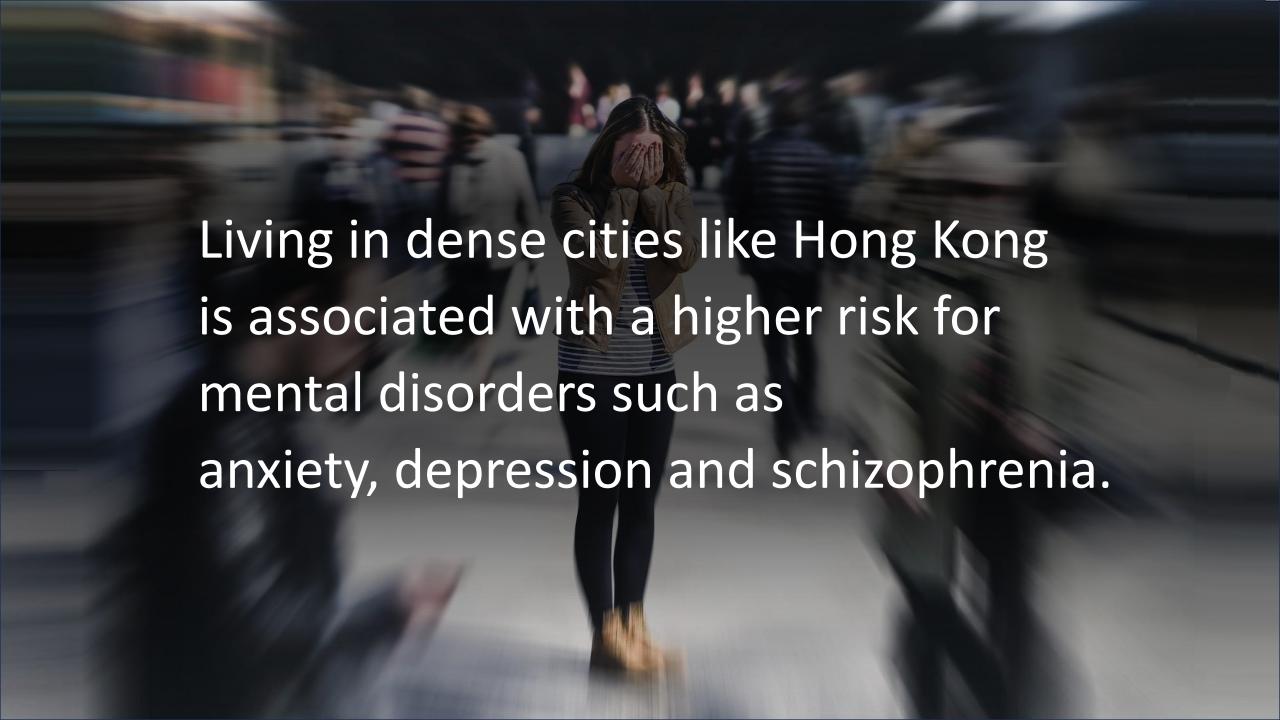


Presented by the MindFit Squad Rio, Johnson, Carson

Date: 4 May, 2024

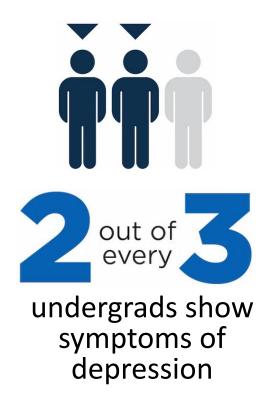
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Hong Kong Mental Health



