A Review of Public Internet-based Treatments for Anxiety: Informing Patients and Professionals

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BACKGROUND

- Undertreatment of anxiety disorders is a significant public health issue (Canialis & Pollack, 1997).
- Internet-based treatments are an approach to increase accessibility and affordability of therapy.
- Meta-analyses concluded that computer-aided therapy can be as effective as face-to-face (e.g. Reger & Grahm, 2009).
- Little research has investigated what is publicly available on the internet for people seeking treatment and the quality of these services.
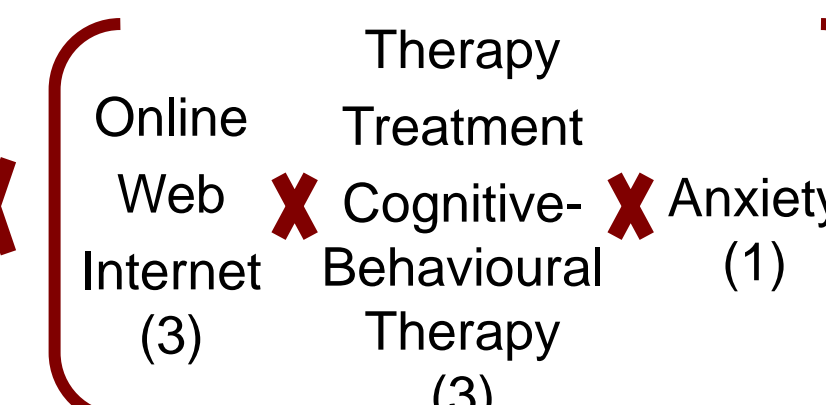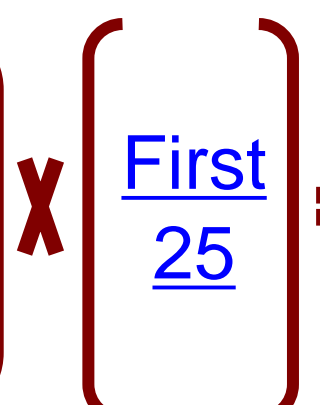
METHODS

Technique
Systematic internet search (October 2013)

Search Strategy

Search Engines   9 Key Search Words   Hyperlinks

Google / bing / YAHOO! ✗ { Online Web Internet (3) } ✗ { Therapy Treatment Cognitive-Behavioural Therapy (3) } ✗ { Anxiety (1) } ✗ { First 25 } = 675

Three most popular search engines (order descending; eBiz, October 2013)

(Eysenbach et al., 2002)

Hyperlink Categorization
Each hyperlink was screened and assigned to one of 12 predefined categories.

Program Selection

Inclusion Criteria	Exclusion Criteria
• Designed for anxiety (not exclusively) • Publicly available • Online component • Structured treatment plan	• Research trial only • Real-time video or chat therapy • Solely educational/informational • No access granted by author

Program Evaluation
Self-developed rating document with 85 items

Website & Sign-up		Treatment program
• Treatment content • Authority • Contact-ability	• Navigation • Readability • Advertisement	• Quality • Modes of presentation • Program features/tools • Therapy techniques

RESULTS

The Selection

Total identified self-help programs (n = 30)

Total included & evaluated self-help programs (n = 16)

7 Self-help programs excluded
Not publically available: n = 1
Research trial: n = 3
Information only: n = 1
Not anxiety-related: n = 1
Homework assistance: n = 1

