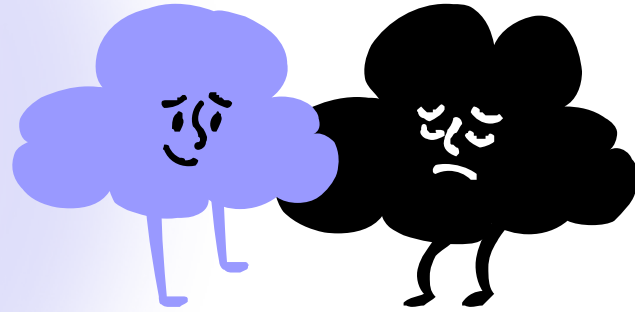




# *Emotional Management of University Students in HK*

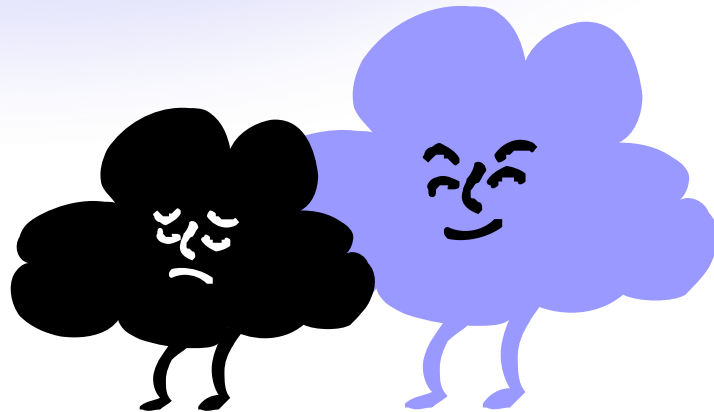
## *Can AI tools be a solution?*

1155175773  
1155174356  
1155167651  
1155143442

TAM Ho Yee  
CHAN Cheuk Ka  
LONG Hio Lam  
ZHANG Ziang

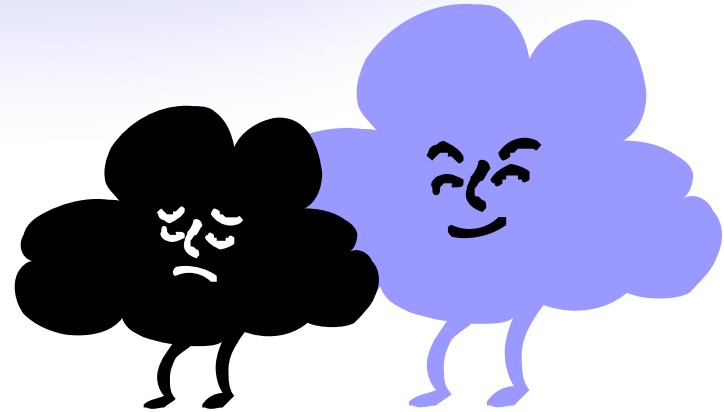
# Introduction

What is Emotional Management  
(情緒管理/調節)?



# Introduction

The Definition of Emotional Management is - regulating emotions and to response to the situation.



Cole, P. M., Michel, M. K., & Teti, L. O. (1994). The development of emotion regulation and dysregulation: A clinical perspective. *Monographs of the Society for Research in Child Development*, 59(2-3), 73-102.  
<https://doi.org/10.1111/j.1540-5834.1994.tb01278.x>

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## *Research Background*

Introducing research aims  
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03

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02

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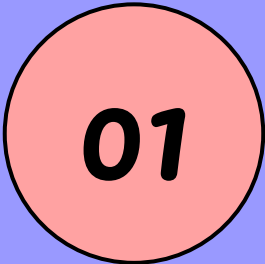
Survey findings

04

## *Is AI a solution?*

Discuss would AI turns to be  
one of the possible solution





**01**

# Research Background

Why & Aims

# Research Background

## HK Uni Student Mental Health

年輕群組自殺率近年亦見上升趨勢，去年 30 歲以下自殺率為近 8 年新高，其中 20 至 29 歲升幅最高且連續 4 年上升。

27.3% of suicide rate of  
University Student

## Stressful Society Atmosphere

No matter working or studying  
are so stressful

## Problems on Seeking Emotional Support

Hardly can find and seek  
support from society

Hardly affordable

## Research Aims

- To find out factors affecting university students' emotions and their emotional management strategies
- To find out the efficiency of emotional support in universities of Hong Kong
- Discuss the possibility and feasibility of AI tools in emotional support services



**02**

# Survey Results

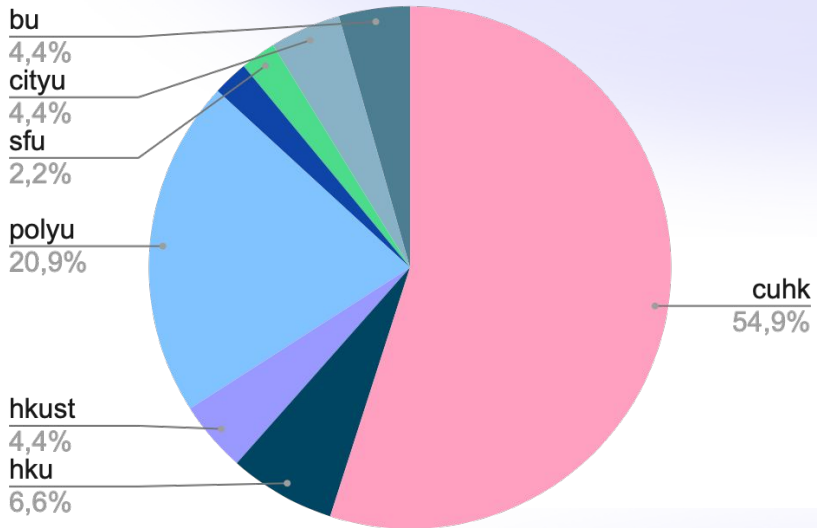
Survey Findings

# Survey Challenges

- Emotional support is commonly used
- Users of emotional support services may not be willing to be interviewed

