

# Understanding The Requirements of Sign Language Interpreting:

## Introduction

Sign language interpreting is an essential service to ensure the participation of Deaf people in work and other facets of society. Interpretation is both physically and mentally demanding.

- Daily job demands often depend on the type of interpretation, and can vary from day to day conversations to business meetings, and legal or medical proceedings.
- Interpreters may work solo, or in a team with one or occasionally two other interpreters to alternate work and rest.
- Currently, the profession lacks evidence-based occupational health recommendations suited to interpreters.
- Purpose - determine the prevalence and pain/discomfort among sign language interpreters registered with the Association of Visual Language Interpreters of Canada (AVLIC) and determine associated job demands.

## Methodology

Members of the Association of Visual Language Interpreters of Canada (AVLIC) were asked to fill out an online questionnaire related to their personal job demands, lifestyle, physical and mental stressors, and their needs as an interpreter in Canada.

- Questionnaire was developed using modified versions of the pain and discomfort survey used by Fischer et al. (2007), the Angina-related Limitations at Work Questionnaire (Lerner et al. 1997) and the 2005 Statistics Canada - Canadian Communities Health Survey (CCHS).
- 56% of the 550 membership of AVLIC responded.
- Potential respondents were asked to participate via the AVLIC quarterly newsletter.
- The AVLIC ad hoc committee encouraged responses to the questionnaire online, administered via the online service <http://www.SurveyMonkey.com> (Figure 1).
- Descriptive statistics on pain prevalence, discomfort and occupational work factors.
- General feedback was provided to AVLIC for use in regularly scheduled workshops.
- The questionnaire and research protocol was approved by the Ryerson University Research Ethics Board.

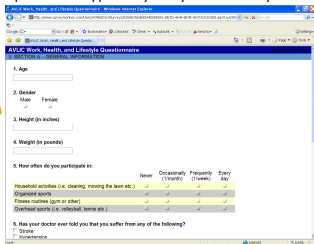


Figure 1. (a) AVLIC committee initiatives were an essential part of recruiting respondents. (b) When members visited the survey portal, they were referred automatically to the questionnaire interface on Survey Monkey.com (sample screen-shot, right).

## Results

Figure 2 illustrates the high prevalence of prior medically diagnosed injuries.

- Figure 3 illustrates the location of pain and discomfort perceived by the interpreters.
- Mean discomfort levels on a 10 point visual analog scale (VAS) were significantly less ( $p < 0.05$ ) at the time of the survey (3.5±2.3) however a similar level of discomfort was felt during one hour of solo interpreting (5.5±2.3) and one full day of team interpreting (5.7±2.4).
- Interpreting in situations where a medical or judicial outcome will be decided was most stressful, interpreting in a team of 3 or more was least stressful (Figure 4)
- Interpreters generally agree their job requires a lot of physical effort, although they moderately disagree they have good job security and job control (Figure 5).

## Injury Prevalence and Pain

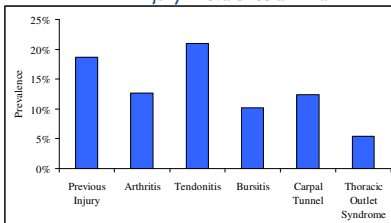


Figure 2 - Prevalence of previously medically diagnosed injuries. Nearly 1 in every 4 interpreters has been diagnosed with tendonitis, arthritis, or carpal tunnel.

# An Examination Of Occupational Health And Job Demand

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BUILDING A TALENT FORCE

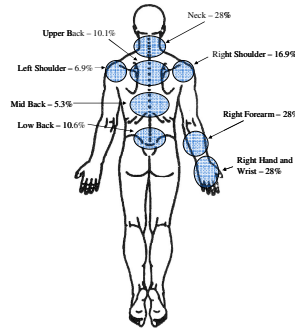


Figure 3 - Body locations where interpreters feel the most discomfort at the time of the questionnaire. The neck and right shoulder regions tend to be the locations of greatest discomfort. Mean discomfort on a VAS scale was 5.5 during one hour of solo interpreting, 5.7 during one day of solo interpreting, and 3.5 at the time of the questionnaire.

## Sign Language Interpreting



Photos by Miguel Aguiro

## Job Demands

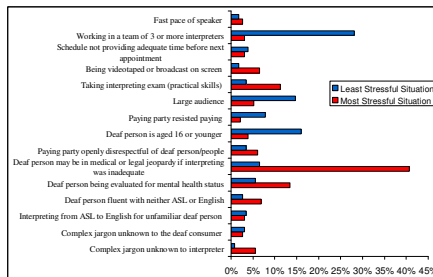


Figure 4 - Interpreting situations ranked as most or least stressful. The impact of a medical or legal situation was reported as most stressful for over 40% of respondents. Working in a team of 3 or more was least stressful for nearly 30%.

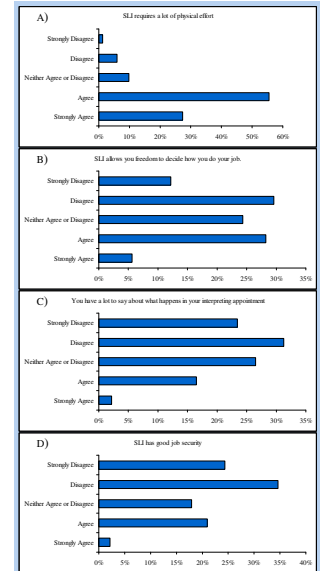


Figure 5 - Interpreter responses to questions of job control and effort from Lerner et al. (1997) questionnaire. Interpreters generally feel their job requires a lot of physical effort (A), however they have moderate control (B&C) and job security (D).

## Discussion

Sign language interpreting is both a physically and mentally demanding task.

- Similar injury proportions as published in the literature showing a prevalence of medically treated carpal tunnel of 15% (Sted, 1992) and 29-31% reporting pain in their neck and shoulder regions (Scheuerle et al., 2000).
- High perceived pain and discomfort for interpreters highlighted by the mean VAS score of 5.5-5.7 on a 0-10 scale.
- Pain and discomfort were highest in the neck and right shoulder regions.
- Discomfort and pain may be a result of sustained low level static contractions, over time restricting blood flow, leading to tissue degeneration (Hagberg et al. 1987).
- Increased importance of interpreting situation (i.e. medical or legal) can increase perceived stress of interpreter, and should be scheduled with adequate prep and rest time.
- Teaming is an effective way to help manage stress, perceived pain, and time with "hands in the air" interpreting.
- Job demand and control findings support Dean & Pollard's (2001) theory suggesting that interpreters are at an elevated risk of both stress related and cumulative trauma based disorders due to high job demand and low job control.

## References

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