

## **TRIAGE : A new group technique gaining recognition in evaluation**

Marie Gervais, Ph.D.,  
Geneviève Pépin, doctoral student, M.Sc., erg.  
Laval University  
Québec, Canada

### **Introduction**

The study of new evaluation methods is necessary for the scientific advancement of the field of program evaluation. (Stufflebeam, 2001). In fact, evaluators must remain on the cutting edge of alternative methods, testing their strengths and weaknesses thus enabling these techniques to be included in their evaluation procedures. These methodological innovations will allow the development of more personalized protocols and procedures, which are better adapted to the reality of the program to be studied. (Stufflebeam, 2001). Currently, several data collection methods based on group dynamics are in use. The *Technique for Research of Information by Animation of a Group of Experts* (TRIAGE) (Plante & Côté, 1993) is one of the lesser-known methods though it has shown great promise. It is the opinion of the authors that TRIAGE represents an answer or more precisely a complement to the Delphi technique, the Nominal Group Technique (NGT) and to the Focus Group (Delbecq, Van de Ven & Gustafson, 1975; Morgan & Krueger, 1998). Principally developed in a French-speaking environment in the context of education, this technique is being used more and more in program evaluation processes in the health care field. This presentation will attempt to define TRIAGE while drawing comparisons to similar techniques such as Delphi, NGT and the Focus Group technique. Subsequently, examples of the use of TRIAGE for research purposes as well as in clinical settings will be presented.

### **Definition**

TRIAGE is a research technique founded on the attainment of a group consensus. It is a structured and inductive method of data collection comprised of a series of formal, successive steps (Gervais, Pépin & Carrière, 2000). The first step is one of preparation, followed by an individual production. The final step consists of a group sessions based on participant interaction and accompanied by important visual support. The objective of TRIAGE is to supply, in a quick and efficient manner, first hand information for decision-making and for the development of more sophisticated research tools.

### **Procedures**

As is the case for Delphi, the NGT and focus groups, TRIAGE starts with a preparation phase. In this step, researchers pay particular attention to the meaning, the terminology and the format of the research question, which will be subsequently validated (Plante & Côté, 1993). Also involved in this step is the recruitment of the individuals who will form the group of experts. Such a group consist of 6 to 12 participants who must be representative of the field being studied. They should be recognized by their colleagues for their credibility, their competence and their ability to provide valid information. Finally, the preparation phase serves to produce documents which will be transmitted to

participants, containing among other items, the research question, definitions of key concepts, as well a description of the TRIAGE procedures (Plante, 2001).

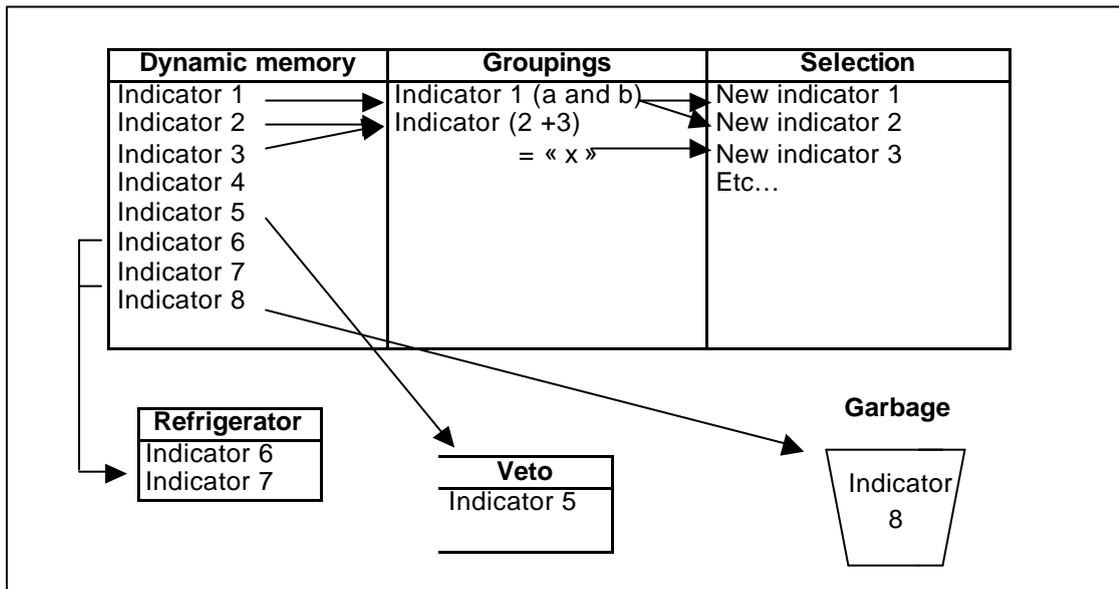
The following step is known as the *individual production*. It begins once the participants have received the mailed documents. During this phase, the participants must provide a maximum of five statements to the question. Plante and Côté (1993) called these statements "indicators". Once identified, the indicators are written on the answer sheet and sent back to the research team. At this stage, TRIAGE resembles the Delphi technique. Both techniques involve personal reflection and the use of questionnaires to start the data collection process. However, the similarities end here. In TRIAGE, once the researchers have received the completed answer sheets, they compile, number and transcribe each indicator onto a different card. This process is called the construction of the "dynamic memory" (Plante & Côté, 2001). This expression is used because all indicators will remain stored away until the later period of dynamic and interactive production (Plante 2001). It should be emphasized that during this step, no indicators are modified or analysed.