# Participants' Background

## University

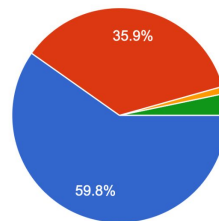


Age: **18 - 25**

No.: **102**

## 性別 Gender

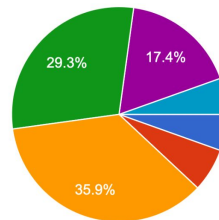
92 responses



- ♂ 男性 Male
- ♀ 女性 Female
- 👤 其他 Other
- 🙅 保密 Prefer not to say

## 年級 Year of study

92 responses



- 1 大學一年級 - Undergraduate Year 1
- 2 大學二年級 - Undergraduate Year 2
- 3 大學三年級 - Undergraduate Year 3
- 4 大學四年級 - Undergraduate Year 4
- 5 大學五年級或以上 - Undergraduate Year 5 or above
- + 碩士或以上 - Postgraduate

# PSS Scale for stress measure

For each question choose from the following alternatives:

0 - never   1 - almost never   2 - sometimes   3 - fairly often   4 - very often

- \_\_\_\_\_ 1. In the last month, how often have you been upset because of something that happened unexpectedly?
- \_\_\_\_\_ 2. In the last month, how often have you felt that you were unable to control the important things in your life?
- \_\_\_\_\_ 3. In the last month, how often have you felt nervous and stressed?
- \_\_\_\_\_ 4. In the last month, how often have you felt confident about your ability to handle your personal problems? reverse scoring
- \_\_\_\_\_ 5. In the last month, how often have you felt that things were going your way?
- \_\_\_\_\_ 6. In the last month, how often have you found that you could not cope with all the things that you had to do?
- \_\_\_\_\_ 7. In the last month, how often have you been able to control irritations in your life?
- \_\_\_\_\_ 8. In the last month, how often have you felt that you were on top of things?
- \_\_\_\_\_ 9. In the last month, how often have you been angered because of things that happened that were outside of your control?
- \_\_\_\_\_ 10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?

-The **Perceived Stress Scale** was developed by Sheldon Cohen in 1983

-PSS defines **Psychological stress** as the extent to which persons perceive that their **stress exceed their ability to cope**.

-Research has proven PSS a reliable scale to measure stress

Lee, E. H. (2012). Review of the psychometric evidence of the perceived stress scale. *Asian nursing research*, 6(4), 121-127.

Kechter, A., Black, D. S., Riggs, N. R., Warren, C. M., Ritt-Olson, A., Chou, C. P., & Pentz, M. A. (2019). Factors in the perceived stress scale differentially associate with mindfulness disposition and executive function among early adolescents. *Journal of child and family studies*, 28(3), 814-821.

# PSS Scale for stress measure

For each question choose from the following alternatives:

0 - never   1 - almost never   2 - sometimes   3 - fairly often   4 - very often

## Columns

- 1 ☐ 🌐 少於每月 - Fewer than monthly
- 2 ☐ 📅 每月或更多 - Monthly or more
- 3 ☐ 📊 每週或更多 - Weekly or more
- 4 ☐ 🌞 每天或更多 - Daily or more

- When designing the survey, we have **tweaked** the scoring slightly
- Easier for participants to choose between/ **interpret** the options
- More consistent answers between participants if we use **absolute frequencies** instead of **subjective frequencies**



# PSS Scale Score Meaning

- Individual scores on the PSS can range from 0 to 40 with higher scores indicating higher perceived stress.
  - ▶ Scores ranging from 0-13 would be considered low stress.
  - ▶ Scores ranging from 14-26 would be considered moderate stress.
  - ▶ Scores ranging from 27-40 would be considered high perceived stress.

## Score meaning proven effective

Lee, E. H. (2012). Review of the psychometric evidence of the perceived stress scale. *Asian nursing research*, 6(4), 121-127.

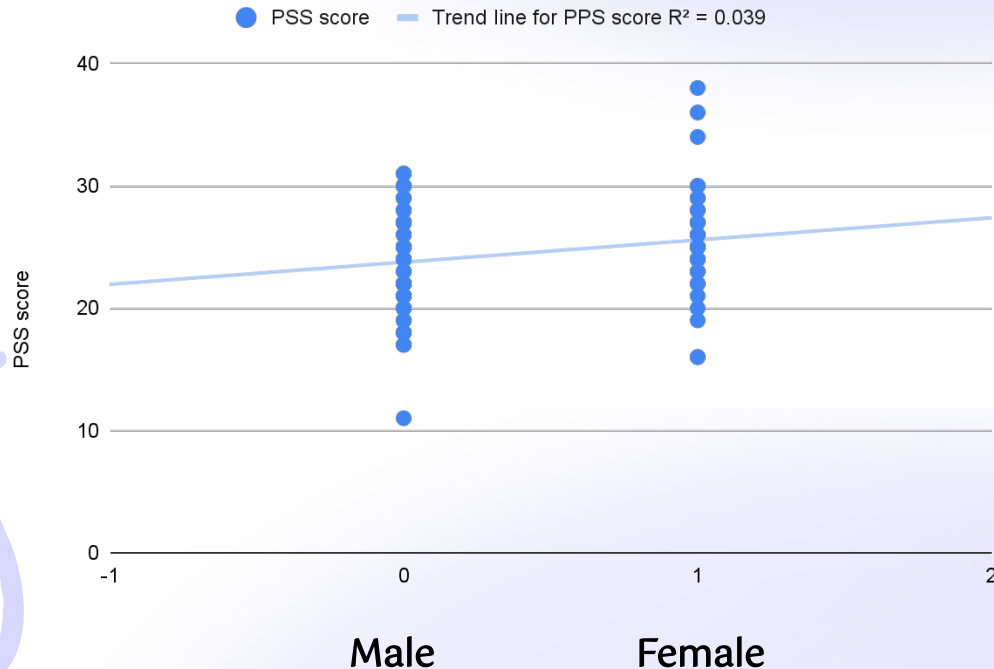
Kechter, A., Black, D. S., Riggs, N. R., Warren, C. M., Ritt-Olson, A., Chou, C. P., & Pentz, M. A. (2019). Factors in the perceived stress scale differentially associate with mindfulness disposition and executive function among early adolescents. *Journal of child and family studies*, 28(3), 814-821.

