



Glenda Jessup
Anita Bundy
Alex Broom
Nicola Hancock

Apps: Their application to inclusive research

Outline

- My PhD research
- The need for an App
- About the P.I.E.L. Survey App
- Data examples from a pilot study using this App.

My research

The intent of inclusive education is that students with disabilities should be able to access the same **educational & social** opportunities as all other students and that **all students should benefit** from this.

(Parker, 2010)

Why my research?

The elephant in the room is that most students who are blind or visually impaired in inclusive education settings are socially isolated. This happens more often than not. There are some exceptions.

(Hatlen, 2004)

Coralyn

School was socially pretty bad. I didn't really have any friends - or any enemies either.

The principal would say..... "if you're feeling lonely and want someone to talk to, you can put a paper clip on your tie."

It bothered me that I didn't have friends, especially when everyone goes out, the girls go shopping on the weekend or to somebody's place and watch a movie or whatever they do.

And I did make quite an effort but towards the end I just I couldn't be bothered to try and fit in more, but it was very difficult.

(Jessup, Cornell,& Bundy, 2010; Jessup, Bundy, & Cornell, 2012)

Students with VI can struggle

- A minority- few/no other kids with VI at their school
- Teaching vs their learning styles
- ADLs take longer
- More essentials to learn
- Compromise - academic vs social
- Stigma: refuse adaptive equipment or admit problems with vision.

Research Aims

To explore and describe the experiences of high school students who are visually impaired and who attend a mainstream high school.

How do these experiences influence their perceptions of social inclusion?

How?

Find a method to explore and describe the experiences of high school students

Adapt this method to be accessible to young people who are blind or vision impaired

Aspects of Experience

Immediate Experience. The raw emotional reality of what is/was in our immediate consciousness

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Long term impact.
The learning,
memory & knowledge

Objective

Subjective

Experience Sampling Method

A diary method to collect data about content & context of the experience of daily life.

(Csikszentmihalyi, & Larson, 1984).

The collection of multiple self-reports (surveys) in near real time (vs retrospective recall).

Allows in-depth exploration of daily occupations and subjective accounts of experiences - not available with other research methods.

(Farnworth, Mostert, Harrison, & Worrell, 1996).

Experience Sampling Method

Well established method.

Focus on in-the-moment states or behaviours in real-world environments.

Captures both subjective & objective aspects of experience.

Social Inclusion

FEELING

- Sense of belonging
- Membership
- Acceptance
- Value

DOING

- Participation in positive relationships
- Mutually valued activities
- Having a voice
- Community engagement

Australian Government (2011)

- Feeling valued, having the opportunity to participate fully in the life of society

Social Experiences Survey

Where?

What?

Why?

With whom?

Know what was going on?

Reciprocity

Dependence

Joking, mischief

Enjoyment

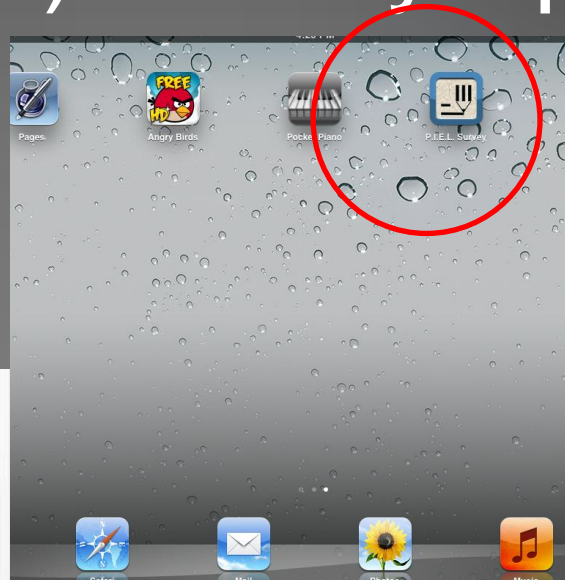
Loneliness

Fitting in

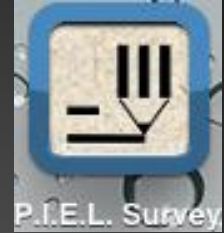
Acceptance



Participation in Everyday Life (P.I.E.L.) Survey App



P.I.E.L. Survey App



- iPad, iPod touch, iPhone
- Utilises
 - Voiceover (text to speech)*
 - Magnification*
- Inclusive: Suitable for people with & without disabilities
- Simple layout & voiceover gestures

*We thank Vision Australia for their assistance with the development of this App.

