Domestic Violence Program's Executive Director, Darlene Thomas. The questionnaire was then pre-tested using cognitive interviewing techniques.

Results of cognitive interviews revealed several classes of problems with the original questionnaire, including lexical, temporal, and computational problems with questionnaire items. As well, specific problems emerged in the single interview where the respondent was primarily Spanish-speaking and an interpreter was used.

Based on these findings, the following recommendations are made:

- Change the wording of questions to more explicitly elicit the information about short-term outcomes desired, based on interview responses.
- Determine how important it is to know the specific time frames in which some services were provided. Several of the questions involved very specific time frames (e.g. “within the first 2 days of arriving at shelter...”), and respondents found these questions almost impossible to answer as originally written.
- Have the questionnaire document translated into other languages needed before engaging in cognitive testing, since this is the form it will be administered in once it is ready for the field.
- Explore other structural issues that might weaken the instrument. Particular attention should be paid to question sequencing and methods for administering, collecting, and analyzing the questionnaire data.
- Format the instrument to reflect current changes in programming, and complete additional iterations of the pre-testing exercise.

This study has several limitations, though it provides assessments of the existing exit questionnaire that can produce a stronger questionnaire instrument and that may be more likely to capture how well the BDVP meets its short-term outcomes.

PROBLEM STATEMENT

Domestic Violence is a social problem created by the intent of one individual to exert power and control over another within the context of an intimate relationship. It is also strongly rooted in societal oppression of women, children, racial minorities, and other marginalized groups (National Coalition Against Domestic Violence). As such, interventions with survivors of domestic violence should be philosophically rooted in restoring a survivor's ability to make decisions for herself (Sullivan and Alexy, 2001).

Program evaluations are necessary for a number of reasons. From the perspective of direct-service providers, evaluation results speak to how services could be provided in a better way on a day-to-day basis. The role of administrators is to guide the general direction of services, so results of program evaluations can suggest what is and what is not successful about a program in an overall sense. Funders, of course, are interested in knowing if a program is successful in meeting outcomes, as significant and scarce public funding is used to provide human services and must be spent well. And clients deserve programs that function to provide them quality services that they need. In domestic violence programs, services should be provided in a non-directive way, meaning clients of programs should guide which services and assistance they need and not program staff. Thus outcomes must be evaluated based on how well services met clients' needs (Sullivan and Alexy, 2001).

This project begins to develop an outcome measurement instrument that provides valid data on the program's success in reaching short-term outcomes. The evaluation instrument is an exit questionnaire that will be used with residential clients to provide information about the program's success in providing safe shelter; basic necessities such as food, clothing, and personal

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items; counseling services; referral services; and self-sufficiency services. Using a questionnaire instrument will provide timely information to the program that is also inexpensive to use and preserves client confidentiality and privacy. As well, it may be administered by program staff while ensuring clients are comfortable providing accurate responses. The particular focus of the study is the development of a *valid* instrument, in that it accurately measures how well clients' needs were met by the program. Specifically, the following research questions are addressed:

1. Is the current questionnaire instrument used to evaluate the program's achievement of short-term outcomes capable of eliciting valid and useful data?
2. What particular kinds of problems exist with the specific questions contained within the questionnaire, or the instrument as a whole?
3. What specific changes might lead to a more valid questionnaire?

OVERVIEW OF BLUEGRASS DOMESTIC VIOLENCE PROGRAM

Domestic violence programs often offer services such as emergency shelter, individual and group counseling, medical and legal advocacy, and life skills training. Often when a survivor of domestic violence enters an emergency domestic violence shelter, she is offered all of these services at once. In Kentucky Domestic Violence Shelters, a client will develop a case plan with the assistance of program staff to define her personal goals, and that staff will offer counseling, case management and advocacy services to assist her in meeting those goals (Kentucky Domestic Violence Association).

The Bluegrass Domestic Violence Program is a domestic violence service agency located in Lexington, KY, that provides emergency shelter services, individual and group counseling, and medical and legal advocacy to victims of intimate partner violence. Services are available to individuals and their immediate families in the 17-county Bluegrass Area Development District.ⁱⁱ

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Now in its third year of operation, the Bluegrass Domestic Violence Program seeks to develop a valid instrument to measure achievement of short-term outcomes for its residential services that can be distributed by program staff.