# PSS Scale Score Meaning

- Individual scores on the PSS can range from 10 to 40 with higher scores indicating higher perceived stress.
  - ▶ Scores ranging from 10-20 would be considered low stress.
  - ▶ Scores ranging from 21-30 would be considered moderate stress.
  - ▶ Scores ranging from 31-40 would be considered high perceived stress.

Score meaning used by Government of New Hampshire, USA

# No Correlation between gender and stress



P-Value = 0.078 > 0.05

性別和壓力沒有關聯

|                              | Male PSS      | Female PSS  |
|------------------------------|---------------|-------------|
| Mean                         | 23.75925926   | 25.57575758 |
| Variance                     | 17.35604472   | 23.25189394 |
| Observations                 | 54            | 33          |
| Hypothesized Mean Difference | 0             |             |
| df                           | 60            |             |
| t Stat                       | -1.79332488   |             |
| P(T<=t) one-tail             | 0.03898055086 |             |
| t Critical one-tail          | 1.670648806   |             |
| P(T<=t) two-tail             | 0.07796110172 |             |
| t Critical two-tail          | 2.000297759   |             |

# Comparison

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<https://www.cityu.edu.hk/zh-hk/media/press-release/2020/08/22/diaochafaxianguoqusanniandaxueshengxingfuganjishenghuomanyidudie-lianxiaoxinlijiankangtuiguangjihua-zhujijiyindingduikunnan-chinese-version-only>

2016年10月港大醫學院《香港醫學雜誌》問卷(訪問1119名大學生)

DOI: 10.12809/hkmj176915

Conclusion: Female gender was not associated with mild to severe anxiety and depression symptoms

TABLE 5. Binary logistic regression model for the effects of multiple covariates on the odds of having mild to severe anxiety symptoms, based on the 7-item Generalised Anxiety Disorder scale

|               | Coefficient | Standard error | P value | Odds ratio (95% confidence interval) |
|---------------|-------------|----------------|---------|--------------------------------------|
| Female gender | 0.319       | 0.169          | 0.059   | 1.38 (0.99-1.92)                     |

TABLE 4. Binary logistic regression model for the effects of multiple covariates on the odds of having mild to severe depressive symptoms, based on the 9-item Patient Health Questionnaire

|               | Coefficient | Standard error | P value | Odds ratio (95% confidence interval) |
|---------------|-------------|----------------|---------|--------------------------------------|
| Female gender | -0.301      | 0.185          | 0.103   | 0.74 (0.52-1.06)                     |

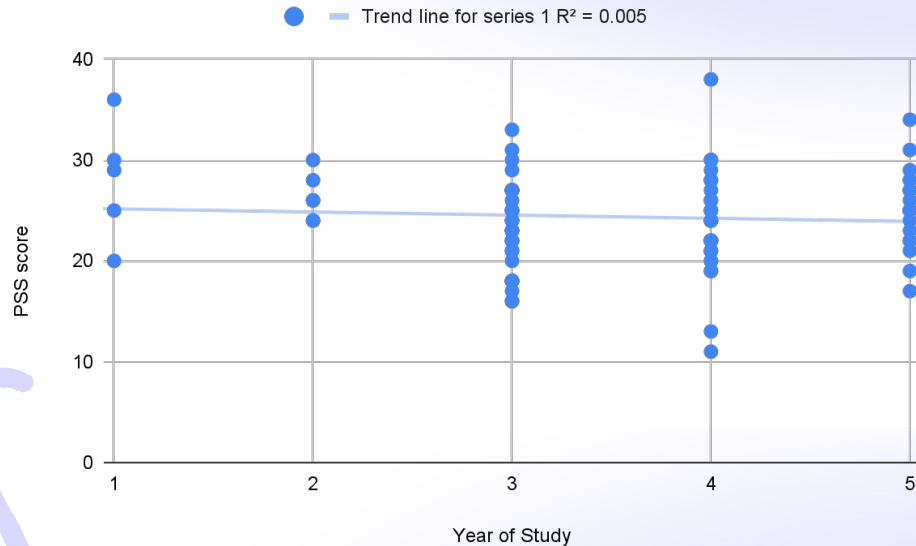
## FYP問卷數據

|          | Male PSS    | Female PSS  |
|----------|-------------|-------------|
| Mean     | 23.75925926 | 25.57575758 |
| Variance | 17.35604472 | 23.25189394 |

P-Value = 0.078 > 0.05

|                     | Male PSS      | Female PSS  |
|---------------------|---------------|-------------|
| Mean                | 23.75925926   | 25.57575758 |
| Variance            | 17.35604472   | 23.25189394 |
| Observations        | 54            | 33          |
| P(T<=t) two-tail    | 0.07796110172 |             |
| t Critical two-tail | 2.000297759   |             |

# No Correlation between Year of study and stress



P-Value = 0.49 >> 0.05

大學年級和壓力沒有關聯

|            | <i>df</i> | <i>SS</i>   | <i>MS</i>   | <i>F</i>     | <i>Significance F</i> |
|------------|-----------|-------------|-------------|--------------|-----------------------|
| Regression | 1         | 10.27175793 | 10.27175793 | 0.4591596717 | 0.4997946545          |
| Residual   | 88        | 1968.628242 | 22.37077548 |              |                       |
| Total      | 89        | 1978.9      |             |              |                       |