P.I.E.L. Survey App



Differs to previous methods of research with people who are VI:

- Private – no need to talk to audio recorder
- Desirable devices - do not “scream disability”
- Use offline

P.I.E.L. Survey App



- Time stamps
- Sound library

Capacity for

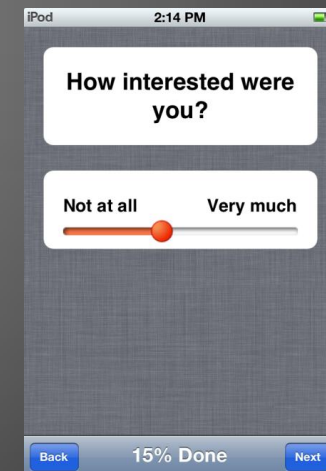
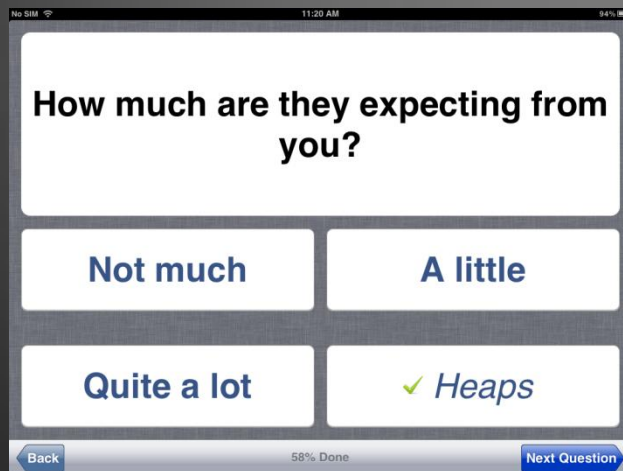
- Multiple choice questions
- Run Once or Run multiple times
- Random or Fixed Alert Schedules or a combination

P.I.E.L Survey App



Capacity for

- Buttons
- Free text
- Visual Analogue Scale (Sliders)



Pilot - Participants

ID	Age	Disability	Trial length	Device	Previous exp
VI0 1	adult	Nystagmus, Hydrocephalus	3 days	iPad, survey txt	iPad
VI0 2	adult	Bilateral non- anterior ischemic optic neuropathy	3 days	iPod touch, voiceover	L iPhone
VI0 3	adult	Graves' disease	3 days	iPad, voiceover	L iPad
HS0 1	15	Metatropic skeletal dysplasia	4 days	iPod touch, survey txt	iPod
HS0 2	16	Cerebral palsy	4 days	iPad, survey txt	iPad
HS0 3	17	Learning disability	4 days	iPod touch, survey txt	none

Output

Social experiences Survey

Where?

What?

Why?

With whom?

Know what was going on?