LITERATURE REVIEW

A wealth of literature exists on both the development of philosophically appropriate evaluation methods for use in domestic violence programs, and techniques used to develop valid evaluation tools. Domestic Violence service providers have been reluctant to evaluate programs for a number of reasons. Staff of domestic violence programs have seen poorly-conceptualized program evaluation results used to make incorrect conclusions about a program's performance. As well, staff of these programs often lack the funding and time needed to complete well-designed program evaluations (Sullivan and Alexy, 2001). Self-administered questionnaires may be used to evaluate a program's services and may limit these problems because they are easily-administered and analyzed. Questionnaires may not provide valid data about a program's achievement of its goals, however, if it is not properly pre-tested (Sullivan and Alexy, 2001). The following section discusses a questionnaire pre-testing technique called cognitive testing that has emerged as an accepted way to improve questionnaire validity.

Cognitive Testing: a Theoretical Framework

Cognitive testing is a method used to develop a questionnaire instrument that can provide valid data. It was developed at a 1984 conference of questionnaire methodologists and cognitive psychologists, who collaborated on a new way of assessing questionnaire questions. The basic theory behind cognitive interviewing is that by having respondents articulate the processes by which they arrived at their responses to questionnaire items, researchers can identify potential problems with those questions. Problems tend to center around several key issues:

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- disparities between a respondent's understanding of a question, and the author's intent;
- a respondent's ability to answer the questions given the information they have; and
- difficulties in a respondent's ability to meaningfully fit their responses into the choices provided to them in the questionnaire (Levine 2005).

Data Collection Techniques

Cognitive interviews are conducted using two different techniques: think-aloud exercises and verbal probing. These two techniques can be used singly or in combination to pre-test questionnaire instruments.

Think-Aloud Exercises

In think-aloud exercises, respondents are instructed to think aloud as they answer questionnaire items. The interviewer collects notes about the respondent's reports, paying attention to the processes the respondent used to arrive at an answer (Willis 1999). In a strict think-aloud exercise, the interviewer does not interject into the conversation.

There are several advantages and disadvantages to this exercise. Some advantages include a lack of interviewer bias, minimal training requirements for the interviewer, and the open-ended format that does not act to limit the respondent's comments (Willis 1999). Disadvantages, however, include the burdens of training respondents, a respondent's potential to resist the think-aloud technique even with explicit instructions, the tendency for respondents to stray from the original task (Willis 1999), and the possibility that the act of thinking aloud affects the thinking being reported, biasing information processing (Conrad 1996).

Verbal Probing

Verbal probing is a technique often used to elicit more specific information about problematic questionnaire items. This technique is completed by the interviewer first reading the

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questionnaire item, allowing the respondent to answer, then asking a verbal probe, and allowing the respondent answer that question. This process can be repeated as needed (Willis 1999).

Examples of verbal probes might include “please repeat the question I just asked in your own words,” or “how do you know you received that service within one week of arriving?” These questions can reveal further information about problematic items that are not revealed in think-aloud exercises.

Verbal probing is more complex than think-aloud exercises discussed previously. An interviewer can utilize spontaneous or scripted probing, and concurrent or retrospective probing. Scripted probing involves using a pre-determined set of probing questions for a particular questionnaire item, whereas spontaneous probing allows the interviewer to think of probing questions “on the fly.” Concurrent probing follows the sequence described earlier for verbal probing exercises. Retrospective probing, however, involves allowing the entire questionnaire to be administered, and afterward probing retrospectively on particular questions (Willis 1999).

Verbal probing, and all its variances, have several advantages and disadvantages. Verbal probing allows the interviewer to maintain greater control over the interview, as well as requires less training burden for respondents than think-aloud methods. However, it also has disadvantages. The two greatest disadvantages are that the technique is more prone to interviewer bias and requires interviewers to be more skilled and knowledgeable about interviewing techniques (Willis 1999).

Hybrid Exercises

Conrad et al. (1999) advocate a combination of these techniques, combining think-aloud techniques and verbal probing. They adhere closely to a think-aloud exercise, but incorporate

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the use of follow-up probes to allow the interviewer to further explore respondents' potential difficulties with questions. Though some types of probes may cause bias or invalid results, Conrad et al. (1999) support the use of follow-up probes in clarifying certain types of verbalizations.

