# Needs Analysis Survey Paper

## Journals:

* [Journal of Otolaryngology - Head & Neck Surgery](https://journalotohns.biomedcentral.com/)
* Otolaryngologic Clinics

Using outline of “Endoscopic ear surgery in Canada:a cross-sectional study” by Jane Lea published in Journal of Otolaryngology – Head & Neck Surgery

## Abstract:

## Background:

## Methods:

* Based on the responses, we decided the questionnaire would ask about most of these difficulties by asking them to rate their degree of difficulty with the following tasks
* *Rating technique*
  + Likert vs. analog visual scale these papers said that the analog visual scale was better BECAUSE [15] [16] – 10 describes what VAS and an LS are
  + <http://www.statistik.tuwien.ac.at/forschung/SM/SM-2009-4complete.pdf>
    - States that the advantages of using the continuous rating scale over the likert are:
      * Hard to discriminate between the categories
      * Cts scale – the respondent is only given anchor points and so it is up to the respondent to pick any value in between......(continue)
* The wording of the scale was taken from:
  + <http://psr.iq.harvard.edu/files/psr/files/PSRQuestionnaireTipSheet_0.pdf>,
  + <http://www.uwex.edu/ces/4h/evaluation/documents/Wordingforratingscales.pdf>

visual analog scale (used in questionnaire) vs. likert scale: [15]

* Compare LS (5 point) to VAS in evaluating perceptions of an emergency department bedside clinical teaching programme
* Evaluation questionnaires used LTS and 100mm horizontal VAS for each question, and this paper, through analyzing the correlations between the two methods for each correlation, concluded that the VAS is a reliable and valid alternative to the LS for educational evaluation, and may provide advantages in educational measurement
* The study had the participants perform a self evaluation using both the VAS (anchors labeled “definitely” and “definitely not”) and LS
* Questionnaires administered three times throughout the course of the study
* Tested for test-retest stability using the intraclass correlation coefficient and internal consistency using cronbach’s alpha. All but one question in the questionnaire had statistically significant correlation
* Conclusion: the VAS are instruments that can capture subjective phenomena quantitatively, similar to the likert scale but the LS uses ordinal scale restricting the respondent to predetermined categories
* The VAS can discriminate finer differences because of the greater range of possible scores, also this makes it more likely that the data is normally distributed
  + Can use parametric statistical analysis with a smaller sample size

### Statistical Analysis

* Descriptive statistics?
* How were the groups of respondents divided
* How were the survey questions analyzed?
* What program was used (JUMP v 13)

## Results:

* Study participants
* subeadings that describe the main ideas we want to convey

Questions:

* does the percent of surgeries done by TEES factor affect the difficulty during TEES result?
* Does the use of TEES instrument set factor affect the difficulty during TEES result?

## Discussion:

## Conclusion:

* key findings
* review main outcome measures
* compare key findings with other literature
* limitations of study
  + from Jane Lea’s study, there is a low adoption rate of TEES (is there an international number?) or if there are enough respondents, then can say that x% of respondents actually have TEES experience and due to this they have different difficulties depending on where they are in the learning curve
  + also if the residents answered then they are still learning core skills that’s why we asked what percent of surgeries are done endoscopically because even though a surgeon is experienced, TEES is very different from microscopic surgery and so we wanted to know experience on TEES specifically rather than total surgical experience

Notes from “Endoscopic and keyhole endoscope-assisted neurosurgical approaches: A qualitative survey on technical challenges and technological solutions” [1]

Methods:

* asked: name, surgical unit, subspecialty interests
* survey:
  + whether surgeon presently uses endoscopic/endoscopic assisted approaches
  + what they consider to be major technical barriers to adopting such approaches
  + technological advances they foresee improving safety and efficacy in the field
  + three authors analysed the survey

Results:

* + 40 neurosurgeons (16% response rate within the first week)
  + reported the percent of surgeons that did xyz types of surgery
  + detailed opinions on technical challenges:
    - grouped responses into specific themes: surgical approach with better integration with image guidance, intra-op visualization and improvement in neuroendoscopy, surgical manipulation and improvements in instruments
    - subthemes outlined in a figure e.g. for approach: integrated IGS, flexible access subthemes
  + paragraphs outlining the results of the themes
    - how many respondents suggested that theme?
    - E.g. How many respondents said endoscope image quality was a problem in the visualization theme?
  + Table outlining the subspecialties of the neurosurgeon respondents

Discussion:

* Why is endoscopy good (briefly)
* Recent advances in endoscopy technology – improved lenses, image quality, HD camera, screen
* Technical challenges of neuroendoscopy themes are mentioned in one sentence
* Discussion of the three themes: their current status clinically

Limitations of the study:

Small sample size, low response rate. Asked endoscopic ear surgeons/surgeons interested in TEES.

All members of SBNS were invited to participate in the survey but neurosurgeons self-selected if they had a specialist interest in neuroendoscopy, as seen by the high number of peadiatric and skull base neurosurgeons responding

“Purely Endoscopic Removal of Intraventricular Brain Tumors: A Consensus Opinion and Update”

* 15 out of 20 surveyed neurosurgeons responded

Introduction:

* background research
* questionnaire was designed and used to survey neurosurgeons who place a particular emphasis on endoscopic methods

Methods:

* questionnaire and survey
  + what led to the development of questions in the survey – literature search, interviewing fellow surgeons, attending the endoscopic ear surgery course
  + what was the questionnaire designed to do? Survey ear surgeons to figure out what difficulties they experience during TEES and would want new tools for
  + who was it sent out to? Ear surgeons who attended the 2nd world congress of EES to get a sense of what experienced surgeons who perform TEES feel, list other societies
  + how many responded?
  + Why did we select these societies?
  + Used a continuous rating scale with labels to help the participants gauge where they fit on the scale -
* Explain the different difficulties

Results:

* Questionnaire was sent to \_\_\_\_\_\_ many otologists
* \_\_\_\_% responded

Discussion:

* give a literature/background on the different difficulties

[2]

[1] H. J. Marcus, T. P. Cundy, A. Hughes-hallett, Z. Yang, A. Darzi, D. Nandi, and D. Phil, “Europe PMC Funders Group Endoscopic and Keyhole Endoscope-assisted Neurosurgical Approaches : A Qualitative Survey on Technical Challenges and Technological Solutions,” vol. 28, no. 5, pp. 606–610, 2015.

[2] D. M. Prevedello, F. Doglietto, J. A. Jane, J. Jagannathan, J. Han, and E. R. Laws, “History of endoscopic skull base surgery: its evolution and current reality,” *J. Neurosurg.*, vol. 107, no. 1, pp. 206–213, 2007.