

## Who Should Set Health Priorities?

Ann R. Johnston Bailey, University of Wisconsin

Identifying specific educational needs is no simple task. Extension professionals have tried various systems of need identification to ensure that the educational programs developed might better meet the needs of the learners. Some experts even say that the skill of need identification is directly related to the success of an Extension professional.

This article deals with a consumer health education project in which the author tries to identify the perceived needs of a target group by using the nominal group process. This example may help you reexamine and clarify the process you use for identifying the needs of the people as well as understanding the nominal group process.

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### Background

Until March of 1973, the Health Sciences Unit of University of Wisconsin-Extension had only occasionally included the health consumer in its educational program planning. However, there had been a growing awareness that both the consumer and provider have roles in improving health status.

With the awareness came the question of whether Extension had any unique potential in consumer health education. Many competent and highly motivated individuals and organizations have been working in the field for years with only limited measurable results. A proj-

ect was funded by Health Services and Mental Health Administration, Public Health Service, to investigate this potential.

The project is being carried out in Bloomer, Wisconsin, a rural community of 3,200 population. The intent is to help the community organize to meet its health education needs in a manner which, if successful, can be replicated throughout rural Wisconsin and elsewhere in the country.

The strengths of a university extension service lie in its rapport with local people, its ability to help them organize their efforts, and its access to expertise within the university to help them. These unique

factors might activate as well as educate consumers to improve their health status.

Consequently, it was predetermined that the project would focus on needs identified by the consumers themselves. There was, however, a reluctance to use traditional techniques of making this needs determination.

The field of health is so broad that surveying would undoubtedly introduce some bias merely by selecting those health areas to be covered and those to be eliminated from the survey instrument. Relying on opinion leaders, voluntary health agencies in the area, or providers of health care seemed too haphazard a method. Virtually every traditional method of needs determination had reasons for not using it.

### **Nominal Group Process**

The Department of Postgraduate Medical Education had been experimenting with a procedure called nominal group process, which offered promise. As structured by Delbecq and Van de Ven,<sup>1</sup> it seemed to offer an efficient and effective method of obtaining consumer perceptions of their own health education needs.

The procedure is simple, but requires strict adherence for maximum results. The optimum number in any group is 5-7, but many groups can meet simultaneously or at different times to obtain volume of input.

A single question is directed to the group; obviously the careful wording of this question is critical. The group is then given 15 minutes to write down their responses to the question—silently and independently, in short words or phrases.

During the next 30 minutes, each response is elicited in round-robin fashion and listed sequentially on flip chart pages. Each item is written as stated by the participant without allowing argument on form or worry about overlap.

The next 15 minutes allows for clarification; this isn't a time for "lobbying" on favorite items, but rather to assure the group understands the intent of the participant who proposed the item.

Next, 10 minutes is spent in voting for priorities. On 3 x 5 cards each participant lists the items he considers most important; 1 card is used for each item selected and a numerical limit is stated. In our project, participants were asked to select the eight most important.

Once this is done, each participant rank orders his cards from highest to lowest priority and the cards are collected and tabulated (in our project a card given first priority was assigned 8 points, second priority 7 points, etc.). Then all points assigned to a specific item are added up to determine the total. A 10-minute discussion is held on the resultant ranking of priorities.

Finally, in another 10-minute silent period, each participant re-ranks those items on the flip chart he or she now considers most impor-

tant. A new set of cards (8 in our case) is completed by each participant, who assigns a value between 0 and 100 to each, with the most important being rated 100. A participant may select items not chosen in the previous steps. These are then collected and the points added up for each item to arrive at the final priority list.

With time devoted to introduction and conclusion, the entire procedure takes less than two and one-

half hours. The result is an extensive list of perceived needs, with a group consensus on which deserve the highest priorities. The group is able to immediately observe the results of its efforts, and a typed priority list is mailed to each participant (See Table 1).

### Results

I participated in a training session conducted by Van de Ven,

Table 1. General health priorities determined by the nominal group process.

