

Nominal Group Technique: its utilisation to explore the rewards and challenges of becoming a mental health nurse, prior to the introduction of the all graduate nursing curriculum in England.

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Abstract

The Nominal Group Technique (NGT) is an evaluative methodology, which allows for the generation of ideas and thoughts from group participants, through the posing of a single question, whilst maintaining anonymity throughout. The process requires direct participant involvement and is non-hierarchical in nature, thus ensuring a democratic, valuing experience on the part of the participants. It has the capacity to generate abundant data from only one session with participants, which highlights the cost-effectiveness of the approach. The approach has also lent itself to adaptation and modification, without losing the basic tenets central to the NGT process

This working paper will outline this approach, and its utilisation to explore the lived experience of a group of mental health nursing students, prior to the introduction of the all graduate nursing curriculum in England, as part of the development of a doctoral thesis.

Introduction

This working paper will outline the Nominal Group Technique (NGT) and its utilisation to explore the lived experience of a group of mental health nursing students, prior to the introduction of the all graduate nursing curriculum in England. This approach is a part of the development of a doctoral thesis, exploring the rewards and challenges of becoming a mental health nurse, with reference to student participants being enrolled on the pre – all graduate curriculum nursing programme.

The Nominal Group Technique is an evaluative methodology, described by Perry and Linsley (2006) as ‘semi quantitative and qualitative’, in which responses from participants are based on a single question.

Emerging from the work addressing group decision-making processes (Van de Ven and Delbecq 1971), NGT has become part of the researchers’ repertoire, in particular when addressing potentially complex qualitative concepts. Carney et al (1996) noted that what was once developed for use in the field of market research has become a useful tool in examining education, policy and

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research.

Nominal Group Technique

Since its original development, researchers have modified and adapted the process of the NGT, but basic tenets remain central to the NGT process. Nominal Group Technique requires direct participant involvement, in a way that is non-hierarchical, and where all participants have an equal voice and all responses to the posed question have equal validity (Harvey and Holmes 2012, Perry and Linsley 2006). The generation of the responses to the posed question takes place in silence, with no conferring with other participants, nor seeking elucidation or clarification from the researcher.

This silent approach to ideas generation enables participants to develop their

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own thoughts and ideas, without interference or pressure from others, lessening group dynamics that may be unhelpful or undermining to the overall process (McMurray 1994, Harvey & Holmes 2012).

Valuing of participants individual contributions is enhanced by the fact that through the NGT process, the collection of data and the analysis following ranking of responses, all participants remain anonymous (Steward 2001), thus allowing all involved to be heard, regardless of position held outside of the participant group

Nominal Group Technique is a time efficient method of collecting data, as a session generally lasts between 1.5 and 2 hours, and participants are only required to attend one session (Potter et al 2004). Moreover, the sessions require very little in the way of prior preparation by the researcher. That said, detailed attendance to the formulation of the question to which the participants respond is required prior to the session (Horton 1980), in addition to ensuring that the data collection takes place in an environment conducive to democratic group working. Harvey and Holmes (2012) highlighted that running two of their group sessions in a tiered auditorium 'was not ideal' and that a level room, with a circular configuration for participants would have been preferred. Pens and flip chart paper or white boards should also be located in the environment, for transcribing of statements and collating of votes in the ranking process, with cards for recording participants' votes also part of the minimal but necessary preparation work.

Prior preparation by participants is also minimal and generally focused on understanding the purpose of the research project; an appreciation of the ethical approval imperatives of the research and determining consent to participation.

Adaptation and Modification to NGT

Adaptations and modifications to the NGT process have been developed

and applied to a range of research projects. Laufman et al (1981) utilised an adapted NGT approach to determine student priorities in a health education curriculum. As the researchers were working with in- class students, the usual time frame for carrying out a NGT approach was not feasible. To overcome these time constraints, the researchers invited the students to carry out some preliminary homework which involved compiling their own personal list of health concerns and then prioritising them for feedback to the whole group in the later face to face session. This enabled the researchers to complete their NGT session within an allotted classroom time period.

Time constraints were also a feature of the work carried out by Thomas (1983), whereby the time allotted for silent generation of ideas was shortened to five minutes and the writing out in full of the generated statement in the voting phase was omitted for the same reason. Additionally, the researchers moved the group on after the generation of 20 – 25 ideas because they had to complete the session in one hour.

Constraints of a different hue faced Lloyd-Jones et al (1999), when they looked at how to evaluate a new and 'radically different' course for medical students. Their constraint was one of working with large numbers of students. To address this problem the team of researchers approached NGT in two stages:

1. The Nominal Group Technique procedure with a small number of students (10)
2. The creation of a simple questionnaire from the items derived in the NGT process from the small group

There has been debate as to what constitutes the optimal size of group for NGT, with Van de Ven and Delbecq (1971) suggesting that NGT groups should be made up of no more than 5 – 9 participants, but that large groups (9 – more than 200) can be accommodated

within this process. Horton (1980) identified his groups as ranging from 7 – 10 individuals, whilst Steward (2001) in her work with Occupational Therapy and Physiotherapy students had groups of between 5 and 8.