# PANSI Inventory for suicide ideation test

| Item                                                                                    | Factor 1 (PANSI-NSI) | Factor 2 (PANSI-PI) |
|-----------------------------------------------------------------------------------------|----------------------|---------------------|
| 11. Felt lonely or sad that you wanted to kill yourself so that you could end your pain | 0.820                | —                   |
| 7. Thought you could not find solution to a personal problem                            | 0.773                | —                   |
| 5. Thought you could not accomplish something important in your life                    | 0.681                | —                   |
| 9. Thought about killing yourself because you felt like a failure in life               | 0.617                | —                   |
| 1. Considered killing yourself                                                          | 0.583                | —                   |
| 3. Felt hopeless and wondered                                                           | 0.536                | —                   |
| 10. Thought problems were overwhelming that suicide was the only option for you         | 0.403                | —                   |
| 4. Felt unhappy about your relationship with someone that you wished you were dead      | 0.385                | —                   |
| 13. Felt that life was worth living                                                     | —                    | 0.820               |
| 12. Felt confident about ability to cope with most of the problems in your life         | —                    | 0.812               |
| 14. Felt confident about your plans for the future                                      | —                    | 0.799               |
| 2. Felt you were in control                                                             | —                    | 0.593               |
| 6. Felt hopeful about the future because things were working out well for you           | —                    | 0.455               |
| 8. Felt excited because you were doing well at school or at work                        | —                    | 0.327               |

reverse scoring

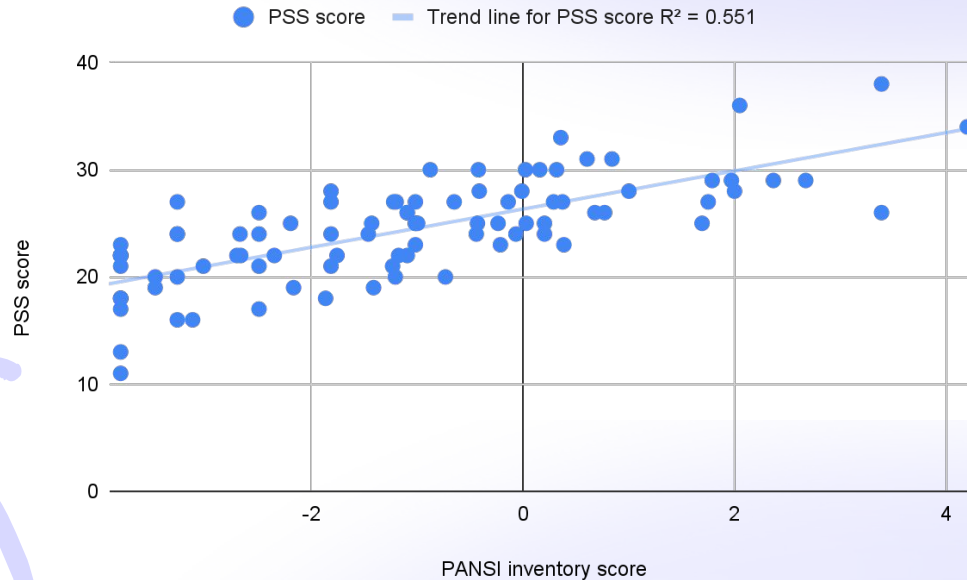
- The Positive and Negative Suicide Ideation (PANSI) Inventory

- Measures the frequency of positive and negative thoughts related to **suicidal behavior**

- Research has proven PANSI a reliable test to measure **suicide ideations**

Aloba O, Adefemi S, Aloba T. Positive and Negative Suicide Ideation (PANSI) Inventory: Initial Psychometric Properties as a Suicide Risk Screening Tool Among Nigerian University Students. Clinical Medicine Insights: Psychiatry. 2018;9. doi:10.1177/1179557317751910

# High Stress and suicide thoughts are correlated



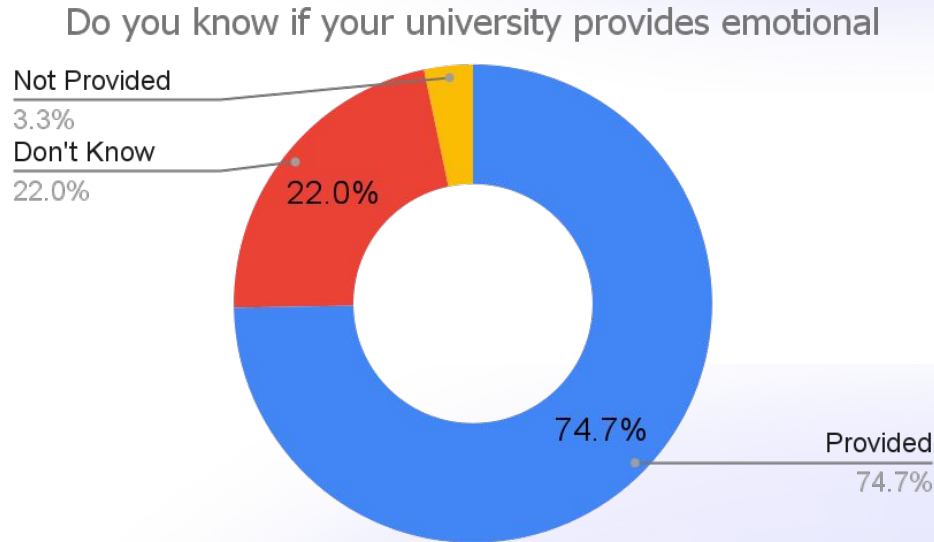
P-Value =  $1.11 \times 10^{-16} \ll 0.05$