Classification	Number of items	Total vote
1. Drug, alcohol, tobacco addiction	58	18,991
2. Health manpower	44	14,984
3. Family living	41	11,525
4. Health care delivery system	45	9,155
5. Emergency care and safety	43	8,764
6. Recreation and exercise	44	7,190
7. Mental health	31	6,432
8. Preventive medicine	42	6,263
9. Economics of health care	27	5,519
10. School health	16	4,346
11. Aging	26	3,751
12. Maternal and child health	23	3,561
13. Diseases and conditions	25	3,221
14. Nutrition and weight control	20	2,249
15. Environmental problems	27	2,148
16. Miscellaneous	17	1,195
17. Unclassifiable	14	1,470
	543*	110,764

\*Equals more than 529 because some items contained more than one concept and were consequently given multiple classifications.

who helped Delbecq develop the procedure. He divided the community of Bloomer into block areas with the intent of forming one nominal group in each area. Each meeting was held in the home of one of the participants, usually in the evening. Initially participants were all volunteers and weren't selected to represent any particular viewpoints.

Thirty nominal group meetings were held between May 4 and July 14, 1972. In all, 225 Bloomer area residents participated, an average of 7.5 per group. They included 95 housewives, 34 students, 28 white collar workers, 26 blue collar workers, 14 retired individuals, 10 health personnel, 10 farmers, and 2 unemployed; 6 weren't identified by occupation.

They listed a total of 529 health needs, an average of 17.6 per group and 2.35 per individual. These were indexed according to the Medical Subject Heading (MESH) classification system of the National Library of Medicine and then various related classifications were combined to give the results presented in Table 1.

This listing by broad categories was useful in setting general priorities. The itemization was also sufficiently definitive to permit setting specific priorities, as indicated in Table 2.

The nominal group process renders three types of items: (1) priority items, (2) referrals, and (3) trash. *Priority* items, in this instance, were those where university leadership and expertise could be

used to seek solutions, perhaps with the cooperation of local residents.

*Referrals* were items best solved locally. In this instance, they were divided into (a) those in which the university staff might help, but would play a minor role in any action and (b) those in which the university had no expertise or help to offer. In both cases, the lists of items were sent to the appropriate local individuals or groups.

In the third category, "*trash*," were items that either had no apparent solution (for example, "high cost of drugs") or weren't appropriate to the project (for example, "too much being paid out on welfare to unwed mothers").

## Discussion

The task was to identify the perceived health education needs of the residents of a small, rural community; the method selected was the nominal group process. It's the subjective view of the project staff, supported by some objective data, that this gave us results far superior to more traditional methods of needs determination.

Results of the nominal groups can be compared with a telephone survey conducted as part of the same project to obtain baseline data. The survey was conducted with 208 area residents, a number comparable to those who participated in the nominal groups.

The first observation is that with the bias of the project staff, combined with inexperience in con-

**Table 2. Examples of specific health priorities determined by the nominal group process.**

Classification	Number of items	Total vote
<b>1. Drug, alcohol, tobacco addiction</b>		
a. Drug abuse	38	15,785
b. Alcohol drinking	17	2,981
c. Smoking	3	225
	—	—
	58	18,991
<b>2. Health manpower</b>		
a. Physicians	27	11,435
b. Dentists	7	1,202
c. All others	10	2,347
	—	—
	44	14,984
<b>3. Family living</b>		
a. Sex education	17	5,097
b. Venereal disease	13	3,507
c. Counselling	6	2,019
d. Family planning	3	511
e. Family, psychological aspects	2	391
	—	—
	41	11,525

sumer health education, questioning would undoubtedly have been done in areas of health other than those of major concern expressed by nominal group participants.

Primarily experienced in professional continuing education, the staff would have emphasized information about specific diseases and conditions; this ranked extremely low on the eventual priority list. Those interviewed probably would have had little opportunity to relate the items that cause them most concern.

Secondly, even when the staff did anticipate needs accurately in the survey, the quality of data obtained by the nominal group process was superior. A prime example is in the top priority of "drug, alcohol, and tobacco addiction." In the phone survey, three questions dealt with drug abuse, one with alcohol drinking, and three with smoking.

The general conclusions to be drawn from survey and nominal group results are the same . . . drug abuse is a major concern, alcohol drinking is a moderate concern, and

smoking is a minor concern. However, from the nominal group process, there are 38 reasonably definitive statements as to why drug abuse is a problem, 17 concerning alcohol drinking, and 3 on smoking.

