Applying the nominal group technique in an employment relations conflict situation: A case study of a university maintenance section in South Africa

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ABSTRACT

After a breakdown in employment relations in the maintenance section of a higher education institution, the authors were asked to intervene in order to try and solve the employment relations conflict situation. It was decided to employ the Nominal Group Technique (NGT) as a tool in problem identification during conflict in the workplace. An initial investigation of documentation and interviews with prominent individuals in the organisation was carried out. The NGT was then used in four focus group discussions to determine the important issues as seen by staff members. The NGT facilitates the determination of shared perceptions and the ranking of ideas. The NGT was used in diverse groups, necessitating adaptations to the technique. The perceived causes of the conflict were established. The NGT can be used in a conflict situation in the workplace in order to establish the perceived causes of employment relations conflict.

INTRODUCTION

Conflict in the workplace is a challenge for employment relations and often leads to non-statutory attempts at resolution. In this article the authors report on the use of the Nominal Group Technique (NGT) in an employment relations setting in a non-academic section of a South African university. Although the NGT is most commonly used in educational and health research settings, it was used with success to identify the causes of conflict between black African workers and mainly white skilled labourers. As theories of conflict and conflict resolution are usually based on empirical studies, insight gained from the use of the NGT in a relatively unusual setting may indicate its possible applicability in new settings.

Labour and employment relations in South Africa reflect the divisions and consequential conflicts in this transforming society. South African organisations are well acquainted with the problems caused by a high level of conflict due to socioeconomic and political differences as well as diversity of values and orientations (Van Aarde & Nieumeijer, 1998). White people used to dominate politically, economically and socially, until the political transformation of 1994 introduced far-reaching changes, including a focus on deracialisation and the restructuring of work (Buhlungu & Webster, 2006; Moleke, 2006). In the tertiary education context, the need to transform South African universities extends not only to the improvement of access of the previously excluded population, but also to the need to increase the population diversity in academic and non-academic settings. Especially where racial, social and cultural differences are experienced as significant, these processes often give rise to tension in employment relations and may carry identity dimensions based on class and 'race'. The Labour Relations Act of 1995 regulates the balance of power between employers, employees and the state (Bendix, 1996). The Act provides for a variety of dispute resolution mechanisms: bargaining councils; statutory councils; the Council for Conciliation, Mediation and Arbitration; the Labour Court; and non-statutory, private, voluntary, informal mechanisms (Du Toit, 1998 *et al.*; Swanepoel, 1998; Van Aarde & Nieumeijer, 1998).

A useful definition of conflict is provided by Anstey , writing about conflict management:

Conflict exists in a relationship when parties believe that their aspirations cannot be achieved simultaneously, or perceive a divergence in their values, needs or interests (latent conflict) and purposefully employ their power in an effort to eliminate, defeat, neutralise, or change each other to protect or further their interests in the interaction (manifest conflict).

(Anstey 2002, p. 6)

Kriesberg (2003, p. 2) puts it very simply: '[A] social conflict arises when two or more persons or groups manifest the belief that they have incompatible objectives'.

Conflict in employment relations often exists between managers, supervisors and employees and can be attributed to several causes, broadly categorised as communication, structure and personal behaviour (Bunker & Rubin, 1995; Deutsch, 1973; Edwards 1986; Langan-Fox, Cooper & Klimoski, 2007; Rahim, 1986; Van Aarde & Nieumeijer, 1998). Conflicts are normal in interpersonal and structural relationships and may have positive (constructive) consequences when they contribute to better decision making (Kriesberg, 2003; Robbins, 2003), but when conflicts escalate they may become negative (destructive) and a threat to an organisation's existence (Nelson & Quick, 2003).

Problem-solving workshops have become a familiar technique for improving relations between co-workers. This is probably why the human resource department at a local university requested that the researchers (a social anthropologist and a sociologist) try and resolve an employee relations conflict situation in a section of maintenance service workers by this means. The nature of the conflict situation was described as a breakdown in relations between the 'supervisors' (managers and skilled labourers) and the workers. Previous attempts at resolving the conflict situation by means of a workshop facilitated by an external consultant had apparently exacerbated the problems in the

section. Involving the researchers seems to have been a last-ditch attempt by management to resolve the issues internally.

Facilitators and mediators are usually selected on the basis of their perceived impartiality and acceptance to both sides (Anstey, 2002; Bendix, 1996; Robbins, 2003). As a first step, the researchers ensured that all parties to the dispute, namely university management, employees of the maintenance section and the trade union representatives, accepted their involvement and were prepared to co-operate.

It was felt by both researchers that an initial assessment was needed in order to determine the root causes of the problem, something they felt more secure about in the light of their disciplinary experience and knowledge. Without such an investigation, they felt that the facilitation would be very difficult, as the facilitators would be at the mercy of the social dynamics between the two polarised groups and would not be able to establish the underlying causes of the conflict situation that needed to be handled (Van Aarde & Nieuwmeijer, 1998).