壓力和自殺念頭有關聯

|            | <i>df</i> | <i>SS</i>   | <i>MS</i>   | <i>F</i>    | <i>Significance F</i> |
|------------|-----------|-------------|-------------|-------------|-----------------------|
| Regression | 1         | 1095.365977 | 1095.365977 | 109.0984653 | 0.00000E+00           |
| Residual   | 88        | 883.534023  | 10.04015935 |             |                       |
| Total      | 89        | 1978.9      |             |             |                       |



# Students are not familiar with school emotional support services



| No. | University | Do you know if your university provides emotional support services? |
|-----|------------|---------------------------------------------------------------------|
| 27  | eduhk      | Not Provided                                                        |
| 79  | polyu      | Not Provided                                                        |
| 86  | cuhk       | Not Provided                                                        |

- 學生不清楚學校是否有提供情緒支援服務
- 有學生誤以為學校沒有提供情緒支援

# Low usage of emotional support services

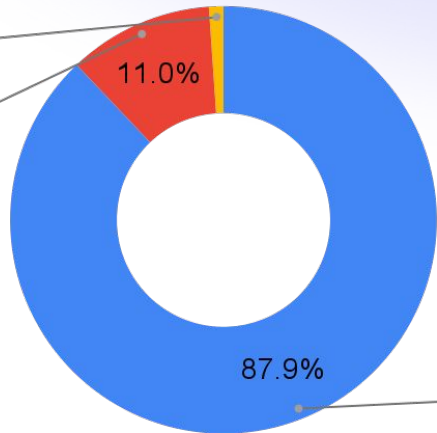
Have you used the provided in-school emotional support

No services provided

1.1%

Used

11.0%



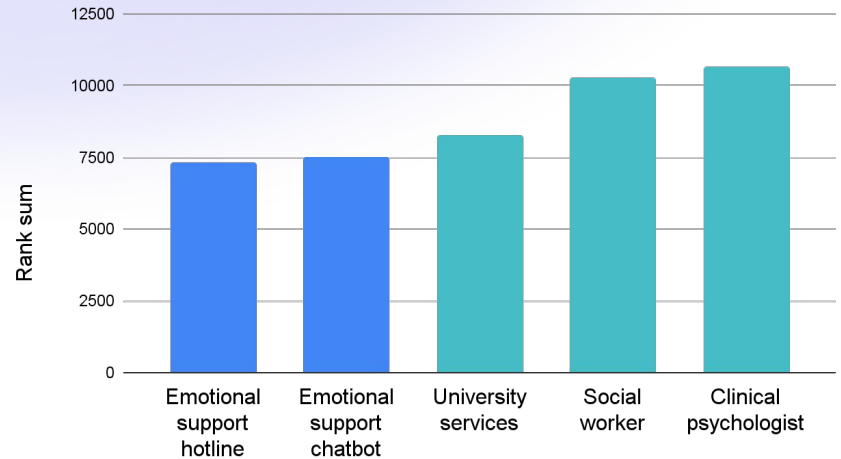
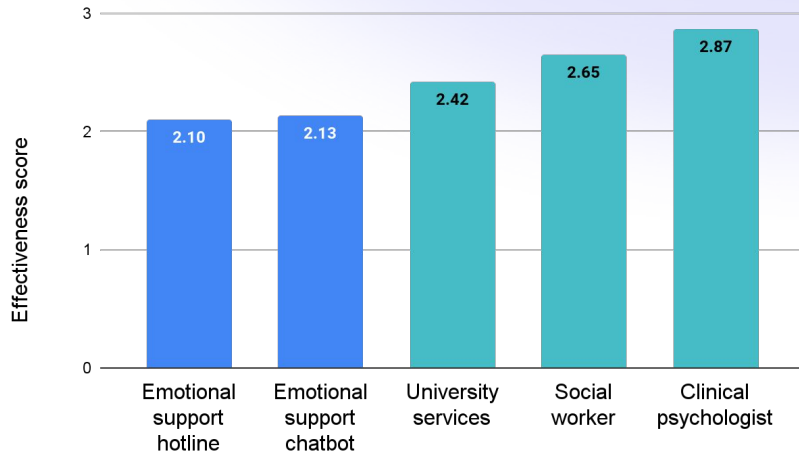
Haven't Used