Once this step is completed, the group of experts is brought together for a period of *interactive production*. In this step of the process, participants are called on to, by consensus, identify the most important and pertinent indicators to the research question among those brought forth in individual production. This step relies on the fact that interaction between participants evolve according to a pre-established procedure and that it is facilitated by a group leader who is competent in group dynamics and group management. At this stage, TRIAGE resembles the focus group technique in that exchanges between participants are essential and valued and differs from the NGT where exchanges pass exclusively through the control of the group leader. Also, information gathered with TRIAGE is immediately validated thus avoiding verbatim transcription and content analysis as is necessary with information gathered from a Focus Group. The interactive process of TRIAGE relies heavily on a prominent visual aid. A wall of the room is used and divided into three main sections: *memory*, *groupings* and *selection* as indicated in Figure 1. The memory section is, in fact, a bank of all indicators gathered in the previous step, which have been numbered and transcribed by the researcher. As group interactions help the selection process evolve, cards are moved from one section to another, from left (memory) to right (selection).

Once the group leader confirms that all participants understand the significance of each indicator, the discussion begins. The indicators which have been retained for their relevance are transferred to the *groupings* section. If, for whatever reason, participants agree that a particular indicator should be eliminated, it goes directly to the *waste paper basket*, an other visual aid. Next, the indicators which have been transferred to the *groupings* section are discussed. Those which have a similar significance are grouped together and conserve the most accurate title or a new, more appropriate one (Gervais et al, 2000). Similarly, if an indicator contains more than one idea, it is divided up and renamed so that each only contains one concept. Finally the discussion may lead to the proposal of new indicators by the participants.

If too much uncertainty surrounds certain indicators, they are temporarily removed from the process to be further examined at a later time. Plante and Côté consider that these indicators have been “stored” and kept for later use. Gervais (1996) used the analogy of a *refrigerator* where the indicators are kept fresh to be reused later. These removals allow to reduce group tension and continue working while avoiding a dead-end (Plante, 2001). If, after a second examination, a consensus is still not obtained, the indicators can be placed in a fifth section, the *veto*. Later, they are submitted to external, recognized experts who are familiar with the TRIAGE process.

**Figure 1. The step of interactive production**



Finally, the most relevant indicators are placed in the *selection* section. This is the final choice of the participants. According to the needs of the study, the indicators can then be organized in order of priority. In this way, the group members have worked by successive approximations leading to a consensus on the best indicators with respect to the research question (Plante & Côté, 1993).