Analyzing Cognitive Interview Data

Conrad (1996) provides a systematic and comprehensive method of recording and reporting cognitive interview data. The following table illustrates their “respondent problem matrix”:

TABLE 1: RESPONDENT PROBLEM MATRIX	RESPONSE STAGE		
	Understanding	Task Performance	Response Formatting
PROBLEM TYPE	Understanding	Task Performance	Response Formatting
Lexical	LEXICAL/ UNDERSTANDING		
Temporal		TEMPORAL/ TASK PERFORMANCE	
Logical			LOGICAL/ RESPONSE FORMATTING
Computational			
Inclusion/Exclusion			

(Conrad, 1996)

Each cell of the table represents a particular type of problem occurring at a particular stage of responding to the questionnaire item. There are three primary phases at which difficulties may occur. The first is *Understanding*, in which a respondent determines both what information is being requested and how that information should be provided. In the *Task Performance* stage, errors may occur when respondents mentally recover data that will lead to a response. Finally, in the *Response Formatting* phase, errors may occur when a respondent cannot format the

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information they have to respond to an item to the response options provided (Conrad 1996).

Within each stage, several types of problems can occur: lexical, temporal, logical, computational, and inclusion/exclusion problems (Conrad 1996). Lexical problems have to do with knowing the meaning of words or how they are used. An example of a lexical problem might be when a respondent does not know what the phrase “outreach services” means within a question. Temporal problems involve the time frame to which the question refers or the time involved in the activity described in the question. An example would be a respondent having difficulty remembering whether she “updated [her] case plan weekly” or at some other interval. Logical problems clearly have to do with logical flaws in questions, including false presuppositions in questions and contradictions and tautologies included within a questionnaire item. Inclusion/exclusion problems occur when a respondent cannot determine whether certain concepts are to be considered within the scope of a word in the question. Other types of problems fall under the category of Computational problems, and mean generally that a respondent had difficulty completing the task requested in the questionnaire item (Conrad 1996).

METHODOLOGY

Sample

The sample for this study included three residential clients of the BDVP that had resided at the shelter for more than 30 days. Small sample sizes are generally accepted in pre-testing questionnaires if multiple iterations of testing and revisions are completed (Willis 1999). The sample was randomly chosen from a list of residential clients who stated they were willing to participate. Random selection was completed using a simple Microsoft Excel function.

Procedures

The original questionnaire instrument was constructed using information from Kentucky Domestic Violence Association's Victim Service Standards and conversations with the Executive Director.

At the time of the interview, respondents completed an informed consent form (Appendix 2). The questionnaire was then tested with three participants using cognitive interviews. The specific techniques employed here include the use of think-aloud exercises and verbal probing. Respondents were asked a particular questionnaire question and instructed to think out loud as they answered the question. Then, if needed, the interviewer asked a series of spontaneous verbal probes to elicit further information about any problems the respondent had answering the question. The results of each question were recorded on a Cognitive Interviewing Worksheet (described below). When all interviews in a round were complete, the results were aggregated and recorded on a new Cognitive Interviewing Worksheet.

Measures

The following table represents the worksheet used to record and summarize the cognitive interview data collected, which is an adaptation from the model Conrad et. al (1996) recommend. Each problem a respondent had with a particular questionnaire question was categorized as 1) a

TABLE 2: Cognitive Interviewing Worksheet

Question:	Problem type: (lexical, logical, temporal, computational, inclusion/exclusion)	Response Stage: (understanding, task performance, response formatting)	Suggested change:

particular problem type occurring at 2) a particular response stage. A worksheet was completed for each interview and also to aggregate the data.

ANALYSIS AND RESULTS

A majority of the problems found with the original questionnaire instrument were lexical, though some problems were temporal, inclusion/exclusion, or computational problems. Table 3 displays some of the problems encountered with the questionnaire. A complete version of this data including all questionnaire items may be found in Appendix 3.