87.9%

- 學校情緒支援服務的使用率低
- 而使用過情緒支援服務普遍感到滿意

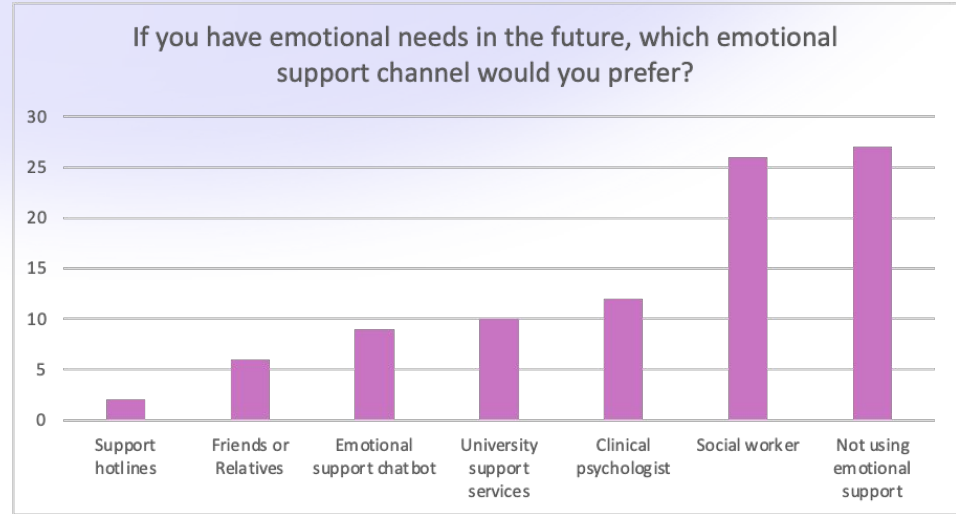
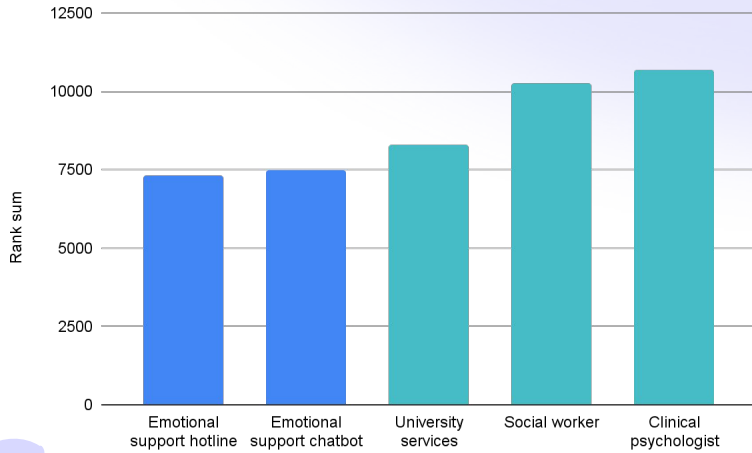
| No. | Have you used the provided in-school emotional support services? | Please rate the service. |
|-----|------------------------------------------------------------------|--------------------------|
| 1   | Used                                                             | 10                       |
| 56  | Used                                                             | 10                       |
| 86  | Used                                                             | 10                       |
| 6   | Used                                                             | 8                        |
| 24  | Used                                                             | 7                        |
| 34  | Used                                                             | 7                        |
| 55  | Used                                                             | 7                        |
| 22  | Used                                                             | 5                        |
| 76  | Used                                                             | 5                        |
| 29  | Used                                                             | 4                        |

# Rating effectiveness of emotional support services



- Students think **face-to-face services** are more effective
- Students think services professionals are more effective

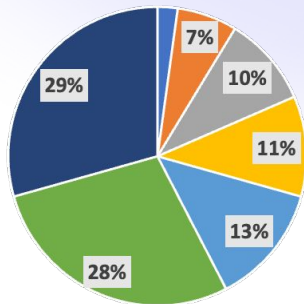
# Emotional support services preference



- Students prefer not using emotional support
- Social worker is the most preferred support service
- Trend follows the effectiveness ranking, except social worker is more preferred over psychologist despite higher effectiveness scores

# Emotional support services preference

Which emotional support channel would you prefer?



- Support hotlines
- Friends or Relatives
- Emotional support chatbot
- University support services
- Clinical psychologist
- Social worker
- Not using emotional support

-FYP 問卷調查29%不會尋求幫助

精神健康素養：只有三成二受訪學生表示有心理健康問題時會尋求協助；兩成表示不會，並有四成六表示不一定

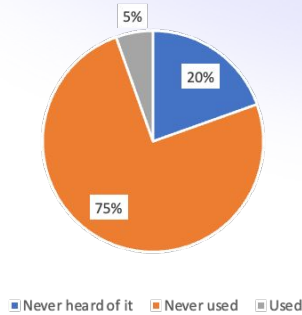
| 多大程度上同意以下問題內容              | 平均分  | 非常不同意(1) | 不同意(2) | 中立/不知道(3) | 同意(4) | 非常同意(5) |
|----------------------------|------|----------|--------|-----------|-------|---------|
| <b>尋求協助 (Help-seeking)</b> |      |          |        |           |       |         |
| 與某人談論我的感受有助於改善心理健康。        | 3.21 | 10.7%    | 6.4%   | 45.4%     | 25.9% | 11.6%   |
| 我很樂意與我的同伴/朋友談論我的感受。        | 3.26 | 10.8%    | 7.7%   | 40.1%     | 27.5% | 13.9%   |
| 如果我患有心理健康問題，我會尋求協助。        | 3.11 | 11.6%    | 9.0%   | 46.9%     | 22.0% | 10.5%   |
| 我很樂意向我身邊的成年人談論我的感受。        | 2.99 | 13.7%    | 12.6%  | 45.3%     | 17.8% | 10.7%   |
| 如果我患有精神疾病，我會與其他人談論它。       | 2.92 | 14.3%    | 12.1%  | 47.9%     | 18.4% | 7.3%    |

- 香港中學生精神健康素養的2024年7-8月調查結果(訪問826中學生)

