



Locating Technology Project

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Accessibly Yours:
McMaster University

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in partnership with
Ontario Ministry of Community & Social Services

Purpose of Research

- Conduct a technical evaluation of devices
- Develop description of attributes, potential advantages and disadvantages.
- Gain deeper understanding of the complex realities of caring for a person who wanders and is at risk of becoming lost.
- Examine caregivers' perspectives about the application of electronic locating systems.

“It [wandering behaviour] has a huge impact because he is not able to experience life. If he goes out with someone, I wouldn’t necessarily trust someone to take him out, because I would worry that he would bolt and run away. Less independence, less experiences”.



~Consumer Trial Participant

What is Locating Technology?

- Technology that enables tracking and/or locating of people who wander and are at risk of becoming lost or unsafe
- The user carries a device – usually a cell phone or a bracelet
- User device is wireless e.g. FM or GPS

Phase 1

- Literature review & definition of “wandering”
- Appointment of Advisory Board
- Technical evaluation & field testing of submitted equipment
- Description of attributes, advantages & disadvantages
- Technologies selected for Phase 2

Phase 1 – Technical Evaluation

- 12 devices submitted
- 5 devices included
- Trials of equipment
- Description of attributes, strengths, & limitations
- Those with 50% success moved to Phase 2

“It would be nice to know what direction he has gone. I am happy to search the forest. I am happy to go down the side road, but they are opposite directions”.



~Consumer Trial Participant

Phase 2

- Recruit participants
- Consumer trials May - June 2006
- Consumer panels
- Collate results
- Report to the Ministry – August 2006
- Publish findings

Phase 2 – Consumer Trials

- 3/5 devices met criteria - 2 used in trial
- 7 people tested devices for 45 days
- Journals written by caregiver
- Interviews conducted re: impact, usage, usability etc.

“John did not tolerate the wristband monitor at all. He wore it for a maximum of 5 minutes. At about 2-3 minutes he started rubbing and pulling and almost biting the wristband. He got quite upset with it”.



~Consumer Trial Participant

*“Well I want to keep it. I spoke to
[the service provider] about
continuing with it, and he said it’s
not going to be available until 2007.
I’ll have to work around it
somehow....”.*