Mediators often begin their intervention in a conflict situation by using 'reflexive tactics' to establish rapport, build their own power base and discover the issues behind the conflict (Anstey, 2002). When the initial interviews with the key stakeholders had been concluded, it was decided to employ the NGT during four focus group discussions. The NGT would be applied to separate groups of workers and skilled labourers in order to determine their views on the nature of the problems experienced in the maintenance section as well as on possible solutions to these problems.

The main aims of this article are to

- illustrate the use of the NGT in a non-academic employee relations conflict situation at a higher education institution
- compare the use of the NGT in diverse groups (white skilled labourers, black workers)
- discuss the adaptations that had to be made during the implementation, and
- make recommendations based on this experience.

RESEARCH DESIGN
Research approach
The investigation commenced with a study of documentation made available by the parties involved as well as semi-structured interviews conducted with a series of key individuals. These individuals were either employed in the maintenance section or played an important role in its immediate context. They included black African workers (including union representatives), mainly white supervisors, a member of the Management Committee of the university and staff members of Personnel Services. The interviews provided a basis for a more representative consultation process.

These initial investigations revealed a serious and high level of polarisation and conflict in the maintenance section, which had built up over time. This should be understood within the context of various factors and events that could not be attributed to the actions of any of the current members of the section. They however bore the brunt of the consequences of these factors and events. It seemed that the tension had escalated in the previous three years, probably due to the effects of rationalisation in the section and the fact that promises regarding training had not materialised as expected. In the recent past, the staff situation in the section had changed tremendously, as many skilled labourers had left the university and were not replaced. This had placed a very heavy burden on the remaining staff, with the former black African 'tool boys' (level C3 workers, who are service workers) being allocated more responsibilities, without the necessary training and support that was needed. The understaffing in the section, coupled with the aging of the university facilities and a substantial increase in the number of

users of these facilities, had led to a situation characterised by a shortage of skilled staff and insufficient supervision of workers performing tasks that they were not fully qualified to do. The decreased availability of university resources, increased threats of pending changes towards outsourcing, the knowledge that outsourcing had already taken place at other universities and the layoff of staff in preceding years had all contributed to an atmosphere of tension and insecurity in the section.

Another stakeholder in the issue was the trade union that was involved on the side of the workers. It was important to gain the cooperation of the trade union representatives at each stage of the process that the facilitators followed. This was done by means of a meeting with prominent union members in which the intended process was discussed in detail. Although sceptical, the shop steward and the leadership of the union at the institution agreed that the process be given a fair chance.

Involving the facilitators in the resolution of the conflict situation at such a late stage of its development meant that they were confronted with a high level of polarisation between the two groups, with dominant personalities taking leading positions on both sides, combined with an intense distrust of the value of any process aimed at conflict resolution. Therefore, the methodology to be used by the researchers was of the utmost importance if the cooperation of the polarised parties was to be secured. Differences of class, levels of education and 'race' between the role-players complicated matters, including in terms of levels of trust and difficulties in communication. These social differences also impacted on the perceptions and relationships emerging between the researchers and the workers.

Research strategy
It was decided to conduct four focus group discussions with staff members of the section during which the NGT would be used in order to determine the priorities of the staff members employed in the section with regard to their perceptions of the problems and the solutions to these problems. The intention was to use the NGT as part of the investigation by the researchers, following on from the semi-structured interviews and the analysis of documents. This investigation was to lead to recommendations on which the management of the university was expected to act.

Research method
Sampling
The following groups were identified for the NGT focus groups:

- The workers in the departments of plumbing, electricity and air-conditioning
- The workers in the departments of welding and painting
- The workers in the department of carpentry
- The skilled labourers.

The size of the four groups that were constituted for the NGT process was very similar, averaging eight participants per group, as is recommended by the literature (Delbecq, Van de Ven & Gustafson, 1975). The groups were 'natural', similar to the work of Gepson, Martinko and Belina (1981), in the sense that they consisted of people who usually worked together and had a similar status in the organisational hierarchy. Group 1 consisted of a combination of workers in the fields of electricity, air-conditioning and welding. Group 2 was a combination of painters and the rest of the welders. Group 3 was the most homogeneous, as it was composed of a work team, namely the carpenters. Group 4 included the various skilled labourers and the secretary of the section, who also shared much as colleagues and who were the supervisors of the workers in groups 1 to 3. All the workers were black Africans, whereas all the skilled labourers and the secretary were white people, with the exception of one coloured person. As indicated

above, the cultural and social differences between the groups of (a) workers, (b) the skilled labourers and (c) the university management were considerable. The staff included only one woman, the secretary working with the skilled labourers. The composition of the groups worked well for the purposes of the facilitators, as the aim was to involve everybody in the process and to focus on information and perceptions, with the avoidance of confrontation, in the phase of the intervention during which the NGT was used.