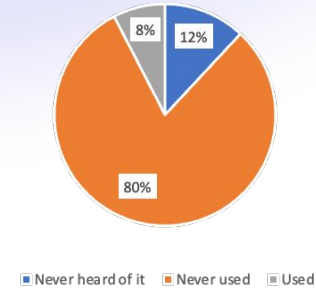
-19.6%不會尋求幫助

# Other emotional support services used by students

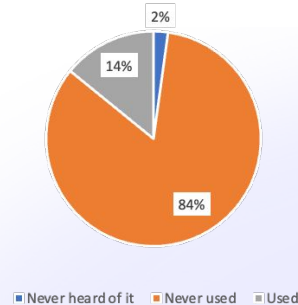
Emotional support chatbot



Psychologist

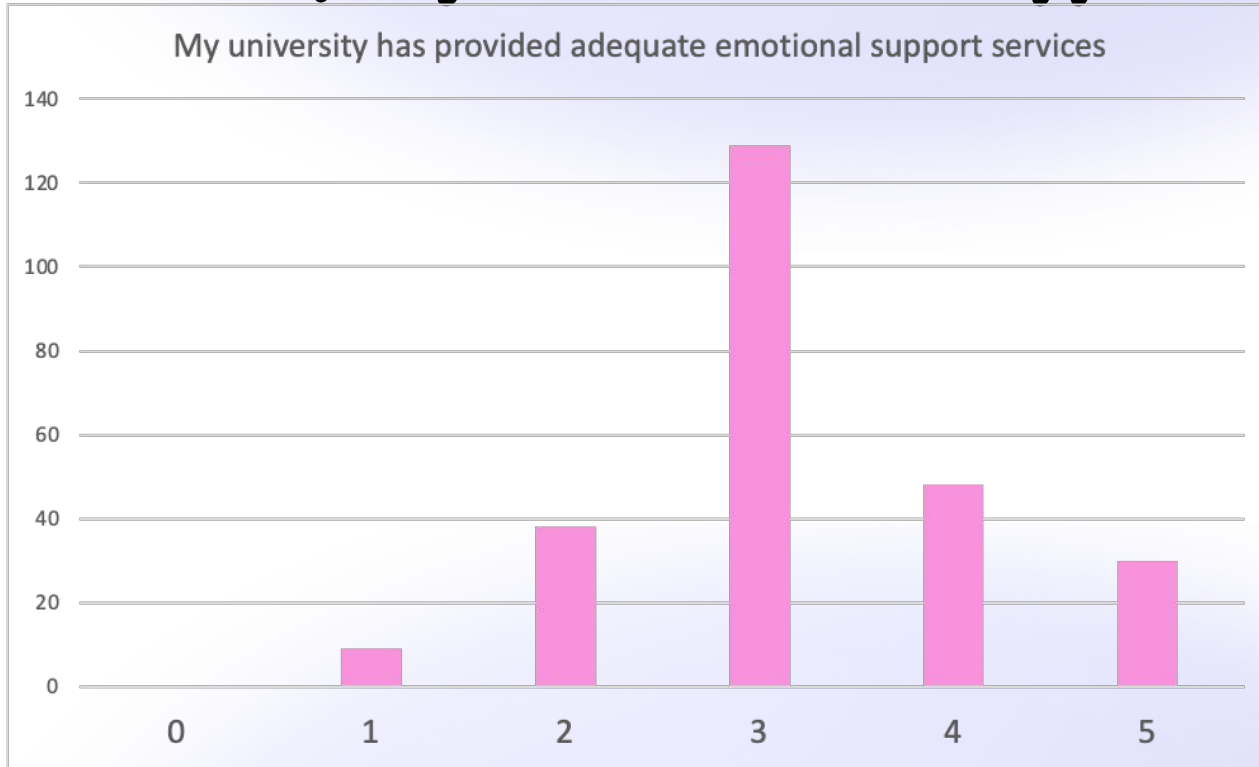


Social worker



- Emotional support services is not commonly used

# Adequacy of Emotional Support Services



大部分人給予 3 分

-反映大學不了解學校的情緒  
支援服務

# Survey Challenges

- Emotional support is commonly used
- Users of emotional support services may not be willing to be interviewed
- Harder to find male interviewees



# *Interview with users of school emotional support services*



- UST Year 5 Male Student
- 因為mid term考得不好唔好而見counsellor
- 並沒有嚴重焦慮億餘、自殺念頭
- 對於情緒支援服務非常滿意
- 並不太想身邊同學知道

# *Interview with users of school emotional support services*

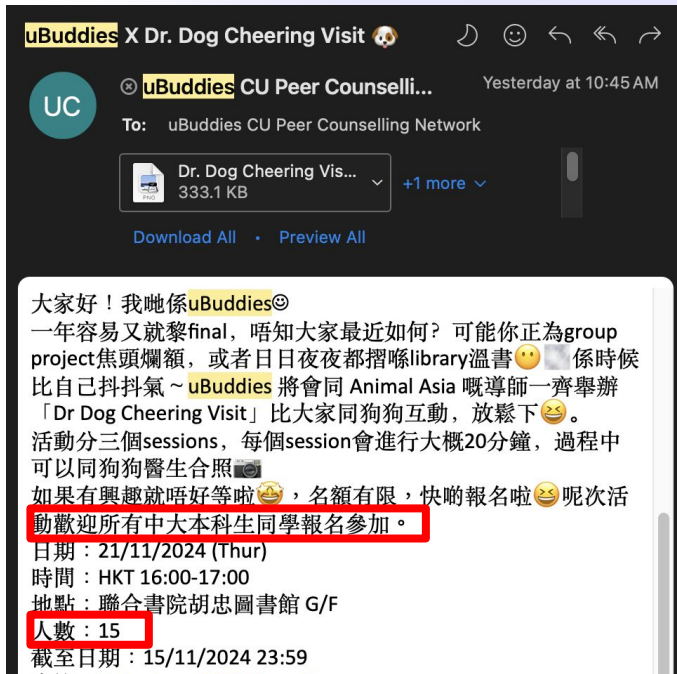


身邊例子：

同學親眼目睹學校有人自殺，想即時預約  
counsellor

獲通知counsellor booking已full  
最早能在2星期後見面

# Emotional Support Services Dilemma



香港中文大學

CUHK

學生事務處心理健康及輔導中心  
Wellness and Counselling Centre  
Office of Student Affairs

ABOUT WACC ▾

PSYCHOLOGICAL  
COUNSELLING SERVICE ▾ S

Wellness and Counselling Centre > Psychological Counselling Service > Getting to Know Counselling

## Getting to Know Counselling

Through psychological counselling, students are encouraged to understand the nature of their difficulties, develop different perspectives as well as learn effective coping skills. Counselling is also a learning process which facilitates self-exploration and continuous personal development.

Counsellors from [Wellness and Counselling Centre \(WACC\)](#) are ready to accompany you as you adjust to university life or overcome hurdles and brave stormy weather.