TABLE 3: SAMPLE COGNITIVE INTERVIEW DATA

Question:	Problem type: (lexical, logical, temporal, computational, inclusion/exclusion)	Response Stage: (understanding, task performance, response formatting)	Suggested changes:
a) The time between when I requested shelter and when I was able to receive shelter was adequate	Lexical: 1 respondent needed clarification on this question because its wording was confusing	Understanding	Reword as: I received shelter when I needed it.
b) A staff member met with me and discussed my safety concerns within my first couple of days here.	Temporal: 2 respondents could not remember if it was the first 2 days or the first week.	Task performance	Reword: "A staff member met with me and discussed my safety concerns shortly after I arrived to shelter."
c) My advocate helped me reach my goals and meet my needs.	Computational: 1 respondent had multiple primary advocates during the course of her stay here, and her experiences were different for each.	Task performance	1) Reword: My current primary advocate helped me reach my goals and meet my needs. 2) Include new question: "Other advocates helped me reach my goals and meet my needs."

Question A demonstrates a lexical problem occurring in the understanding response stage. One responded needed clarification on the question and what was being asked because the wording was confusing and the question was too long. I suggested that the questionnaire item be reworded as: "I received shelter when I needed it."

Question B demonstrates a temporal problem occurring in the task performance response

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stage. Two respondents had difficulty recalling whether or not safety planning occurred within the first two days, or if it was within some other time frame, such as the first week of arriving to shelter. My suggested revision was to reword the question as: “A staff member met with me and discussed my safety concerns shortly after I arrived to shelter.” However, it should be noted that although this may make the question easier to answer for the respondent, it may miss information stakeholders need. Because this time frame is based on a Kentucky Domestic Violence Program Victim Service Standard of offering safety planning within 48 hours of entering a residential program, the term “shortly” may not capture the information that is important here.

Question C demonstrates a computational problem occurring in the task performance response stage. One respondent had more than one primary advocate during her stay at the shelter, and had very different experiences with the advocates. Thus, the question was impossible for her to answer without more information. I suggested that the question go through a couple of changes. First, the wording “primary advocate” should be changed to “current primary advocate.” Second, another question should be constructed to ask about the respondent’s experiences with other advocates. Wording of this question could be, “other advocates helped me reach my goals and meet my needs.”

DISCUSSION

Though questionnaires are instruments that are easy to use, they are not necessarily easy to design. Questionnaire items, even when developed by professional questionnaire methodologists, may provide invalid data because of discrepancies between the questionnaire author's intended meaning and the questionnaire respondent's interpretation; the difficulty of the memory recall involved in answering a question; and other problems (Levine 2005).

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This study revealed many of these problems, and has helped answer the research

questions posed earlier:

1. Is the current questionnaire instrument used to evaluate the program's achievement of short-term outcomes capable of eliciting valid and useful data?
2. What particular kinds of problems exist with the specific questions contained within, or the questionnaire instrument as a whole?
3. What specific changes will lead to a more valid questionnaire instrument?

To address the first question, the cognitive interviews revealed problems with almost every original questionnaire question. Thus it is unlikely the instrument can be relied upon to gather the kinds of information stakeholders are attempting to gather. However, perhaps with the suggested changes and further iterations of the pre-testing technique, the instrument could produce this information.

Turning to the second question, it is clear that a majority of the problems with the current questionnaire had to do with disparities between the questionnaire author's intended meanings and the way respondents interpreted these questions. As well, some respondents stated that some of the words or phrasing used were simply too complex. Thus, many of the suggestions had to do with rewording questions. Finally, several of the questions asked whether services were provided in a particular time frame; however, these respondents believed that the time frames the questionnaire referenced are generally too specific for respondents to accurately answer.

Finally, the third question is answered through the use of specific suggestions to change question wording, time frames referenced, and more precise use of terminology and concepts. In the first sample question discussed above, language needed to be clearer and the question needed

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to be shortened. In the second sample question, the time frame mentioned was difficult for respondents to reference, perhaps because of factors common to many residents of domestic violence shelters including an initial stage of crisis in their first few days of residing at shelter. The third sample question had a couple of problems: it failed to recognize that a respondent may have more than one advocate in her stay at the shelter and these experiences may be very different, and it limited exploration of how well advocates were doing in assisting women to only primary advocates, when in fact almost every resident has interactions with almost every advocate.

LIMITATIONS

This study has several limitations that should be mentioned. First, as with most cognitive interviewing projects, the sample size is small. This is somewhat limiting, but cognitive interviewing has been effective with small samples in other projects (Willis 1999). More iterations of cognitive testing may be needed to ensure the reliability of the questionnaire data, however.