7 Self-help programs eliminated
Access denied: n = 1
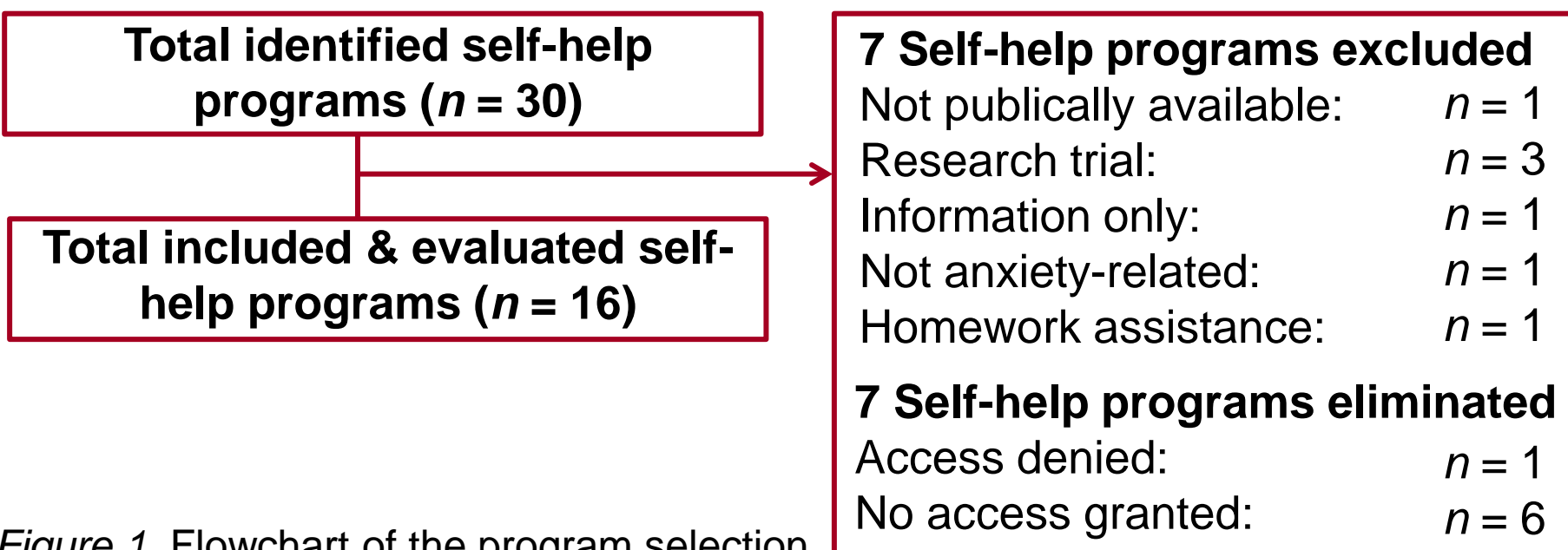No access granted: n = 6

Figure 1. Flowchart of the program selection.

The Evaluation (selected results)

Website characteristics
- 15 had contact details available (email address or contact form).
- Most specified Terms of Use (62.5%) and a Privacy Notice (93.8%).
- Only two contained advertisement (relevant & irrelevant).
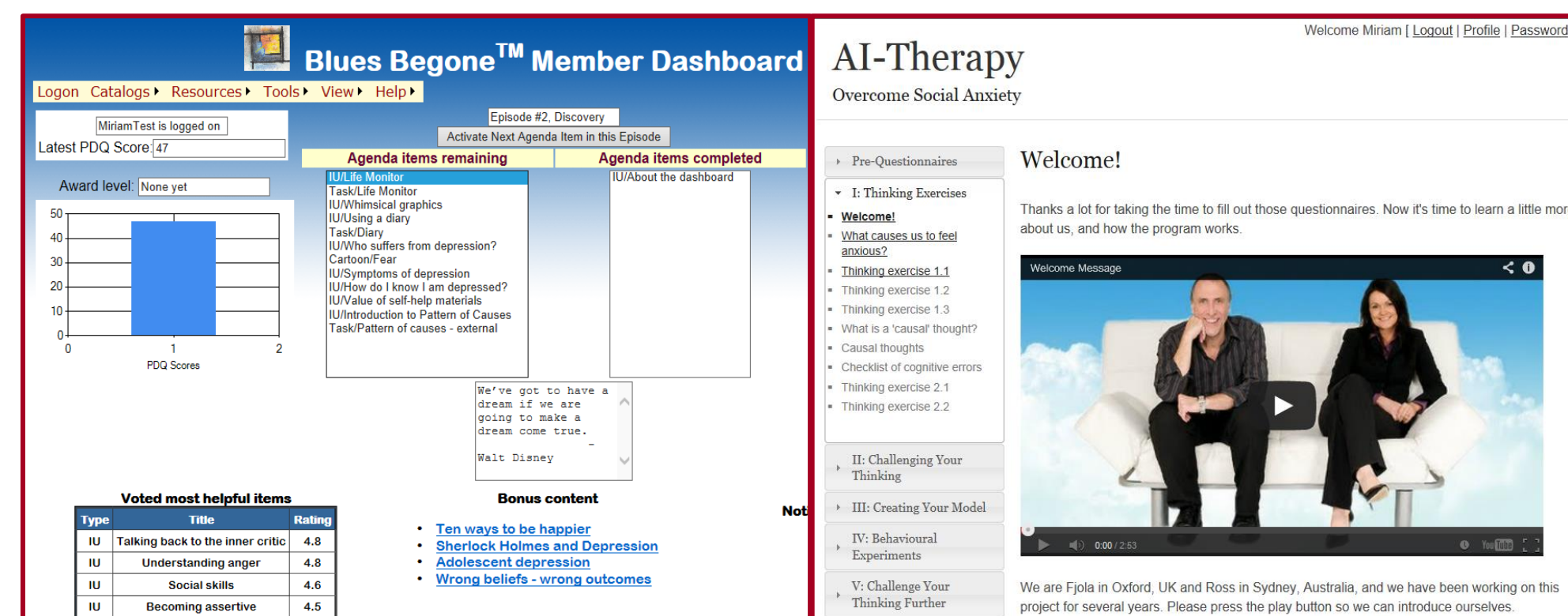- Navigation was rated as 'easy' for 62.5% of the websites.