~Consumer Trial Participant

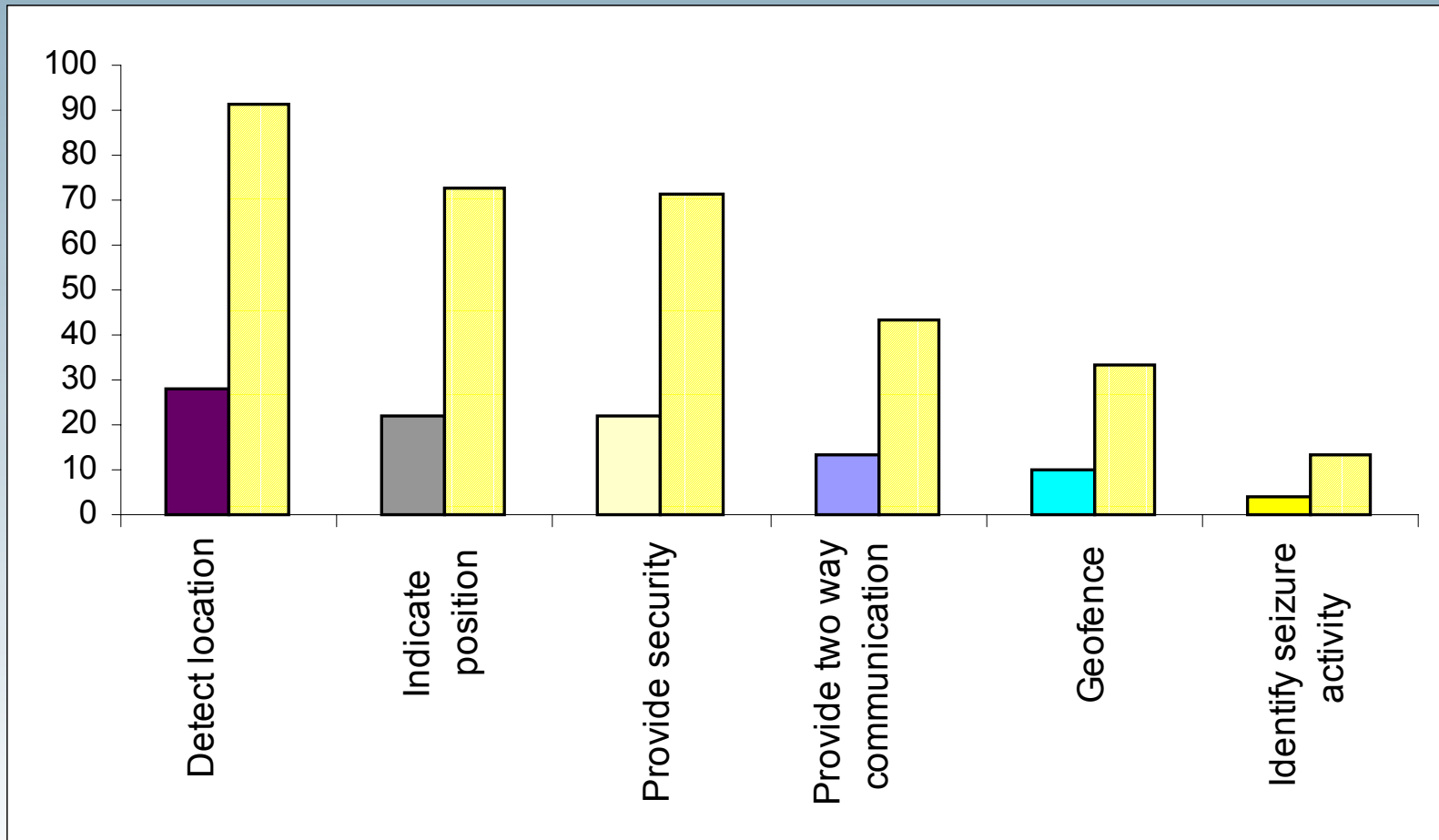
Phase 2 – Consumer Panels

- 5 cities in Ontario
- Presentation on methodology & devices
- Groups of 4 - 30 people
- Small group discussions
- Completion of survey forms

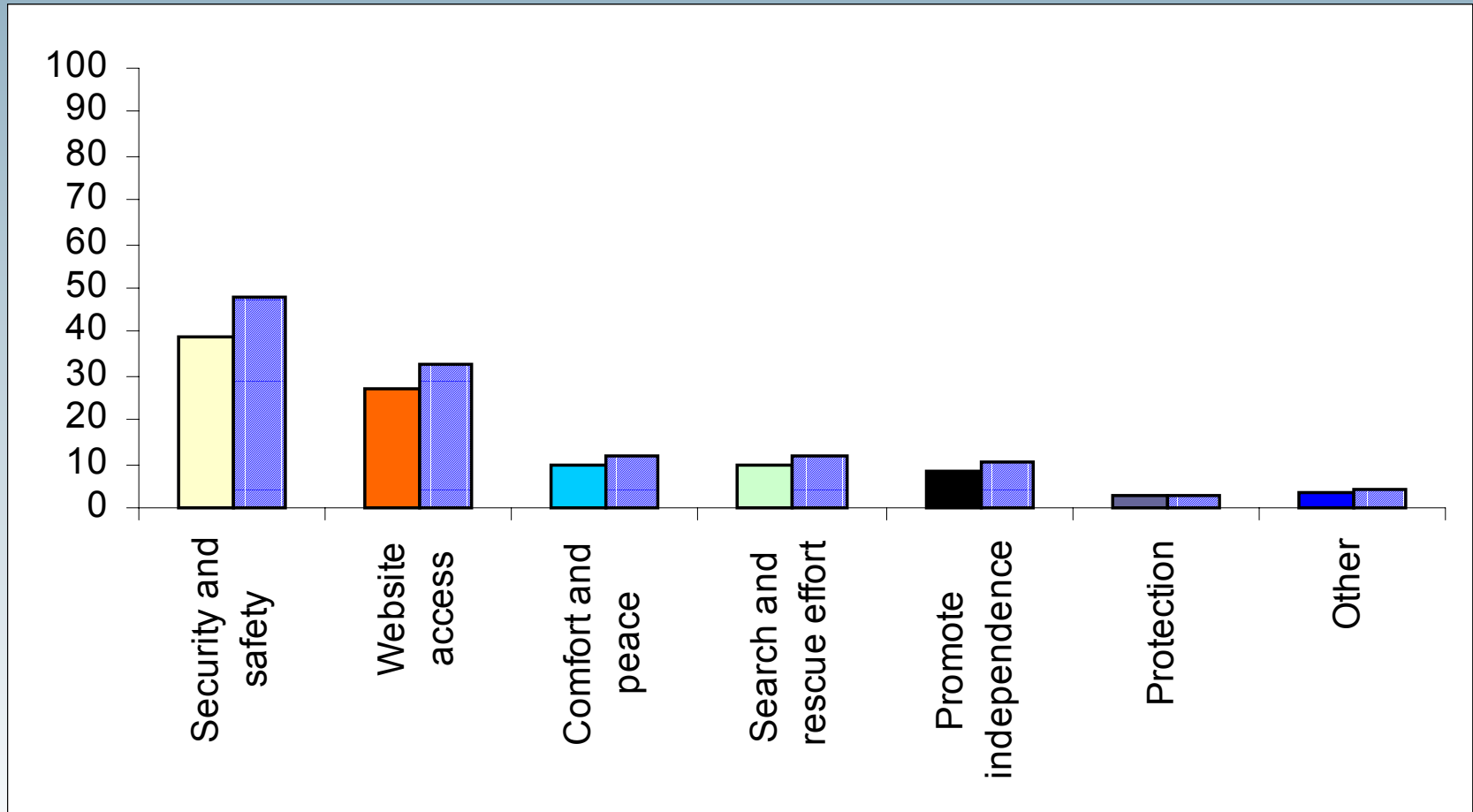
Lessons Learned – the Technology

- Varying degrees of support available
- Location determined by:
caregiver/monitoring service/police
- Use of geofencing
- Most use GPS and/or FM (radio)