Data-collection method

The NGT was used because it is known as a useful tool to minimise individual domination of group meetings and to facilitate the determination of shared perceptions (Chapple & Murphy, 1996; Delbecq & Van de Ven, 1971; Delbecq *et al.*, 1975; Gepson *et al.*, 1981; Lloyd-Jones, Fowell & Bligh, 1999; Lomax & McLeman, 1984; MacPhail, 2001; Moore, 1987; Skibbe, 1986; Taffinder & Viedge, 1987; Viedge, 1988). Anstey (2002) mentions that the NGT is particularly useful for finding solutions to a problem in a conflict-resolution process where subgroups are involved.

The technique is described as follows by the Center for Rural Studies at the University of Vermont (1998):

> *Research in group dynamics indicates that more ideas are expressed by individuals working alone but in a group environment than by individuals engaged in a formal group discussion. The Nominal Group Technique is a good way of getting many ideas from a group. It has advantages over the usual committee approach to identifying ideas. Group consensus can be reached faster and everyone has equal opportunity to present their ideas.*

(CRS 1998, n.p.)

The technique guarantees that each idea has an equal chance in the establishment of the perceptions of the group. Furthermore, the technique facilitates an unbiased ranking of the ideas that were generated by the groups.

The NGT is a tool used in aiding judgemental decision making where

> *[t]he central element of this situation is the lack of agreement or incomplete state of knowledge concerning either the nature of the problem or the components which must be included in a successful solution.*

(Delbecq *et al.*, 1975, p. 5)

Its main aim is solving problems or generating ideas and it is less useful as a technique for conducting routine meetings or resolving conflicts. It should be stated at the outset that the use of NGT by the facilitators focused on identifying the issues that motivated the lack of co-operation and the atmosphere of distrust and hostility that existed in the section as well as possible solutions to these issues.

Recording of data

Delbecq *et al.* (1975) summarise the NGT process in terms of four steps:

1. Group members start off by writing down their ideas with regard to the issue in silence.
2. Each group member takes a turn to provide one idea at a time. The essence of each idea is recorded on a flip chart. This process continues until all the ideas are exhausted.
3. The recorded ideas are discussed in order to clarify and evaluate them. Ideas that are sufficiently similar can also be combined at this stage.
4. The group members vote individually on the importance of each idea. The group decision is calculated by means of rank ordering or rating.

Using the NGT to structure the discussion in the focus groups had particular advantages when attempting to identify the major issues and solutions. It enabled the facilitators to balance the socio-emotional dimension of the group situation with its

focus on accomplishing the task successfully. The inability of dominant members to dictate the final outcome implies that independent thinking is encouraged and that a diversity of ideas is tolerated as a result of the minimisation of emotion. Members get to know each other and also become more familiar with the task. The technique was therefore particularly useful in a context that was highly charged in emotional terms and where the impact of dominant members on both sides of the dispute was clearly visible from the beginning.

One of the main limitations of the use of the NGT in this context is its requirement that participants are functionally literate in the particular language in which the focus group discussion is conducted.

FINDINGS

The procedure followed when employing the NGT with the four focus groups was based on a South African training manual (Viedge, 1988), which provides documentation such as overheads and forms to be used during each step of the NGT process. A further benefit of the manual is its clarity in terms of the description of the steps of the technique.

Preparation for the NGT process: different expectations

The preparation for the process involved the formulation of an NGT question, the scheduling and practical arrangements for the focus group meetings, as well as obtaining the help of an interpreter (a female black African clerk from the human resource department with academic training). Where needed, translation into African languages took place and assistance was given to those workers who could not write in order to record their views as well. The main focus of the discussion was on the problems in the section as well as their causes.

The authors acted as facilitators during the meetings, taking turns in leading the group through the various steps of the NGT process. During the word of welcome the facilitators explained that it was their purpose to involve all the members of the section in the focus group discussions. They also indicated that a workshop aimed at addressing the problems in the section would be held at a later stage. The aim of the focus group meeting, they explained, was to identify the problems in the section and to discuss possible solutions. They also explained the NGT process, using overheads to describe each step. They emphasised the fact that the NGT process would give all the ideas that would be generated an equal chance to be considered; that some parts of the process involved a discussion and other parts were based on individual work. They then handed out the forms that were to be used and wrote the question that was to be considered on a white board. The question was: 'What are the reasons for the lack of co-operation in this section?' The lack of co-operation in the section was understood by the facilitators as a manifestation of an underlying employment relations conflict situation. The facilitators also explained the steps in the process to the participants at each stage of the NGT process.