Figure 2. Example screenshots of self-help program layouts.

Program characteristics
- Designed for several types of anxiety issues ranging from general anxiety issues to specific anxiety disorders.
- The majority of programs were based on CBT principles (87.5%).
- 9 required an access fee (£30 - 229).
- 43.8% were therapist-supported, either by email or instant messaging, which except for one, were paid programs.
- Only 7 out of 16 were evaluated using one or more research trials.
- 15 programs used multiple modes of presentation.
- The most identified mode of presentation was text chapters with images (n = 9). Each 7 programs used video & audio elements.
- 11 programs were rated as interactive (e.g. downloadable or online worksheets and questionnaires, interactive animations).

RESULTS - CONTINUED

Program Quality
- Figure 2 shows that the layout and design of the evaluated programs varied from rather unstructured to clearly arranged and structured.
- There was a great variability in reading ease, but the overall reading is ease was fairly simple.
- The quality of presentation across different parameters (clear text, organisation, style, images) was mostly rated as 'very good', with image quality receiving the lowest scores.

Therapeutic components

Cognitive techniques:		Behavioral techniques:	
Eliciting thoughts:	16 (100%)	Activation:	5 (31.3%)
Evaluating & challenging thoughts:	15 (19.8%)	Experiments:	5 (31.3%)
Evaluating & challenging beliefs:	7 (43.8%)	Exposure:	4 (25%)
Evaluating & challenging worries:	10 (62.5%)	Skill training:	14 (87.5%)
Emotional processing:	6 (37.5%)		

Other therapeutic approaches:			
Psychoeducation:	15 (93.8%)	Experience stories:	6 (37.5%)
Interpersonal:	3 (18.8%)	Relaxation:	13 (81.3%)
Acceptance and commitment:	2 (12.5%)	Sleep hygiene:	5 (31.3%)
Mindfulness:	7 (43.8%)	Relapse prevention:	11 (68.8%)

Program Tools
- Homework/worksheets: n = 15 (93.8%); done online (n = 6; 37.5%)
- Mood monitoring: program defined (n = 9); user defined (n = 5)
- Diary: n = 8 (50%)
- Forum: n = 4 (25%)

CONCLUSION

- A great variety of self-help treatment options is publicly available on the internet.
- Programs differ in their characteristics and modes of presentation.
- Overall, programs exhibited a good quality of presentation and were fairly easy to understand.
- A variety of different therapeutic techniques and program tools are used.
- These findings can to be used by professionals to inform and advice patients on the availability and quality of internet-based self-help treatment options for anxiety-related issues.

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