61%
Adults
experienced
poor
mental
health



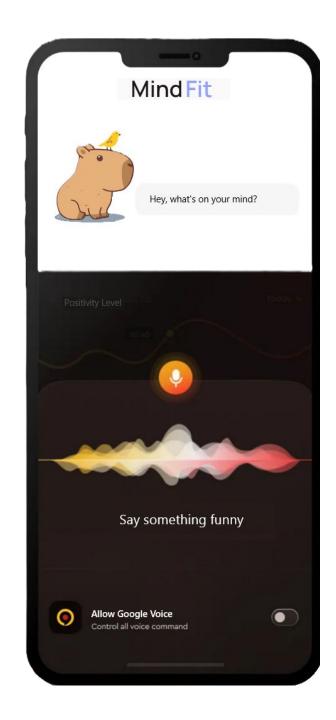
Suffering in Silence

74% sufferers in HK don't seek any form of professional help



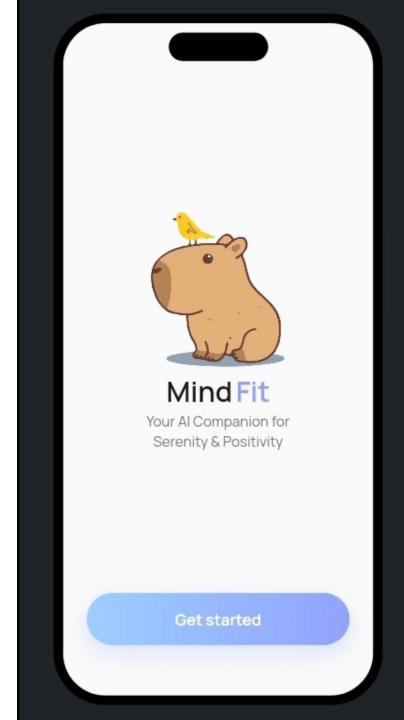
Mental Wellness Companion

A tireless, empathetic companion to improve emotional well-being for the Millennials and GenZs

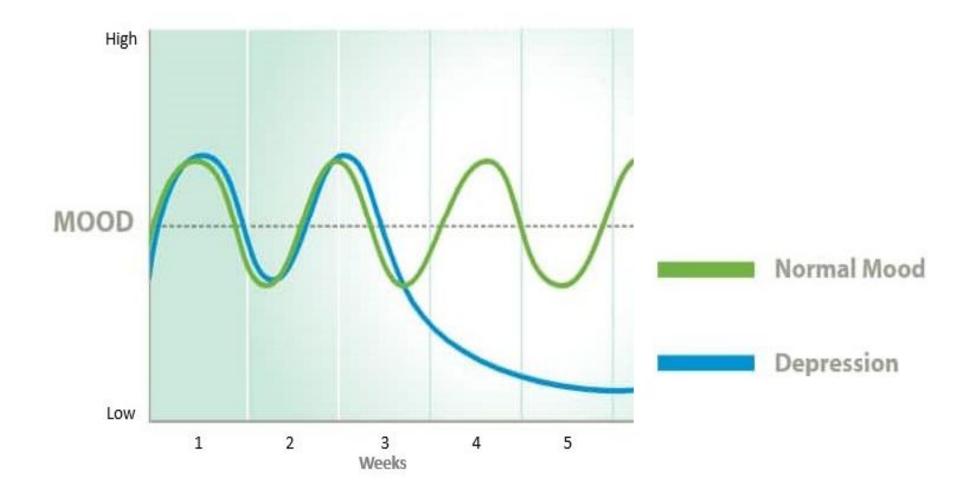


MindFit Mission

Integrate mental health support seamlessly into a user's daily routine in a fun, positive and helpful manner.



Mood Monitoring



Continuous Multi-model Assessment



Proactive Interventions

















Content of "adaptive dialogue" can suggest a suitable set of intervention techniques:

- Humor and Fun
- Cuteness hack
- Physical exercise
- Mindfulness exercise
- Motivational quotes
- Journaling and thought records (Meta cognition for anxiety)
- Music and podcast
- Serenity scenes and sounds
- Reframing
- Nudging

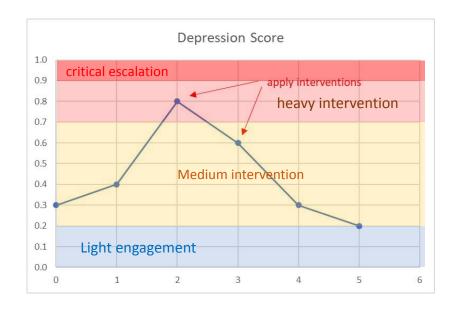
Live Demo

Johnson:

 Real-time Depression / Anxiety Assessment from conversational content using Gemini