Right at the outset it became apparent that while the facilitators were focusing on the NGT process as a research tool and wanted to use the process to obtain more certainty about the extent of the perceptions and feelings in the section, the workers were approaching the process from a completely different position. They were initially quite sceptical about the focus group meetings and about the intervention process in its entirety. It was said, for instance, that the university had spent a lot of money on the process in the past without achieving anything. They were therefore not convinced that the process should be trusted this time. One of the workers said that meetings had taken place in the past as well, but nothing positive had resulted, therefore 'to hold such meetings was like watering a garden with a leaky can'. He reckoned that he 'would probably go on pension without having seen any positive change'. It was

also a concern among the workers whether the ideas generated at the meeting would have any effect on the ultimate outcome of the process. The facilitators could only answer that they were positive about the process and were spending time on it in order to find solutions. The workers who raised these questions nevertheless took part in the process in a very co-operative way. They understood that the use of the interviews and the NGT focus groups was part of a problem-clarification process and that the facilitators would hand the results and recommendations over to management for action.

Adapting the NGT for the labour relations intervention

The usual steps of the NGT process were followed, with some modifications. The first adaptation to the specific situation was the use of an interpreter in the three groups that contained the 'black African' workers, similar to what Parker (1975) reported about the use of the NGT in Micronesia. The interpreter used Tswana, as this accommodated the language needs of most of the workers. As the interpreter was more conversant in English than in Afrikaans, the facilitators used English during the focus group meetings composed of the black African workers. Some of the workers wrote their ideas down in their own languages, which the interpreter translated during the next step.

Another adaptation had to be made during the first step in the NGT process, which involved the silent generation of ideas by the participants and its recording on paper. About 40% of the workers were illiterate (nearly all in Group 2) and could therefore in many cases not record their ideas themselves. In each case, those workers were assisted by the interpreter or one of the facilitators (when English or Afrikaans could be used). This assistance prolonged the process and led to a situation where some participants had to wait for the others to be helped. In some cases, the participants started to help each other with the recording of their ideas. The need for assistance with the recording of ideas led to a situation in which it was impossible to retain silence in the group, as is required in the NGT process. This of course opened up the possibility of manipulation and influencing by dominant members. However, the facilitators are fairly confident that they managed to limit any such attempts by intervening to stop any discussions when they started.

After the initial individual recording of ideas on the nature of the problems in the section, each individual participant had the opportunity to present one idea at a time, which was then recorded on flip charts. The ideas that were offered as reasons for the lack of co-operation in the section were then discussed in the group and, where possible, the number of ideas was reduced by subsuming ideas under more comprehensive categories. In the next step, ranking and prioritising, another adaptation to the normal procedures of the NGT process took place. The complex voting procedure was found to be too cumbersome for the specific NGT situation in two of the groups, as every step had to be translated and many of the workers could not read or write. The voting, or the determination of the ideas considered by the group to be the most important, was therefore done by raising hands and counting the number of votes per idea. Each idea was read out, a vote was taken and the result determined which idea was considered as the most important for the group. Each time the winning idea was eliminated and a next round of votes was taken for the remaining ideas. Despite this adaptation, some participants still got it wrong and voted twice in the same round, for instance. This can be ascribed to several causes, including the artificiality of voting for ideas in a group situation during several rounds, the difficulties of communication due to the translation of what was said and the difficulty involved in making a choice between ideas that were all considered to be important. Nevertheless, the results of the different NGT meetings were sufficiently complementary to regard the outcomes as a reflection of their real concerns.

The second part of each focus group meeting was dedicated to a discussion of the possible solutions to the problems in the section. In this discussion the problems that had been identified in the NGT part of the meeting were mentioned and solutions to them were discussed in focus group style. The solutions that were suggested were recorded on flip charts and formed a valuable input into the facilitators' understanding of the causes for the conflict in the maintenance section. They also contributed significantly to the planning of the workshop that was to follow.

Minimising group dynamics during the NGT process

Although the NGT is supposed to minimise the influence of the researcher and of group dynamics, as it was 'designed to receive input from all members, and in so doing to avoid the potential dominance of the interview by more vocal members' (MacPhail, 2001, p. 164), the dominance by some participants was clearly present in some of the focus groups. The literature also reports that group pressures do influence participants' contribution to the process, for instance in the case of students' evaluation of teaching and learning (Chapple & Murphy, 1996). In Group 1 it was evident that one of the workers was the dominant person in the group and that he was influencing the NGT process, especially in the first phase, when ideas were to be written down in silence. His relaxed body language and his saying out loudly what he was writing down in all probability influenced the other participants. He was one of the workers who had confronted the supervisors about problems in the section and was therefore a leading figure in the employee relations conflict situation. This difficulty in implementing the NGT according to the rules is also echoed by Lomax and McLeman (1984, p. 187) and by Chapple and Murphy (1996, p.151): '[T]he no discussion rule is essential if peer conformity pressures are to be reduced and in practice this is difficult to enforce'. In another group of workers the atmosphere of the NGT focus group was tense when the process started. The leader of the workers, also a labour union shop steward, introduced himself by getting up and addressing the meeting shortly. During the NGT process, when the reasons for the lack of co-operation in the section were discussed, some of the workers used the opportunity to make strong statements about the problems they had experienced with a white supervisor. They seemed to make strong short speeches to convince the other workers and the facilitators that the situation was serious. Again, this problem seemed to diminish when the NGT process proceeded and a more relaxed atmosphere for discussion became possible.

