



Project TECH: an Internet depression prevention program for adolescents.

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Role of closed social network in increasing adherence



Challenge of web based interventions

- Poor utilization and low adherence

Using closed social network to increase adherence by

- Create accountability for each patient's actions
- Foster a sense of responsibility towards other networked peers
- Provide forum for collaborative learning.
- Strengthen bonds among networked peers
- Promote prosocial behavior

Aims



- Create an Internet depression prevention program for adolescents where closed social network interactions are engineered to increase adherence to site.
- Refine the online peer network.
- Conduct feasibility and beta-testing.

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Project TECH (Teens Engaged in Collaborative Health)



A 10-week CBT based depression prevention program for adolescents

Intervention Design: basic site components

	Intervention ingredient	Site feature
1.	Mood management skills	Didactic lessons
2.	Behavioral activation	Activity tracker
3.	Cognitive restructuring skills	Thought record
4.	Mood awareness	Mood rating widget

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Project TECH



Intervention Design: peer networking components

	Increase site adherence by promoting...	Site feature examples
1.	Accountability	<ul style="list-style-type: none"> • Displaying last log in, tool use and lesson activity • Sharing tool use and lesson activity • Ability to prompt members to log in
2.	Prosocial behavior	<ul style="list-style-type: none"> • Questions to group about mood management skills • Commenting and discussion
3.	Collaborative learning	<ul style="list-style-type: none"> • Discussion boards to allow discussion of intervention topics
4.	Peer Support	<ul style="list-style-type: none"> • Sharing and commenting on each other's responses and reactions
5.	Sense of "we"-ness, bond and commonalities	<ul style="list-style-type: none"> • Initial ice breaker game, personalisable member profiles

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...from mockups



...to user feedback

...to launch



Project TECH

Road Map A	Today's Lesson 💡	Mood 🧠	Homer Homer guessed at other group member's lies Last seen at: Apr 21, 10:16 AM	Larry No Activity Yet Last seen at: never
Do 📅	Think & Feel 💭		Barney No Activity Yet Last seen at: never	Carl Carl commented on Quote 1 Last seen at: Apr 10, 12:45 PM
Summary ☰	Quotes “ ”	Play 👥	Moe Moe rated their mood Last seen at: never	Bart No Activity Yet Last seen at: never
		Poll 📊		

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Engineering peer interactions



Collaborative learning:
Daily short CBT lessons

Peer support:
Activity Tracker tool and Thought Record tool

Sense of well-being and bond: Profiles, ice-breaker games

Accountability:
Peer site activity

Peer support:
New daily group activities and sharing

Prosocial behavior:
Answering questions about mood management skills

Didactic content

Learn Today's Lesson Choose Guide ▾

What is depression?

You may know what depression is. You may have heard about it, read about it, or known someone dealing with it. But what you might not know is how depression is different from just "having a bad day". You may even have experienced depression in the past, or not. All we know that is, approximately 20% of adolescents will experience depression during their teenage years.

← Previous Next →


1 like this

Comments

Post Comment

Media

AFSP's More Than Sad: Teen Depression (Clip 5 o...



Answer the questions below:

1. Which videos did you watch?
2. What did you like about the videos, if anything?
3. Did anyone say something that made an impact or that you could relate to?
 - If so, who was it and what did they say?

Comments

Post Comment

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Activity Tracker tool

Project TECH Rules Contact a Moderator Log out

Guides 1: Introduction Choose Guide ▾

Guide #1

Introduction: Welcome to the Activity Tracker!

Because this is your first guide, you will learn:

- The purpose of the Activity Tracker
- What is expected of you
- How to use this website

← Previous Next →

Event Editor

Title:

Starts:

Ends:

Tags (0) ➕ Add Tag

Please rate your predicted **PLEASURE** during the event: **6**

Please rate your predicted **ACCOMPLISHMENT** during the event: **2**

Save Event Delete Event

Visualization Filter ▾

May 2013

Sun	Mon	Tue	Wed	Thu	Fri	Sat
28	29	30	1	2	3	4
5	6	7 <a>Go to this content	8	9	10	11
12 <a>Go to this clip	13	14	15	16 <a>Go to this music	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	1
2	3	4	5	6	7	8

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Methods



Initial feasibility pilot sample

Recruitment: high schools, social media, youth centers, flyers

Sample: A group of five teenagers ages 14-18

- All CESD scores <6
- 4 girls, 1 boy
- 2 White, 1 Alaskan/Native American, 1 Hispanic, 1 African American

Assessment: 1) Baseline interview, 2) Week 1 and Week 2 feedback interviews

The website is monitored by a licensed child clinical psychologist.

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Initial use results



5 adolescent users in a 14-day period...

Teen	# of days accessed	# of use sessions	Mean session duration with activity	Out of 14 didactic lessons, accessed...
A	4	5	3 minutes	3
B	9	10	4 minutes	9
C	7	13	4 minutes	10
D	13	21	8 minutes	13
E	7	8	9 minutes	5

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Initial use results



5 adolescent users in a 14-day period...

Teen	# "LIKES"	# times rated mood	# of comments to a site feature	# of comments to another teen
A	1	4	0	0
B	0	12	9	2
C	0	6	6	0
D	9	13	29	2
E	2	5	5	5

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Qualitative feedback



What was liked:

- 1) Simple homepage design, bright colors
- 2) New material every day
- 3) Mood rating and mood graph
- 4) Ability to comment and 'like', reading others' comments
- 5) Ability to see other members' site activities

What needed improvement:

- 1) More ways to interact with other group members
- 2) Better member profile page to get to know who other members are
- 3) Better ways to know which tools are getting the most comments and discussion, i.e. where the action is.
- 4) Activity Tracker tool

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Qualitative feedback



Barriers to using the site:

- 1) Too many commitments during school day
- 2) Too busy after school: jobs, sports
- 3) "I can only do it on a computer"

Ways to increase site use:

- 1) SMS Text or email reminders
- 2) Ability to access via smartphone

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Conclusions



...from a brief 14-day period with 5 adolescents

1. High acceptance of this closed social network model of web intervention delivery.
 2. Teens were immediately drawn to social network interactions, and demanded more opportunities for interactions.
 3. High number of logins, lesson views and commenting activity.
1. Promising number of commenting in response to another user

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Next steps

1. Continue development of web intervention by building more tools and social network interaction opportunities.
2. Lab usability and beta testing with groups of adolescents.
3. Field trial of adolescents with higher depression scores.

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Thank you!

