

Social networking sites: barriers and facilitators to access for people with aphasia

Summary: We report **barriers** and **facilitators** to the use of Social Networking Site (SNS) apps for people with aphasia (PWA). Issues were explored through structured usability testing of apps for Facebook, Twitter, Pinterest and Tumblr with PWA, and interviews with experienced speech and language therapists (SLTs).

Background: SNS apps may help to reduce isolation for people with aphasia (PWA). They offer a SLTs a contemporary platform for communication activities. However, there is little research into the accessibility of such tools. To address this, the present study investigated barriers and facilitators to SNS app use.

Study 1: Usability Testing

Participants

ID	M/F	Age	WAB Aphasia Quotient	Aphasia Severity
1	Male	30s	92	Mild
2	Male	50s	72	Moderate
3	Female	50s	81	Mild
4	Male	60s	95	Mild

Methods

Participants undertook a series of 16 common tasks using an SNS apps on an iPad (see figure). They each completed the same tasks for two apps. Sessions were facilitated by a speech and language therapist researcher. Video and audio data from sessions were transcribed and analysed.

Apps and Tasks					
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Open the application					
Explore the home feed					
Express interest in a post (like/favourite)					
Express interest in a post (comment)					
Undo or delete task 4					
Find a friend					
Add or follow a friend					
Share content from the friend's account					
Unfollow the friend's account					
Create content					
Delete content					
Find information about aphasia					
Find out who you are following					
Change your profile picture					
Add a description in your bio					
Write and send a private message					

Study 2: SLT Interviews

Participants

ID	M/F		Years working with PWA	Work Setting
5	Female	Male	10-15 years	Private Practice
6	Female	Male	10-15 years	Research
7	Female	Female	10-15 years	National Health Service
8	Female	Male	20+ years	National Health Service

Methods

Interviewees were invited to predict how a PWA from their caseload might respond to each of the tasks used in study 1 (see figure). Interviewees completed this exercise for two apps each (e.g. Facebook and Tumblr or Pinterest and Twitter). Transcribed data were analysed thematically.

Results

18 barrier and 3 facilitator categories were Identified through usability testing.

Results

30 barrier and 43 facilitator categories were identified through SLT interviews.

Most common barriers:

- 1. Unfamiliar Icon
- 2. Hidden Feature/Indirect Action
- 3. Lack of Prominence for Feedback
- 4. Unclear Copy/Text.

Identified facilitators:

- 1. Predictive search features
- 2. Previous experience in using the SNS



Most commonly identified barriers:

- 1. Writing or typing difficulties
- 2. Too many steps required
- 3. Too many choices or distractions
- 4. Cognitive Difficulties

Most commonly identified facilitators:

- 1. Help from SLT or other person
- 2. Use of symbols to type with





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3. The ability to navigate to a destination using non-typical routes



- 4. Conceptual understanding of the task
- 5. Provision of a word bank or predictive text

Discussion: Studies identified a number of potential barriers to SNS use by PWA. Each can be used to inform technology design decisions by app developers. Facilitator categories were more readily identified within the interview data. Outcomes from both studies indicate the important role of both clinical support and technology design in facilitating access to SNS.

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