The more confrontational and sceptical position taken by some of the leading workers seemed to change towards co-operation in the NGT process that the facilitators were implementing, possibly due to the attempt the latter made to be as impartial as possible. In one of the groups it even occurred that some of the participants wrote down the results of the analysis of the NGT process for their own purposes. For them the points that were raised and the terminology used were probably a basis for further lobbying. This was an interesting use of the results of the NGT, something that was foreseen by the designers of the technique, who stated that the output of NGT meetings was used by professionals, but that it could also be used by the community concerned to make sure their needs were met (Delbecq *et al.*, 1975).

The positive influence of the NGT process on at least some of the participants, in terms of their commitment to finding a solution to the problems in the section, was also indicated by another event. One of the participants stayed behind after the NGT meeting and gave the facilitators valuable insights into the relationships in the maintenance section. The NGT meeting seemed to have facilitated the volunteering of these views.

Identification of problems

The results of the NGT and the discussion in the focus groups

TABLE 1
Ranking of the ideas generated by the NGT focus groups on the question: 'What are the reasons for the lack of co-operation in this section?'

GROUP 1	GROUP 2	GROUP 3	GROUP 4
• Racism and discrimination	• Racism and discrimination	• Racism and discrimination	• Promises are not kept with regard to training and salaries
• Lack of training	• Post structure and job description	• Lack of training	• Lack of communication and consultation
• Treatment by the supervisor	• Lack of communication	• Lack of management skills	• Discipline and intimidation
• No understanding	• Poor treatment by the supervisor	• Lack of communication	• Post structure and job opportunities are unclear
• Lack of tools	• Lack of training	• Lack of respect between black and white people	• Poor attitude to work
• Lack of communication and co-operation		• Need for a telephone	• Personnel Services and management not sufficiently involved
		• Personnel Services not sufficiently involved	• Inconsistency of orders
		• Poor time management	• Interpersonal relations are weak
		• Access to machines	• Unpleasant physical working environment
		• Lack of rules about private work	• Conflict about the exclusive use of the tearoom

after the NGT process proved to be very useful for the process of facilitation. The facilitators were able to identify the problems in the section as ranked by the workers and skilled labourers. This enabled the facilitators to compare these views with the understanding they had gained from individual interviews and from the scrutiny of the available documentation. They were able to prepare the final workshop on the basis of this knowledge and eventually report to management in terms of the problems and their possible solutions.

The list of the problems in the section, as reflected in Table 1, was the result of the NGT process. It is of interest to look at the way in which the ideas in Table 1 were often a combination of several points raised by individuals during the first round of idea generation. Group 1, for instance, initially listed the following ideas:

• Racism and discrimination
• No communication
• No co-operation between supervisors and workers
• Supervisor does not handle workers well
• No understanding
• Working under pressure
• Sick leave denied
• Lack of training
• Unfair treatment with regard to injuries
• Lack of tools
• Promises not kept
• No respect for others' views
• Transport problem not considered when arriving late for work
• Lack of transport to get to workplace
• Supervisor not truthful about clients' views about the work done.

In the discussion of these ideas the group decided to reduce these 15 ideas to 6, as listed in Table 1. For instance, various instances of the way in which a supervisor was perceived to treat the workers unfairly were combined into one idea, namely 'treatment by supervisor'. Group 2 generated 10 ideas that were reduced to five, Group 3 generated 11 ideas that were reduced to 10, and Group 4 generated 26 ideas that were reduced to 11. The facilitators played an important role in the process of idea combination, by pointing out possibilities for the combination or subsuming of ideas that had been offered by the members of the groups and that were logically linked. The facilitators ensured that these proposals for the reduction of the number of ideas were accepted by the group. Nevertheless, it is possible that the intervention and facilitation removed some of the tendencies to blame specific individuals and tended to move away from polarisation, by combining ideas that were centred on specific instances and examples into more general categories. A good example of this process occurred when the ideas generated by the skilled labourers were reduced. The following ideas involving the attitudes of the workers had been listed in the initial round:

• Attitude towards work by the workers
• Work times not adhered to
• Workers who regard themselves as being untouchable
• Workers do not accept discipline
• Workers are not proud of their work
• Instigation by one individual
• Lack of motivation among workers
• Lack of responsibility for tools among workers
• Refusal to carry radios
• Refusal to be accountable for spending of time
• Lack of self-control
• Intimidation
• The informal supervision by skilled labourers is not accepted.

All 13 of these ideas were combined into two in the final list, namely:

• Problem with discipline, intimidation and instigation
• Weak work ethic among the workers.