Second, one of the interviews was conducted using a Spanish interpreter. The original questionnaire was not translated into Spanish due to cost constraints. Much of what was reported could have been problems of interpretation, and also many problems might have been lost in the interpretive process. It is suggested that because the questionnaire will be self-administered, the document be translated into another language *first*, and then tested using cognitive interviewing methodology. If possible, this interviewing should be done by an interviewer who speaks the native language of the respondent.

Finally, cognitive interviewing cannot test for structural problems of questionnaires

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(Willis 1999). It cannot detect problems with the ordering of questions, the method for administering the questionnaire, and other issues with questionnaire items, such as double-barreled questions. These issues should, however, be considered and addressed before implementing the instrument as an exit questionnaire.

CONCLUSION

This study explored the ways an exit questionnaire for the Bluegrass Domestic Violence Program can be improved using cognitive interviewing techniques, so that it can be implemented as a continuous evaluation tool for the achievement of short-term outcomes. Many lexical as well as temporal and computational problems were revealed with the questionnaire items, and possible solutions were identified for these problems. However, examination of the questionnaire instrument should not end with this study. As identified earlier, a major limitation of this study is that cognitive interviewing cannot detect more structural issues. Further attention should now be directed toward these potential issues. Once these have been addressed, further iterations of testing and revising should be completed.

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APPENDIX 1

LOGIC MODEL: Bluegrass Domestic Violence Program

RESOURCES/ INPUTS	ACTIVITIES	OUTPUTS	SHORT-TERM OUTCOMES	INTERMEDIATE OUTCOMES
<p>BDVP provides 24 Family Advocates, 4 Crisis Counselors, and 1 Housing coordinator.</p> <p>Agency provides 32 bed facility.</p> <p>Agency provides emergency clothing, personal hygiene items, and food.</p> <p>Agency receives funding from Kentucky Domestic Violence Association, United Way of the Bluegrass, Heart of Kentucky United Way, Fayette County Government, and Private Donations</p>	<p>+Operate Emergency Shelter +Operate Crisis line +Safety planning +Individual counseling +Support groups +Case management -housing assistance -financial assistance -job assistance -clothing referrals +Legal advocacy +Self-sufficiency education +Language Advocacy</p>	<p>+Victims of intimate partner violence receive safety in shelter +Victims of intimate partner violence identify strategies for remaining safe in abusive relationship +Victims develop case plan +Victims receive support during legal proceedings +Victims receive education about self sufficiency and stability +Victims receive services in their primary language</p>	<p><i>(SAFETY)</i></p> <p>+Clients feel safe +Clients have basic needs met +Clients learn their rights and options in the legal justice process +Clients have initiated a safety plan</p>	<p><i>(STABILITY)</i></p> <p>+Clients attending support groups enhance knowledge of domestic violence +Clients improve emotional well-being +Clients are able to identify goals necessary to achieve self-sufficiency</p>

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APPENDIX 2

Informed Consent Form
Bluegrass Domestic Violence Program
Outcome Assessment Instrument Development Using Cognitive Interviewing

I, _____, understand and agree to the following:

- That I am completing this interview voluntarily and may end participation at any time.
- That I will be compensated with a \$5 gift card to Wal-mart for my completion of the interview. I will receive this compensation no later than April 3, 2008.
- That the interviewer has the right to end the interview at any time due to any of the following:
 - Inability to complete the requested tasks.
 - A sudden lack of childcare.
 - The interviewee requests that the interview end for any reason.
- That my responses will be recorded. Responses will not be shared outside of this interview, and will be confidential from other staff and residents at the program.
- That this interview and my responses will be used only to improve measures of the program's success. My responses will not be used against me and will not result in a change in the level of services I receive or my treatment by staff members.