Allen et al (2004) worked on a number of participants between 9 and 12, noting that this afforded the researcher a group that would be manageable, but that would also allow for the generation of a range of opinions, whilst Harvey and Holmes (2012) suggested that a group of between 6 and 12 would have been ideal. Interestingly, Carney et al (1996) noted that from their pilot project findings, that a minimum of six participants was required, in order to engender a sense of 'safety' within the group, illustrating this point by outlining that one of the pilot groups in the study had only contained five members and it was perceived that this could be felt as 'mildly threatening'.

The Process of NGT

The nominal group technique process comprises number of stages:

1. **Silent Reflection** – This stage of the process requires the participants to write as many responses to the question as they can think of, onto a blank piece of paper. This stage of the process lasts for approximately 10 minutes. During this phase there is no conferring amongst the participants, they merely silently reflect on their views and perspectives of the first question.
2. **Round Robin** – During this phase of the process each of the participants' offers the researcher one response from their list, who then writes that response onto a flip chart. There is no conferring, chatting or debate at this stage. The responses are raised from each of the participants in turn, until no responses are left to be expressed and noted, and saturation is achieved.
3. **Clarification** – The researcher reads out all of the responses noted on the flip chart to confirm the

statements and the understanding of each of the statements. At this stage some responses have the potential for amalgamation, but only if the group agrees that this is still a true representation of their words.

4. **Ranking of Statements** – Each of the participants is given five separate recording cards.

They are invited to then choose five responses from the main list. They write the number of the response they have chosen in the top left hand corner box, with the full statement written out beside it. After the participants have identified five statements and have numbered them, they move onto the process of ranking each of the statements. The statement that the participant feels is the most important is awarded 5 points. Once each of the participants has awarded their five (5) marks, that card is then placed face down and from the remaining four cards, the statement that is least important is awarded one (1) mark.

When each of the participants has awarded their one mark, that card is placed face down. From the remaining three cards, the most important statement is awarded four (4) marks and the previous process repeated. From the final two cards, the least important statement is awarded two (2) marks and the most important awarded three (3). When this process is complete, the researcher then collects the cards from the participants and moves to the final phase of the process.

5. **Focus Reflection** – this stage of the process seeks to gain group discussion and perspectives on the statements generated and the processes involved in the nominal group technique approach. This stage of the process is recorded for transcription and thematic analysis, but at no time are individuals identified.

6. **Collation of Marks and Ranking of Statements** – In this final part of the process, the researcher

collates the marks awarded to the statements chosen by the participants, in order to produce a hierarchy of identified statements. During this collation phase the researcher will also identify how many participants ranked a particular statement, to determine the overall level of importance of the statement to the group participants.

Discussion of the Approach

Nominal group technique has a number of persuasive components. Firstly, it requires minimal prior preparation, either on the part of the researcher or the participants, which in a busy environment and with ever increasing time constraints on working lives can make it an efficient method of choice. As with the minimal preparation requirements, the advantage that the data collection can be completed in one session means a lessening of the time commitment of the participants in comparison to other data collection methods.

The generation of abundant data from one session can make the approach both appealing and perhaps daunting at the same time, particularly as even small numbers of participants have the ability to generate large numbers of responses. However, this ability to capture such rich and diverse feedback from participants is the exciting aspect of the method, as the participants can share in the presentation and development of responses.

The democratic and non-hierarchical aspect of the method is attractive, in that it is clear to all the participants that everyone in the group is following the same, prescribed methods and that all participants have an equal voice in the process, and all responses are valid. This non-hierarchical approach reinforces the experience of the process being participant focused.

As demonstrated through example, the NGT process can be adapted and developed, according to need, focus and constraints. Further examples of how the approach might be tailored can be seen through the work of Tuffrey-

Weijne et al (2007), who examined the views of end-of-life care provision with participants who had intellectual disabilities and Aspinall et al (2006) who investigated what was important to patients, families and health professional in end-of-life care. The sensitivity of dealing with the subject of end-of-life care necessitated some adaptations from the team to the NGT process.