With hindsight, looking back at the total flow of the facilitation process, the facilitators may have tried to influence the NGT process towards less confrontational attitudes, given the polarised state of the conflict at that stage. By so doing, they could have contributed, unwittingly, to the eventual discharge of confrontational emotion that occurred at the end of the workshop, which followed a few weeks after the NGT focus group discussions. The facilitators, as outsiders to the section, may have underestimated the strong feelings of polarisation in the section, especially at the initial stages of the process. The implication of this is that the NGT process can be charged with emotion and with strong indications of strained relations, especially in a case like the one described here, where the NGT is part of a conflict-resolution process.

When the quantity and contents of the ideas from the various groups are compared, interesting differences and similarities can be observed. It can be seen from Table 1 to what extent the views of the worker groups (groups 1 to 3) were similar in content and in ranking. The group containing the strongest leaders of the workers and with only one illiterate member (Group 3) generated the most ideas. Group 4 generated even more ideas, again possibly related to the higher level of training that was represented in this group. It is evident that the problems that were identified and ranked by Group 4 (the skilled labourers) had much in common with the views expressed in groups 1 to 3, but were based on different perceptions and experiences. The most glaring difference was that the groups composed of black African workers put racism and discrimination at the top of their list, whereas these terms were not even mentioned in Group 4 (consisting of white people and one coloured person). Group 4 did refer to the strained relations in the section indirectly, by mentioning reasons such as 'interpersonal relations are weak' and 'the tearoom'. However, not identifying racism and discrimination as a problem was probably directly due to their own social position in the racial caste system that seemed to persist in this working environment. One indication of the

racial caste stratification was found in the fact that only white people and one coloured person were supervisors and that the use of three separate tearooms underlined the separateness of the racial categories.

Some of the ideas generated in the NGT groups reflected the needs of the specific groups. Group 1, for instance, had a problem with a lack of tools, which led to continuous negative interaction with their supervisor. Similarly, participants in Group 3 had a need for a telephone in order to organise their work more effectively. Members of this group were also very frustrated about the lack of rules about private work that was allowed for the supervisors but seemingly not for the workers. Group 4, again, experienced resistance by the workers to the problems in the section as 'poor attitude to work' and as a problem with 'discipline and intimidation', reflecting their position as supervisors. It is clear, then, that the perceptions, work situation and experiences of the members of each group very strongly influenced the way that problems were identified. Particularly, there was a division between the supervisors (skilled labourers) and the workers in terms of the identification of the most pressing problem. On the other hand, there was consensus between the various groups in terms of their blaming of the human resource department and of management for some of their problems. This referred to unkept promises, the lack of training opportunities, problems with the structure of the posts in the section and a lack of interest by management in the conditions and problems in the section.

DISCUSSION

It is generally accepted that the NGT is a useful tool in facilitating employee contributions to improvements in their work situation (Taffinder & Viedge, 1987). This article illustrates that the technique can also be used successfully to explore employee perceptions of the causes of a lack of co-operation as a manifestation of social conflict in an employee relations context even when there is a high level of polarisation. The initial aim of the use of the NGT in this case was to get maximum participation by the people involved in the conflict situation, without the dominating influence of the leaders who were mobilising the participants. It is important in employee relations disputes that the issues are identified properly and that those involved participate in working towards possible solutions. In terms of the results that were obtained, the NGT intervention was very successful. The facilitators were able to draw conclusions about the causes of the conflict, as the views of four separate focus groups complemented and corroborated each other, and to present these to the management of the institution as well as to the section as a whole. However, a word of caution is needed. The NGT should not be used as a solitary technique to negotiate or resolve conflict, as the developers of the technique have also indicated (Delbecq et al., 1975). The facilitators employed other methods as well in order to gather information (mainly interviews and the study of documents) and to work towards resolving the conflict situation (a day-long workshop for the whole section). In hindsight, it was a wise decision to use the NGT, as it emerged during the intense emotional interaction at the workshop exactly how much conflict potential existed in the section. Less structured focus groups, where dominant individuals could exert more pressure, would have led to less open interaction and airing of ideas than was possible with the NGT.

The NGT, therefore, can be used in a labour relations conflict situation, not to mediate in a conflict situation, but to identify problems and their possible solutions. What is especially attractive about the NGT is its focus on the 'consumer' rather than the 'producer', by encouraging participants to use their own categories (Lomax & McLeman, 1984). The NGT is a technique that fits in with the anthropological approach to a problem, namely to understand a situation from the emic viewpoint of the people concerned. One would therefore also not attempt to claim that the results of the NGT are totally objective.