Interviewee

Date

Interviewer

Date

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APPENDIX 3

Aggregated Cognitive Interview Data

Question:	Problem type: (lexical, logical, temporal, computational, inclusion/exclusion)	Response Stage: (understanding, task performance, response formatting)	Suggested change:
I found my initial contact (crisis call, court advocate) with the BDVP helpful.	None		
I was provided adequate information about services available to me when I called the crisis line or met with an advocate the first time.	1. Inclusion/Exclusion: 2 of 3 respondents reported being explained some services, but not others when they called the crisis line or met with an advocate. 2. Lexical: did not understand if this meant really basic services such as shelter and counseling, or if it meant more specific services like financial literacy	1. Response Formatting 2. Task performance	Reword as: "I was provided information about emergency shelter and counseling services when I first had contact with the program." Divide into two questions: one addressing emergency shelter, and another addressing counseling services
The time between when I requested shelter and when I was able to receive shelter was adequate	Lexical: 1 respondent needed clarification on this question because its wording was confusing	Understanding	Reword as: I received shelter when I needed it.
The emergency shelter kept me safe	Lexical: 2 respondents interpreted this question to mean "safe from my abuser" in terms of security, while 1 respondent interpreted this question to mean the building was secure and services were confidential.	Understanding	Reword as: The emergency shelter's security system, policies and procedures kept me safe"
I was provided adequate emergency food, clothing, and hygiene items when I arrived at shelter.	1. Inclusion/Exclusion: 1 respondent received some but not all of these items 2. Temporal: 1 respondent did not receive these when she arrived at shelter, but the next day.	1. Task performance 2. Task performance	Eliminate: immediate needs question included further in the questionnaire, and this question is more confusing than helpful.
I was given a tour of the facility when I arrived at shelter.	None		
If I had medical needs upon arriving to the shelter, staff assisted me in getting medical care.	Lexical: all respondents interpreted "medical needs" as basic medical needs, not injuries from abuse.	Understanding	Reword as: if I had injuries from abuse when I arrived to the shelter, staff assisted me in getting medical attention.
A staff member met with me and discussed my safety concerns within my first couple of days here.	Temporal: 2 respondents could not remember if it was the first 2 days or the first week.	Task performance	Reword: "A staff member met with me and discussed my safety concerns

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			shortly after I arrived to shelter.”
A staff member met with me to discuss any special needs I have because of my disability.	Lexical: All respondents did not consistently understand the term disability	Understanding	Reword: “A staff member met with me to discuss any special needs I have because of a mental or physical disability.”
A staff member met with me to discuss any special needs I have because of my ethnicity, culture, religion, or other affiliations.	Lexical: none of the respondents thought about this questions in terms of whether they arrived from a rural or urban location.	Understanding	1) Separate each element of special need (e.g. ethnicity, culture) into separate versions of the same question. 2) Include “county of origin” to capture rurality/urbanity.
A staff member met with me within the first couple of days when I arrived to shelter to discuss my immediate needs and concerns.	None		
I was able to identify my own goals and needs, and make a case plan according to these.	Lexical: case plan was not consistently understood as a written agreement between a client and an advocate.	Understanding	Reword: I was able to identify my own goals and needs, and made a written case plan with my advocate according to these.
My advocate and I updated my case plan weekly as goals were met, or new needs developed.	1. Lexical: same as above 2. Temporal: none of the respondents could recall if it was every week, or just when new things came up. 3. Computational: 1 respondent had multiple primary advocates during the course of her stay here, and her experiences were different for each.	1 Understanding 2. task performance 3. task performance	Reword: My current primary advocate and I updated and signed my written case plan regularly as needed.
My advocate helped me reach my goals and meet my needs.	Computational: 1 respondent had multiple primary advocates during the course of her stay here, and her experiences were different for each.	Task performance	1) Reword: My current primary advocate helped me reach my goals and meet my needs. 2) Divide into two questions: “my advocate helped me reach my goals.” And “my advocate helped me meet my needs.”

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			3) Include new question: “Other advocates helped me reach my goals” and “other advocates helped me meet my needs.”
I was able to meet with my advocate as requested.	Lexical: no respondents thought the term 'as requested' included when an advocate sought them out for counseling or to give them information	Understanding	Reword: I met with my current primary advocate regularly and as requested.
The individual counseling services provided to me were helpful and supportive	None		
The group counseling services provided to me were helpful and supportive	None		
I received sufficient education on domestic violence in the following areas: -How abusers maintain control and dominance	Lexical: one respondent was unclear if this series of questions referred to the education she received from her own experience or from the shelter.	Understanding	Reword: I received sufficient education on domestic violence from the shelter in the following areas:
-The role of society in perpetuating violence against women	Lexical: 1 respondent did not understand the word “perpetuating”. They also thought the question structure was confusing.	Understanding	Reword: Society's role in continuing violence against women
-The need to hold perpetrators accountable for their actions	None		
-The social change necessary to eliminate violence against women	Lexical: social change was a confusing term. 2 people actually interpreted this to mean individual change—change they must make.	Understanding	Reword: the changes in laws and public attitudes that are necessary to end violence against women.
I was provided referrals to other agencies when my needs could not be met by the program.	None		
The program helped me feel prepared to live on my own.	Lexical: all respondents captured only one part of being prepared to live on one's own: emotionally	Understanding	Reword: the program helped me feel emotionally and financially prepared to live on my own.
I have been explained the non-residential services provided by the program that are available to me after I leave shelter.	Lexical: 1 respondent knew of the services available to her, but hadn't been formally explained these. Also, 2 said the term non-residential was confusing	Understanding	Reword: I know about the services provided by the program that are available to me after I leave shelter.