Limitations of NGT

Limitations of NGT have been noted. Peña et al (2012), highlight that the composition of the group involved in the process may limit the generalizability of any findings, whilst Davidson and Glasper (2005) suggest that a weakness of the method is that it is limited to a 'single topic meeting'. Harvey and Holmes (2012), focus on the size of the group involved as being a limiting factor; a view supported by Tuffrey-Weijne et al (2007), who highlight the possibility that having small groups will affect the validity of the results, as one person's 'random' vote can alter the overall ranking of responses. This discussion of group size was addressed by Carney (1996), who suggested that a smaller group might not feel safe for the participants. Steward (2001) discusses the rigidity and formality of the process as being limiting in itself, noting that groups may experience resistance to the formal structure of the approach. For some researchers, time allotted to the process was a limiting factor, rather than the process itself (Laufman et al 1981, Thomas 1983).

Application to Thesis Topic

The nominal group technique was chosen for this doctoral research project because of the key aspects outlined. The process afforded the researcher the opportunity to generate a wealth of data, in a focused and structured way, in response to the two questions posed to participants:

1. **What are the challenges of becoming a mental health nurse?**
2. **What are the rewards of becoming a mental health nurse?**

Immediate feedback from participants on the process echoed the key aspects of NGT. The participants felt that their voices and opinions had been heard and acknowledged, and participants reported that they felt they had had equality of opportunity for participation.

High levels of enthusiasm for the process were reported by the participants, with a number suggesting that it had helped them to focus more deeply on their own experience of becoming mental health nurse; a notion expressed irrespective of which year of the mental health nursing programme the participants were in.

Mental health nursing students, representing all three years of the nursing programme were involved in the generation and gathering of data, the results of which will be published in due course.

Key Aspects of Nominal Group Technique

- Nominal group technique requires direct participant involvement, in a non- hierarchical way
- The potential for researcher bias or influence is reduced
- All participants have a voice in the process
- Abundant data can be generated at each group session

Reference

Allen, J., Dyas, J., Jones, M. (2004) Building consensus in health care: a guide to using the nominal group technique. *British Journal of Community Nursing* 9 (3): 110 -114

Aspinal, F., Hughes, R., Dunkley, M., Addington-Hall, J. (2006) What is important to measure in the last months and weeks of life?: A modified nominal group study. *International Journal of Nursing Studies* 43: 393 - 403

Carney, O., McIntosh, J., Worth, A. (1996) The use of the Nominal Group Technique in research with community nurses. *Journal of Advanced Nursing* 23, 1024 – 1029

Davidson, J. and Glasper, E. (2005) Staff nurse development programme: evaluation. *Paediatric Nursing*. 17 (8): 30 - 33

Harvey, N., and Holmes, C.A. (2012) Nominal group technique: An effective method for obtaining group consensus. *International Journal of Nursing Practice* 18: 188 -194

Horton, J.N. (1980) Nominal group technique: A method of decision-making by committee. *Anaesthesia* 35, 811 – 814

Laufman, L., Immarino, N.K., Weinberg, A.D. (1981) The Nominal Group Technique: A Health Education Strategy. *Health Education* 12 (1): 17 – 19

Lloyd-Jones, S., Fowell, S., Bligh, J.G. (1999) The use of the nominal group technique as an evaluative tool in medical undergraduate education. *Medical Education* 33, 008 – 013

McMurray, A.R. (1994) Three Decision-making Aids: Brainstorming, Nominal Group and Delphi Technique. *Journal of Nursing Staff Development (now: Journal for Nurses in Staff Development)* 10 (2): 62 -65

Perry, J. and Linsley, S. (2006) The use of nominal group technique as an evaluative tool in the teaching and summative assessment of the inter-personal skills of student mental health nurses. *Nurse Education Today* 26: 346 -353

Potter, M., Gordon, S., Hamer, P. (2004) The Nominal Group Technique: A useful consensus methodology in physiotherapy research. *New Zealand Journal of Physiotherapy*. 32 (3): 126 -130

Peña, A., Estrada, C.A., Soniat, D., Taylor, B., Burton, M. (2012) Nominal Group Technique: A Brainstorming Tool for Identifying Areas to Improve Pain Management in Hospitalized Patients. *Journal of Hospital Medicine*. 7 (5): 416 - 420

Steward, B. (2001) Using Nominal Group Technique to Explore Competence in Occupational Therapy and Physiotherapy Students during First-Year Placements. *British Journal of Occupational Therapy* 64 (6): 298 – 304

Thomas, B. (1983) Using Nominal Group Technique to Identify Researchable Problems. *Journal of Nursing Education* 22 (8): 335 - 337

Tuffrey-Weijne, I., Bernal, J., Butler, G., Hollins, S., Curfs, L. (2007) Using Nominal Group Technique to investigate the views of people with intellectual disabilities on end-of-life care provision. *Journal of Advanced Nursing*. 58 (1) 80 - 90

Van de Ven, A. and Delbecq, A.L. (1971) Nominal versus Interacting Group Processes for Committee Decision-Making Effectiveness. *Academy of Management Journal* 14 (2):203 -212