The NGT succeeds in producing a list of issues (causes of conflict and lack of co-operation in this case study) as seen and formulated by 'consumers', which they rank in a priority order. It should, however, not be assumed that consensus exists within a group about these issues, even though the technique is sometimes known as a formal consensus method (Chapple & Murphy, 1996; Lomax & McLeman, 1984; Moore, 1987). Some seem to doubt the non-consensual nature of NGT results:

> The debate revolves around the degree to which group dynamics influence the NGT process; essentially, whether the outcomes of a group in which interaction and group dynamics are controlled can be equated with those of a freely interacting one.
>
> (Lloyd-Jones et al., 1999, pp. 11–12)

The authors maintain that the views raised during the NGT process still represented the ideas of individual participants, which cannot be seen as the consensus of the group as a whole. The authors therefore agree with Lomax and McLeman when they claim the following:

> The problem is that decisions in interacting groups are made in interaction and are influenced by dominant, influential group members. Removing group pressure is not conducive to reflecting reality. … Removing conformity pressures in a group situation not only fails to reflect reality, it ignores the very basis upon which group life is sustained.
>
> (Lomax & McLeman 1984, p. 190)

This also explains the difference between the relatively relaxed atmosphere during the NGT group discussions and the intense emotional outpourings during the workshop in which all the members of the section participated.

In the specific situation that is reported here, the NGT was used in diverse groups in terms of the status of the groups and their levels of education. Some of the participants were totally illiterate and unable to express themselves in English or Afrikaans, whereas others had technical training certificates and could express themselves very effectively in English or Afrikaans. Despite this difference, and despite some authors claiming that the NGT needs participants who can write (Oosthuizen, 1991), the authors' experience confirmed that the NGT can be used with groups from any socioeconomic level or background, as also stated in Parker (1975). The technique was developed to involve marginalised people in the context of community development. The developers of the technique reported enthusiasm among disadvantaged people about the technique, despite the need for assistance with the phrasing of ideas (Delbecq et al., 1975). The facilitators in this case study found that there was a need for translation in the groups as well as a need for assistance with the recording of ideas by those participants who were illiterate. Problems were experienced in ensuring silence during the parts of the NGT process where participants were supposed to work as individuals, but this may have been more a function of the tension in the work situation of the employees, rather than of the socioeconomic background of the participants. The facilitators did modify the NGT to some extent to fit the situation in which they were using it, especially in terms of simplifying the voting procedure, as discussed above.

Lastly, what more did the authors learn from the use of the NGT in this situation that they would like to share with potential users of the technique in similar situations? In the first place, more documentation on the process in the form of audiotapes or videotapes would have been very useful. For their final analysis, the facilitators had to rely on notes that were taken during the NGT discussions, while simultaneously facilitating the process. Although taped recordings of the proceedings would have been intrusive and possibly inhibiting, they would have been invaluable for the analysis since they would have provided verbatim records of the interaction during the NGT focus group discussions. Secondly, having used the NGT successfully for a very limited part of the process, it appears that it would have been possible to extend the use of the technique

to other parts, as suggested by Delbecq and Van de Ven (1971). For instance, further rounds of focus group discussions in the form of an NGT process could have worked well with more senior staff members of the institution, e.g. representatives from management and the human resource department. Whether the greater use of the NGT would have led to a different result of the intervention as a whole is an open question.

The use of the NGT enabled the facilitators to identify certain key issues in the operation of the section that needed to be explored during the workshop. These included a lack of clarity with regard to the post structure of and insufficient staff provision to the section, training needs, inadequate involvement of senior management in the affairs of the section, insufficient opportunities for open communication and mutual decision making, segregated use of facilities by workers and supervisors and the possible redeployment of certain senior staff members. The impact of the results from the focus group discussions on the structuring of the workshop was such that some clearing of the air was achieved. This encouraged the creation of an atmosphere of co-operation that laid the ground work for reconciliation between the various participants in the section. The NGT procedure enabled the facilitators to present results and recommendations to management that were strongly convincing due to the structured research technique that was followed. At a meeting of all the workers in the section with the vice-chancellor, union leaders and representatives from the human resource department, the facilitators could report on the progress with the process and the need for implementing the proposals contained in their report. The authors ascribe the implementation of most of their proposals by management partly to the use of the NGT.

Conclusion

The use of the NGT in a relatively unusual setting, that of employment relations in a university non-academic section, was discussed in this article. The NGT was found to be a useful technique, after some adaptations had been made based on the local setting and the capacities of the participants. Although the NGT was used to identify the causes of the employment relations conflict situation that was investigated, the technique was not designed for conflict resolution, nor do the authors recommend its use for that purpose. The NGT is, however, based on very sound insight into the social dynamics of group settings and proved its usefulness in a context of tense interpersonal relations. On the basis of the experience reported in this article, the authors recommend that the NGT be considered for use in settings where it is important to elicit the views of all participants, including in employment relations contexts.

REFERENCES

Anstey, M. (2002). *Managing change: Negotiating conflict.* Lansdowne: Juta.

Bendix, S. (1996). *Industrial relations in the new South Africa.* Kenwyn: Juta.