Reciprocity

Dependence

Joking, mischief

Enjoyment

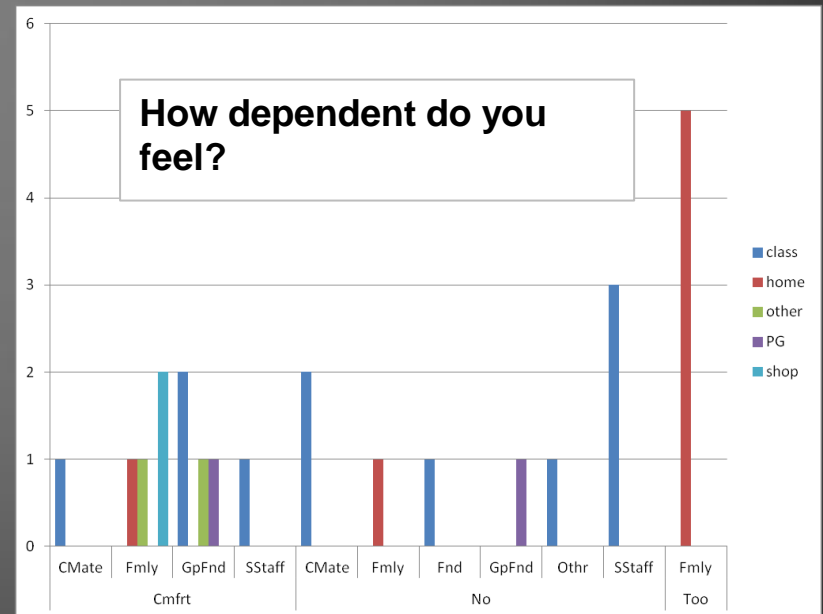
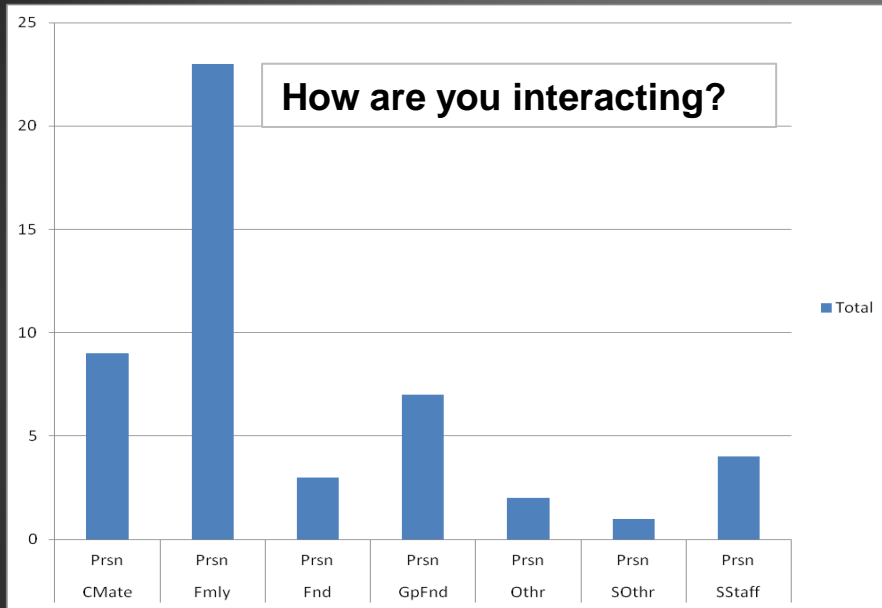
Loneliness