**REVISED QUESTIONNAIRE INSTRUMENT USING SUGGESTIONS FROM
COGNITIVE INTERVIEWING DATA**

Key:
Black text = original item
Teal text = revised/suggested item

1) I found my initial contact (crisis call, court advocate) with the BDVP helpful.

Strongly disagree Somewhat disagree Neutral Somewhat agree Strongly agree

(Original item unchanged)

2) I was provided adequate information about services available to me when I called the crisis line or met with an advocate the first time.

Strongly disagree Somewhat disagree Neutral Somewhat agree Strongly agree

I was provided information about emergency shelter when I first had contact with the program.

Strongly disagree Somewhat disagree Neutral Somewhat agree Strongly agree

I was provided information about counseling services when I first had contact with the program.

Strongly disagree Somewhat disagree Neutral Somewhat agree Strongly agree

3) The time between when I requested shelter and when I was able to receive shelter was adequate

Strongly disagree Somewhat disagree Neutral Somewhat agree Strongly agree

I received shelter when I needed it.

Strongly disagree Somewhat disagree Neutral Somewhat agree Strongly agree

4) The emergency shelter kept me safe

Strongly disagree Somewhat disagree Neutral Somewhat agree Strongly agree

The emergency shelter's security system, policies and procedures kept me safe

Strongly disagree Somewhat disagree Neutral Somewhat agree Strongly agree

5) I was provided adequate emergency food, clothing, and hygiene items when I arrived at shelter.

Strongly disagree Somewhat disagree Neutral Somewhat agree Strongly agree

(Original Item eliminated)

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6) I was given a tour of the facility when I arrived at shelter.

Strongly disagree Somewhat disagree Neutral Somewhat agree Strongly agree

(Original Item unchanged)

7) If I had medical needs upon arriving to the shelter, staff assisted me in getting medical care.

Strongly disagree Somewhat disagree Neutral Somewhat agree Strongly agree

If I had injuries from abuse when I arrived to the shelter, staff assisted me in getting medical attention.

Strongly disagree Somewhat disagree Neutral Somewhat agree Strongly agree

8) A staff member met with me and discussed my safety concerns within my first couple of days here.

Strongly disagree Somewhat disagree Neutral Somewhat agree Strongly agree

A staff member met with me and discussed my safety concerns shortly after I arrived to shelter.

Strongly disagree Somewhat disagree Neutral Somewhat agree Strongly agree

9) A staff member met with me to discuss any special needs I have because of my disability.

Strongly disagree Somewhat disagree Neutral Somewhat agree Strongly agree

A staff member met with me to discuss any special needs I have because of a mental or physical disability.

Strongly disagree Somewhat disagree Neutral Somewhat agree Strongly agree

10) A staff member met with me to discuss any special needs I have because of my ethnicity, culture, religion, or other affiliations.

Strongly disagree Somewhat disagree Neutral Somewhat agree Strongly agree

A staff member met with me to discuss any special needs I have because of my ethnicity.

Strongly disagree Somewhat disagree Neutral Somewhat agree Strongly agree

A staff member met with me to discuss any special needs I have because of my culture.

Strongly disagree Somewhat disagree Neutral Somewhat agree Strongly agree

A staff member met with me to discuss any special needs I have because of my religion

Strongly disagree Somewhat disagree Neutral Somewhat agree Strongly agree

A staff member met with me to discuss any special needs I have because I am used to living in a more rural area.

Strongly disagree Somewhat disagree Neutral Somewhat agree Strongly agree

QUESTIONNAIRE DEVELOPMENT

A staff member met with me to discuss any special needs I have because I am used to living in a more urban area.