Buhlungu, S., & Webster, E. (2006). Work restructuring and the future of labour in South Africa. In S. Buhlungu, J. Daniel, R. Southall & J. Lutchman (Eds.), *State of the nation: South Africa 2005–2006,* pp. 248–269. Pretoria: HSRC Press.

Bunker, B.B., & Rubin, J.Z. (Eds.). (1995). *Conflict, cooperation and justice: Essays inspired by the work of Morton Deutsch.* San Francisco: Jossey-Bass.

Center for Rural Studies. University of Vermont. (1998). *Guidelines for using the Nominal Group Technique.* Retrieved March 17, 2005, from http://crs.uvm.edu/gopher/nerl/group/a/meet/Exercise7/b.html

Chapple, M., & Murphy, R. (1996). The Nominal Group Technique: Extending the evaluation of students' teaching and learning experiences. *Assessment and Evaluation in Higher Education, 21*(2), 147–160.

Delbecq, A.L., & Van de Ven, A. (1971). A group process model for problem identification and program planning. *Journal of Applied Behavioral Science, 7,* 466–491.

Delbecq, A.L., Van de Ven, A.H., & Gustafson, D.H. (1975). *Group techniques for program planning: A guide to Nominal Group and Delphi processes.* Glenview: Scott, Foresman and Company.

Deutsch, M. (1973). *The resolution of conflict: Constructive and destructive processes.* New Haven: Yale University Press.

Du Toit, D., Woolfrey, D., Murphy, J., Godfrey, S., Bosch, D., & Christie, S. (1998). *The Labour Relations Act of 1995.* Durban: Butterworths.

Edwards, P.K. (1986). *Conflict at work: A materialist analysis of workplace relations.* Oxford: Basil Blackwell.

Gepson, J., Martinko, M.J., & Belina, J. (1981). Nominal Group Techniques. *Training and Development Journal,* September, 78–83.

Kriesberg, L. (2003). *Constructive conflicts: From escalation to resolution.* Lanham: Rowman & Littlefield.

Langan-Fox, J., Cooper, C.L., & Klimoski, R.J. (2007). *Research companion to the dysfunctional workplace: Management challenges and symptoms.* Cheltenham: Edward Elgar.

Lloyd-Jones, G., Fowell, S., & Bligh, J.G. (1999). The use of the Nominal Group Technique as an evaluative tool in medical undergraduate education. *Medical Education, 33,* 8–13.

Lomax, P., & McLeman, P. (1984). The uses and abuses of Nominal Group Technique in polytechnic course evaluation. *Studies in Higher Education, 9*(2), 183–190.

MacPhail, A. (2001). Nominal Group Technique: A useful method for working with young people. *British Educational Research Journal, 27*(2), 161–170.

Moleke, P. (2006). The state of labour market deracialisation. In S. Buhlungu, J. Daniel, R. Southall & J. Lutchman (Eds.), *State of the nation: South Africa 2005–2006,* pp. 202–222. Pretoria: HSRC Press.

Moore, C.M. (1987). *Group techniques for idea building.* Newbury Park: Sage.

Nelson, D.L., & Quick, J.C. (Eds.). (2003). *Organizational behaviour: Foundations, realities and challenges.* Mason: South-Western.

Oosthuizen, J.H. (1991). *Die ontwikkeling van 'n besluitnemingsmodel vir bestuursdoeleindes.* Unpublished master's thesis, University of Pretoria, Pretoria, South Africa.

Parker, A.W. (1975). Introduction. In A.L. Delbecq, A.H. Van de Ven & D.H. Gustafson (Eds.), *Group techniques for program planning: A guide to Nominal and Delphi processes.* Glenview: Scott, Foresman and Company.

Rahim, M.A. (1986). *Managing conflict in organizations.* New York: Praeger.

Robbins, S.P. (2003). *Organizational behaviour.* Upper Saddle River: Prentice Hall.

Skibbe, A. (1986). Assessing campus needs with nominal groups. *Journal of Counseling and Development, 64,* 532–533.

Swanepoel, B.J. (1998). Employment relations policy. In J.A. Slabbert, J.J. Prinsloo, W. Backer & B.J. Swanepoel (Eds.), *Managing employment relations in South Africa.* Durban: Butterworth.

Taffinder, P.A., & Viedge, C. (1987). The Nominal Group Technique: Standing alone in group problem solving. *Productivity South Africa, 13*(6), 34–38.

Van Aarde, M.C., & Nieumeijer, L.J. (1998). Conflict management. In J.A. Slabbert, J.J. Prinsloo, W. Backer & B.J. Swanepoel (Eds.), *Managing employment relations in South Africa.* Durban: Butterworth.

Viedge, C. (1988). *The Nominal Group Technique: A structured approach to problem-solving for small groups. Facilitator's manual* [Unpublished document]. The Training Channel.