Demo: Depression/Anxiety Detection

- Adaptive dialogue
- Sentiment analysis on user text
- Depression or anxiety scoring
- Level of intervention
- Re-assessments
- Escalation decision



Few-shot Learning

Before Training

	Precision	Recall	f1-score	Support
Normal (=0)	1.00	1.00	1.00	8
Depressed (=1)	1.00	1.00	1.00	4
Anxious (=2)	0.50	1.00	0.67	4
Dep & Anx.(=3)	0.00	0.00	0.00	4
Accuracy	0.80	0.80	0.80	0.80
Macro avg	0.63	0.75	0.67	20.00
Weighted avg	0.70	0.80	0.73	20.00

After Training

	Precision	Recall	f1-score	Support
Normal	1.00	1.00	1.00	8
Depressed	1.00	1.00	1.00	4
Anxious	0.80	1.00	0.89	4
Dep & Anx.	1.00	0.75	0.86	4
Accuracy	0.95	0.95	0.95	0.95
Macro avg	0.95	0.94	0.94	20.00
Weighted avg	0.96	0.95	0.95	20.00

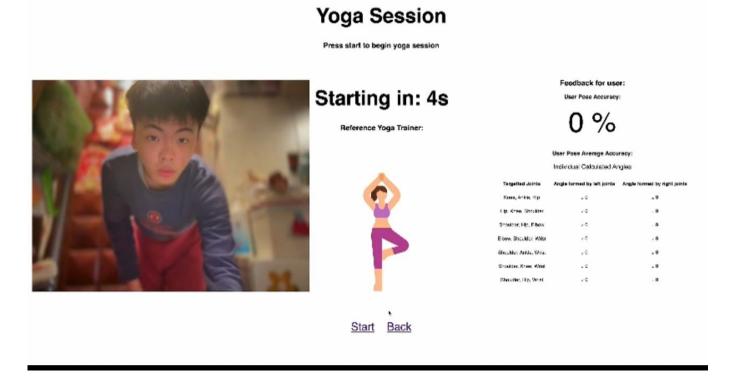
Intervention Decision Map

<u>Conditions</u>		Calculated Score			
Anxiety	< .5	< .5	> .5	> .5	
Depression	< .5	>.5	< .5	> .5	

	Normal	Depressed	Anxious	Depressed & Anxious
Recommendation	А	В	С	D
Strategy 1	Humor and fun	Humor and fun	Mindfulness	Escalation
Strategy 2	Physical exercise	Physical exercise	Self-journaling	Mindfulness
Strategy 3	Cuteness	Cuteness	calming music	Exercise
Strategy 4		Motivational	Serenity scene	Counseling
Strategy 5		Self-journaling	reframing	Reframing
		Self-journaling		uplifting music

Yoga Pose Challenge

- Visual feedback
- Correct posture
- Time limit



Demo: Proactive Intervention #1



Inspirational Quote

• Idols, Heros, Philosophers, etc.

Demo: Proactive Intervention #2

Like a Caring Friend

Mitigate, Reduce, Divert or Avoid:

- Negative self-talk
- Toxic social media
- Dramas from needy people
- Dwelling in unpleasant past
- Consumed by negative scenarios
- Repeating meaningless tasks
- Mindless snacking

Mood Positivity Resilience Self Esteem

Impact

Improve mental health by:

- Overcoming negative thoughts
- Coping with stress, and everyday ups and downs
- Developing skills to deal with stress and anxiety

Future Enhancement

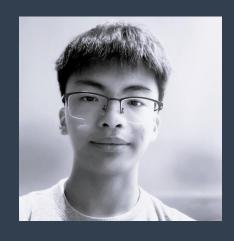
- Integrate with biometric data on Google Watch and Fitbit
 - Heart rate variability (HRV) and electrodermal activity (EDA)
- Speech emotion detection from voice analysis
- Behavioral phenotyping for more effective interventions
- Better contextual and situational awareness
- Emergency protocols and escalation
- Directory to mental health professionals and counselors

Business Model

B2C – freemium model

B2B2C – subscription per user

The MindFit Squad



Carson Wu "Hacker"



Johnson Chong "Al Avenger"



Rioma Kam "Imagineer"