Strongly disagree Somewhat disagree Neutral Somewhat agree Strongly agree

11) A staff member met with me within the first couple of days when I arrived to shelter to discuss my immediate needs and concerns.

Strongly disagree Somewhat disagree Neutral Somewhat agree Strongly agree

(Original item unchanged)

12) I was able to identify my own goals and needs, and make a case plan according to these.

Strongly disagree Somewhat disagree Neutral Somewhat agree Strongly agree

I was able to identify my own goals and needs, and made a written case plan with my advocate according to these.

Strongly disagree Somewhat disagree Neutral Somewhat agree Strongly agree

13) My advocate and I updated my case plan weekly as goals were met, or new needs developed.

Strongly disagree Somewhat disagree Neutral Somewhat agree Strongly agree

My current primary advocate and I updated and signed my written case plan regularly as needed.

Strongly disagree Somewhat disagree Neutral Somewhat agree Strongly agree

14) My advocate helped me reach my goals and meet my needs.

Strongly disagree Somewhat disagree Neutral Somewhat agree Strongly agree

My current primary advocate helped me reach my goals and meet my needs.

Strongly disagree Somewhat disagree Neutral Somewhat agree Strongly agree

Other advocates helped me reach my goals and meet my needs.

Strongly disagree Somewhat disagree Neutral Somewhat agree Strongly agree

15) I was able to meet with my advocate as requested.

Strongly disagree Somewhat disagree Neutral Somewhat agree Strongly agree

I met with my current primary advocate regularly and as requested.

Strongly disagree Somewhat disagree Neutral Somewhat agree Strongly agree

QUESTIONNAIRE DEVELOPMENT

16) The individual counseling services provided to me were helpful and supportive

Strongly disagree Somewhat disagree Neutral Somewhat agree Strongly agree

(Original item unchanged)

17) The group counseling services provided to me were helpful and supportive

Strongly disagree Somewhat disagree Neutral Somewhat agree Strongly agree

(Original item unchanged)

18) I received sufficient education on domestic violence in the following areas:

I received sufficient education on domestic violence from the shelter in the following areas:

--How abusers maintain control and dominance

Strongly disagree Somewhat disagree Neutral Somewhat agree Strongly agree

(Original item unchanged)

--The role of society in perpetuating violence against women

Strongly disagree Somewhat disagree Neutral Somewhat agree Strongly agree

Society's role in continuing violence against women

Strongly disagree Somewhat disagree Neutral Somewhat agree Strongly agree

-The need to hold perpetrators accountable for their actions

Strongly disagree Somewhat disagree Neutral Somewhat agree Strongly agree

(Original item unchanged)

-The social change necessary to eliminate violence against women

Strongly disagree Somewhat disagree Neutral Somewhat agree Strongly agree

The changes in laws and public attitudes that are necessary to end violence against women.

Strongly disagree Somewhat disagree Neutral Somewhat agree Strongly agree

19) I was provided referrals to other agencies when my needs could not be met by the program.

Strongly disagree Somewhat disagree Neutral Somewhat agree Strongly agree

(Original item unchanged)

QUESTIONNAIRE DEVELOPMENT

20) The program helped me feel prepared to live on my own.

Strongly disagree Somewhat disagree Neutral Somewhat agree Strongly agree

The program helped me feel emotionally prepared to live on my own.

Strongly disagree Somewhat disagree Neutral Somewhat agree Strongly agree

The program helped me feel financially prepared to live on my own.

Strongly disagree Somewhat disagree Neutral Somewhat agree Strongly agree

21) I have been explained the non-residential services provided by the program that are available to me after I leave shelter.

Strongly disagree Somewhat disagree Neutral Somewhat agree Strongly agree

I know about the services provided by the program that are available to me after I leave shelter.

Strongly disagree Somewhat disagree Neutral Somewhat agree Strongly agree

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ⁱ "Exit questionnaire" refers to a questionnaire completed by a residential client of the Bluegrass Domestic Violence Program upon exit from the residential program.

ⁱⁱ Including the counties: Anderson, Bourbon, Boyle, Clark, Estill, Fayette, Franklin, Garrard, Harrison, Jessamine, Lincoln, Madison, Mercer, Nicholas, Powell, Scott and Woodford.