The data from the telephone survey resulted primarily in “yes,” “no,” or “don’t know” responses with some additional information on knowledge of specific instances of drug abuse and the types and amounts of tobacco used by individuals. The staff received much more guidance on how to approach the problems from the nominal group data.

Perhaps personal interviews would have collected data of equal or greater value if the interviewer wasn’t too restricted by the printed instrument. However, to conduct 225 personal interviews in depth would be a major, costly undertaking compared with the nominal group process.

There were some procedural problems encountered. After the staff training session, five group meetings were held as a feasibility study. It was found that the group leaders—members of the project staff—were combining statements during the round-robin listing on a flip chart. This was corrected and the rest of the meetings were scheduled.

Midway through the 30 groups, the project staff began to experience difficulties in controlling group interaction. A refresher training session was held, and this was corrected. Experience indicates that it’s

easier for an “outside expert” to control the nominal group process than for a local group leader who’s dealing with friends and neighbors.

There remains some doubt that the question used was the most appropriate that could be devised—as previously stated this is critical to success.

The question was devised by the project staff by listing on a blackboard a variety of phrases that expressed the important elements. By trial and error, these were combined in various ways, altered, and revised. The final result was the question: “What more do you need to know about the health of you and your family to be physically and mentally fit?”

Analysis of the nominal group results indicates that the majority of the participants mentally eliminated the words “to know”—the educational implication of the question—and answered in terms of any health related concern they might have. In the view of the project staff, this phenomenon is a strength, rather than a weakness, of either the nominal group process or the way in which it was used.

By interpreting the question in terms of their most critical needs rather than being confined to the goals of the project, the group was a richer source of data. The project staff can now analyze the expressed needs, determine if there is a partial or major educational solution, and act on that basis. For needs that don’t lend themselves to educational solutions in any way, there’s the op-

tion of referring them to the appropriate local groups or individuals who have the interests and capabilities to meet these needs.

The distribution of participants within a group causes some concern. Housewives were most willing to join the nominal groups, and consequently were overrepresented. Midway through the period, it became evident that certain groups weren't being involved in the needs identification. Consequently, specific meetings were planned to involve men, young people, old people, and rural residents. The result still didn't give the ideal balance.

If the sample had to be biased, the fact that housewives were predominant is fortunate, based on responses to two questions in the baseline telephone survey. They indicated that 69.7 percent of the households had 1 member who was most concerned about the health of the family. In 62.8 percent of these, it was the mother.

Consequently, the concerns that are overrepresented in the nominal group results are those of the one type of participant who has the most interest in the subject.

One unanticipated result of the nominal group meetings was that in some instances they may have motivated consumers to act without any subsequent educational program. During the time the data were being processed and analyzed, there were a number of developments in the community that could be directly correlated with needs listed during the meetings. We're now trying to

document whether these occurred as a direct result of the meetings, or perhaps would have occurred anyway.

Finally, it should be stressed that the project staff doesn't consider the nominal group process the ultimate method of needs identification or that methods such as surveying by interview or mail should be discarded. In fact, any method that would identify actual rather than perceived needs would be preferable to any of these. However, in this instance, where a project staff was functioning in a broad area where it had little experience, it apparently proved superior to traditional methods.

## Conclusions

1. The nominal group process, by Delbecq and Van de Ven, is apparently one effective method of determining the perceived health education needs of a small, defined population.

2. Staff training in the procedure isn't a complex task.

3. The nominal group process offers a more flexible structure in needs identification by reducing the possibility of inadvertent staff bias affecting the data.

4. The nominal group process, in itself, may be sufficiently motivational to activate consumers to meet their own health needs in certain instances.

It probably won't be possible to measure objectively the success of the nominal group process in identi-

ifying health educational needs beyond the limited data presented here, since there will be so many variables affecting the success or failure of the project. However, the level of staff satisfaction is sufficiently high to warrant reporting the results to others who face the complex and often frustrating task of needs identification.

One measure will be obtained when educational materials are developed or events scheduled to meet the identified needs. The degree to which residents of the community

respond to these educational exercises will help establish whether a relationship exists between needs established in this manner and a willingness on the part of individuals to take action to meet those needs.

#### **Footnote**

1. Andrew H. Van de Ven and Andre L. Delbecq, "Nominal and Interacting Group Processes for Group Decision Making Effectiveness," *Academy of Management Journal*, XIV (June, 1971), 203-12.