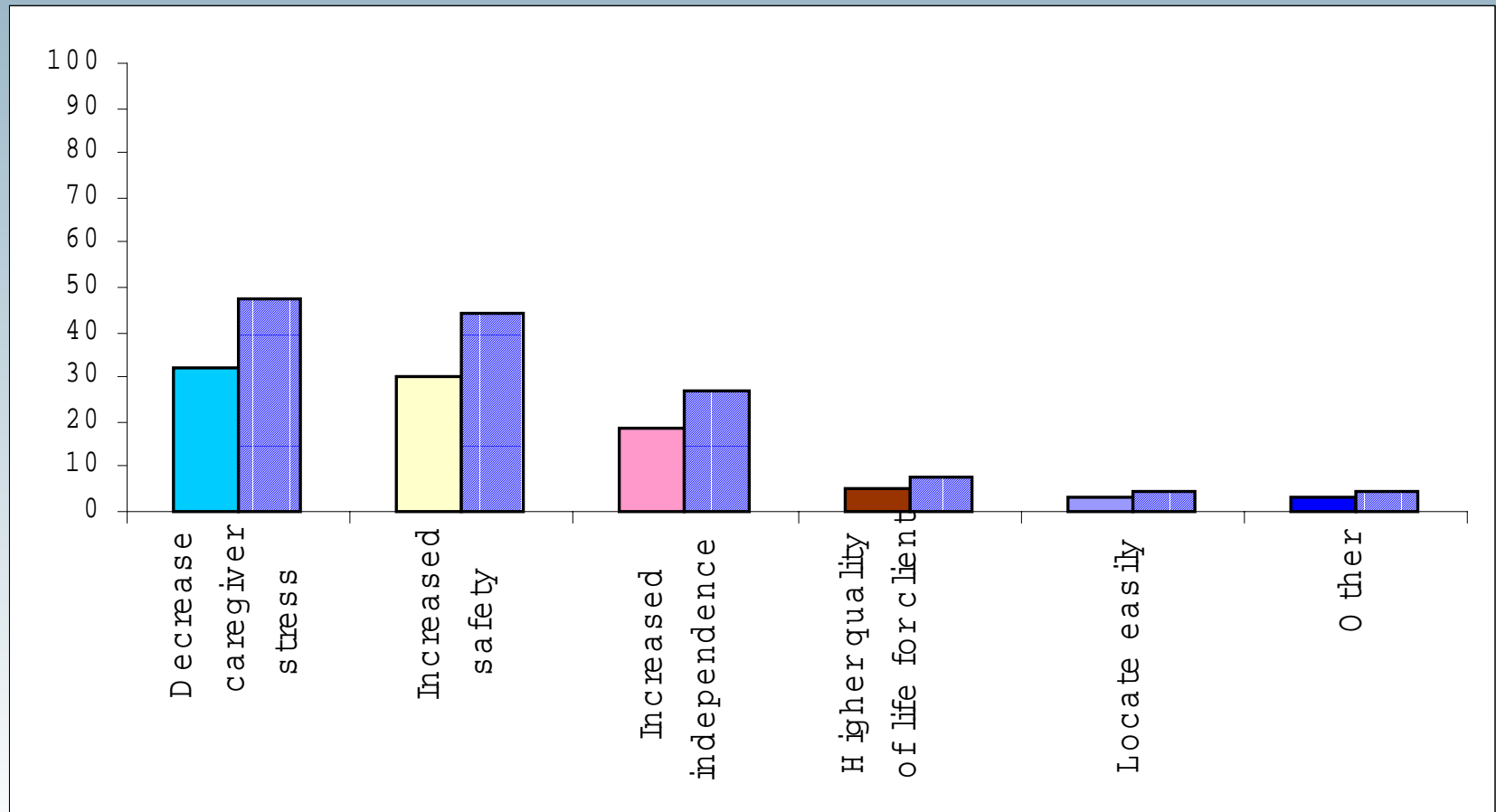
What do you expect from ELT?



Why would you use ELT?



Do you think ELT would affect “John’s” life and others; in what way?



What People Want

Size reduction

Disguise/customize
device

Weather/water proof

Combination of
technologies

Decreased cost

Bracelet security

Geo-fence

Website access

Acceptable appearance

Independent use

Increased battery life

*“People notice it right away,
so it looks kind of
institutional-like....”*



~Consumer Panel Participant

Ethical Issues

- Locating devices may impose restrictions on clients' rights including liberty, freedom, privacy & dignity
- Devices have been used to track criminals & wild animals which may lead to stigmatization & negative connotations
- Advantages outweigh ethical considerations

“The peace of mind that this device will bring is truly unbelievable! Thank you!”



~Consumer Trial Participant

Discussion & Questions?

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