### **Inherent Strengths and Weaknesses of TRIAGE**

As with all data collection tools, TRIAGE has its advantages as well as its weaknesses. First, the rapid implication of participants is a strength of TRIAGE (Plante, 2001). Then, the visual aid, unique to TRIAGE, which shows the evolution of the process as well as the dynamic character of the interactive production are also other advantages of this technique. Another advantage resides in the fact that the information obtained in the individual production phase is validated in the interactive production (Plante, 2001). Furthermore, the exchanges allow the group to explore and enrich the discussions. Finally, TRIAGE is economic, quick, requires little material and produces data which are immediately usable (Gervais et al, 2000; Plante, 2001). TRIAGE presents, however, three limits. First, the quality of the information obtained is directly related to the competence, the representativeness and the credibility of the participants. The choice

of these participants is therefore of paramount importance. It must be carried out rigorously and based on well-defined selection criteria. Second, the group leader must be able to manage group dynamics, to make sure that all participants are involved, while stimulating discussion, managing conflicts and controlling and avoiding sterile debate (Gervais et al, 2000). Third, it can be difficult for participants to maintain an adequate concentration level throughout the entire *interactive production* process. Despite the fact that discussions are often stimulating and tend to generate new ideas, such a process can be nevertheless tiresome (Plante 2001). This being said, if the users keep in mind these limits and put in place strategies to counter them, TRIAGE remains an effective technique which is promising and complementary to other recognized techniques.

### **Examples of Applications of TRIAGE**

TRIAGE has been used in a diversity of settings and contexts with a variable number of participants. Some examples will now be presented. The TRIAGE technique has been used in the context of a study aiming to identify the best indicators of effectiveness for each of the five dimensions of a program, as conceptualised by Gervais (Gervais, Plante and Jenrie, 1999). In this study, 53 participants divided into six groups were recruited among decision-makers, workers and users of programs administered by two health and social services organisations in Quebec, Canada. The *individual production* phase yielded 820 propositions of indicators which were tabulated to obtain five banks of indicators, one for each dimension of the conceptual frame. TRIAGE allowed for the selection of the 20 best indicators of effectiveness applicable to programs operating in this context. Also, TRIAGE has been applied in an exploratory process concerning the functioning of a mental health program in a general hospital in the province of Quebec. A questionnaire sent to members of the personnel yielded 343 proposed indicators. TRIAGE identified indicators of functioning as well as ways to improve working conditions. Recently, TRIAGE was adapted to fit the specific needs of a study in the rehabilitation field. The study was attempting to increase the validity of a measurement tool for the social participation of a clientele with physical disabilities (Fougeyrollas et al, 1998). Three groups of clinicians were formed (29 participants) to judge the relevance of 58 items forming the test as well as their level of difficulty. The results obtained by the expert clinicians confirmed those obtained by Rasch statistical analysis applied on data obtained from over 300 users (Smith, 1997).

From a clinical perspective, TRIAGE has been used as a decision-making and problem solving aid with psychiatric in-patients receiving occupational therapy services. This technique is used early in the rehabilitation process to identify treatment goals, in periodic evaluations and to verify whether these goals were reached prior to patient discharge. In this case, the main adaptation is in the *interactive production* step where interactions are limited to those between the patient and the therapist. These interactions are however essential for the identification of each one's roles as well as the implication required in the rehabilitation process. In this example, indicators which are not related to occupational therapy but are judged to be significant in the rehabilitation process are placed in a *suitcase* which the patient carries to symbolize the pursuit of the process.

## Conclusions

In conclusion, TRIAGE is a tool which places the participants, whomever they may be, in a role of reflection and of action, yielding information which is representative of the reality experienced by these expert participants in their fields. This technique is flexible and has proven its adaptability to the different contexts in which it has been applied. Although TRIAGE bears some similarities to other data collection techniques such as the Delphi technique, NGT and the Focus Group (Delbecq, Van de Ven & Gustafson, 1975; Morgan & Krueger, 1998), it also contains some interesting complements. In fact, the *interactive production* step allows access to a deeper level of information and to open up data collection while keeping tabs on the many aspects which can have a determining effect on the evaluation process. Furthermore, information coming from TRIAGE is validated through the course of the group interaction as it evolves toward a consensus and is therefore immediately applicable. An increased usage of TRIAGE in various program evaluation processes will help in demonstrating the methodological characteristics of this most promising technique.

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