Fitting in

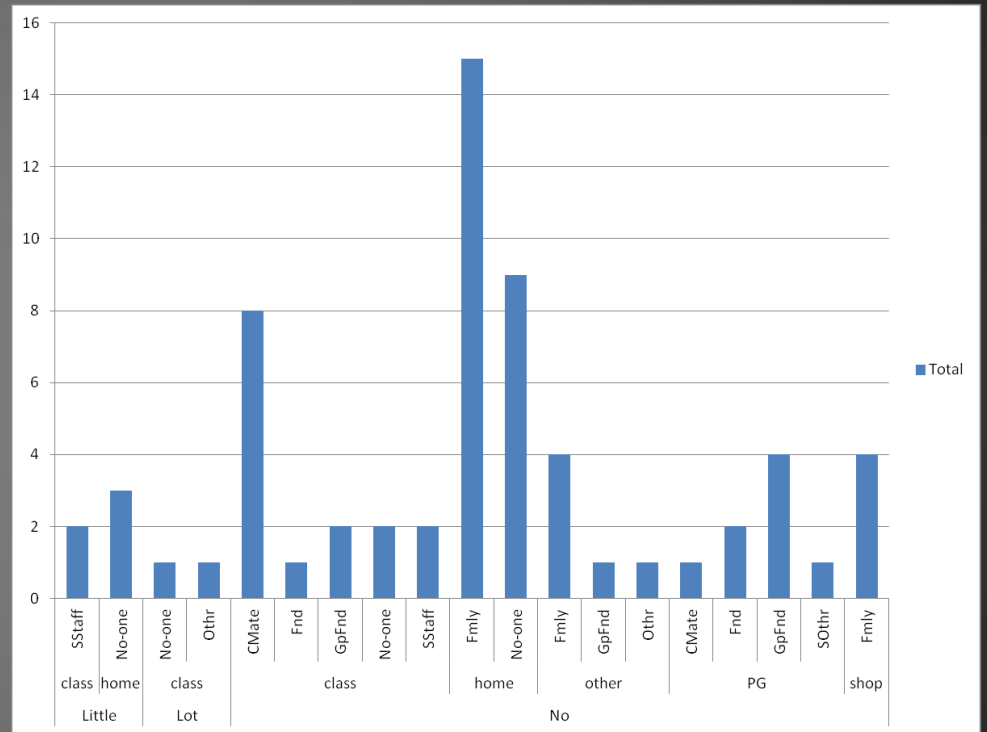
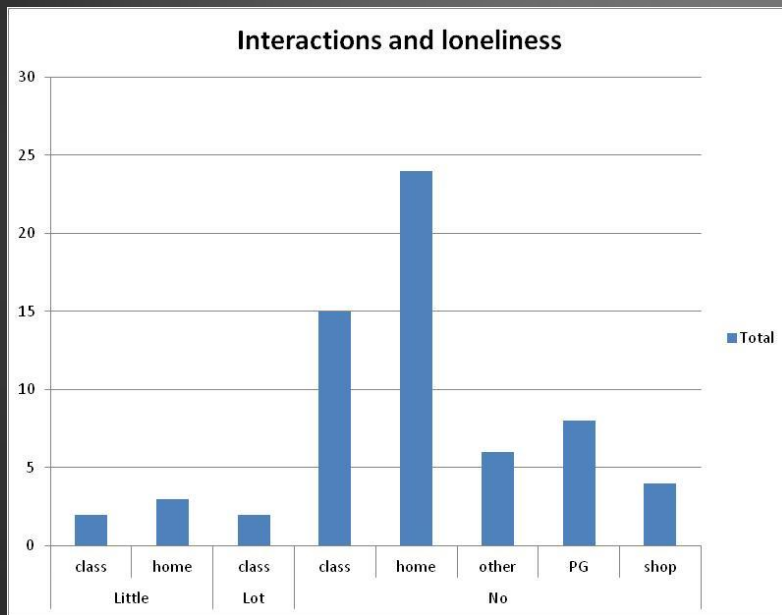
Acceptance

	6	7	8	9	10	11	12	13	14	15	16	17	18
6	Start Time	End Time	1	2	3	4	5	6	7	8	9	10	11
7	2012-10-17T09:58:5	2012-10-17T10:00:03+1100	1	1	1							2	2
8			2012-10-1	2012-10-1	2012-10-17T09:59:13+1100							2012-10-1	2012-10-1
9	Start Time	End Time	1	2	3	4	5	6	7	8	9	10	11
10	2012-10-17T13:01:4	2012-10-17T13:03:49+1100	3	5	5	1	2	2		2	2		4
11			2012-10-1	2012-10-1	2012-10-1	2012-10-1	2012-10-1	2012-10-17T13:02:3	2012-10-1	2012-10-17T13:02:4	2012-10-1	2012-10-1	2012-10-1
12	Start Time	End Time	1	2	3	4	5	6	7	8	9	10	11
13	2012-10-17T14:16:2	2012-10-17T14:17:21+1100	1	1	1								2
14			2012-10-1	2012-10-1	2012-10-17T14:16:38+1100								2012-10-1
15	Start Time	End Time	1	2	3	4	5	6	7	8	9	10	11
16	2012-10-17T16:01:2	2012-10-17T16:02:27+1100	5	4	1								4
17			2012-10-1	2012-10-1	2012-10-17T16:01:38+1100								2012-10-1
18	Start Time	End Time	1	2	3	4	5	6	7	8	9	10	11
19	2012-10-17T18:29:5	2012-10-17T18:30:48+1100	5	4	1								4
20			2012-10-1	2012-10-1	2012-10-17T18:30:07+1100								2012-10-1

Output translations



Output translations



Pilot → modifications

Alert sounds lengthened and volume increased

App store (free). Download onto own iDevices

- Less equipment worries for participants
 - Decreased equipment costs for researchers
 - Need less face to face contact with participants
- Main study on social experiences: 15-20 high school students who are blind or VI.

Conclusion

The P.I.E.L. Survey App provides a new opportunity for people with visual impairment to be genuinely engaged in research in which in-the-moment data is sought.

One means through which people with visual impairment can have a greater voice in future research.

Questions?



glenda.jessup@sydney.edu.au

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