### You may benefit from seeing a counsellor when you:

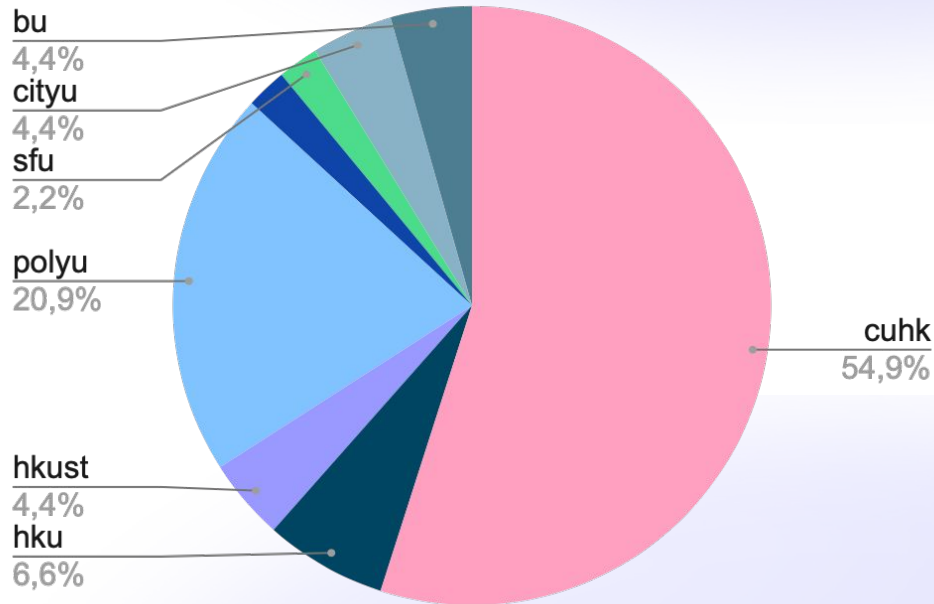
- Experience problems in adapting to the university environment
- Feel unhappy, unmotivated or troubled for prolonged periods
- Wish to understand more about yourself
- Feel that you are not doing as well as you should in your studies
- Wish to improve your relationships

大學情緒支援為鼓勵同學使用，一直歡迎所有同學使用，沒有明確篩選制度

但可能導致情緒支援資源不能被有效分配

# Participants' Background

## University



Age **18 - 25**

Despite being red, **70K**  
Mars is a cold place

Mercury is the closest **35K**  
planet to the Sun



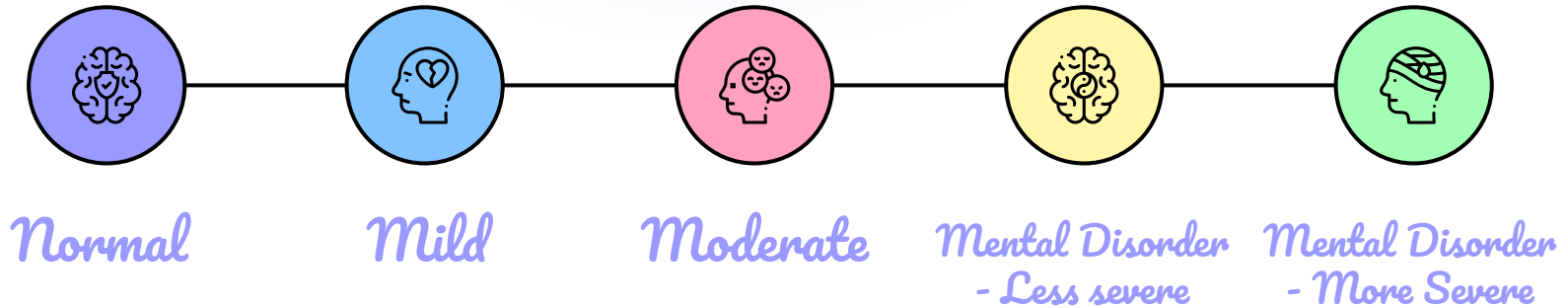
**03**

# *Interview x Survey*

Using interview results to interpret our survey findings

# Mental Healthiness

States of Mental Health



Zimmerman, M., Morgan, T. A., & Stanton, K. (2018). The severity of psychiatric disorder. *World psychiatry : official journal of the World Psychiatric Association (WPA)*, 17(3), 258-275. <https://doi.org/10.1002/wps.20569>

# Normalising abnormal mental health

- Although the university students are in high stress and strong emotion, but they think that this is a normal situation
- During interview, they think although their survey stress score is moderate to high, they are still fine
- This shows that Uni student in HK normalise the high pressure environment, which is not healthy

# Normalising abnormal mental health

- Under the cultural background and factors of traditional Chinese thoughts, students in Hong Kong are more likely to not seeking support, and try to normal the high pressure situation due to the society atmosphere
- 69% of university undergraduates are currently showing common mental disorder symptoms, such as depression and anxiety

Lo, S. M., Wong, H. C., Lam, C. Y., & Shek, D. T. (2020). Common mental health challenges in a university context in Hong Kong: A study based on a review of medical records. *Applied Research in Quality of Life*, 15, 207-218.



# Uni Emotional Support are not enough

- Although most of the university in Hong Kong has established emotional and mental support for students, it's not enough for huge numbers of University students' in HK
- Hardly can have an appointment (中大有晴), the 24-hours hotline cannot get through
- Lack of publicity and awareness
- Hard to contact and afterwards following
- Passive Uni Emotional support services



# Qualitative Research

Interview with a practising counsellor

What do you think triggers the emotional challenge for university students?

「一個好重要嘅過渡期」

# 人生八階

Eight Stages of Psychosocial  
Development

By Erik Erikson

| 階段            | 心理社會危機     | 心理效能 |
|---------------|------------|------|
| 嬰兒期 (0-1歲)    | 信任VS不信任    | 希望   |
| 幼兒期 (2-3歲)    | 自主VS羞恥及懷疑  | 意志力  |
| 學前期 (4-5歲)    | 自發VS罪惡感    | 意義   |
| 童年期 (6-12歲)   | 勤奮VS自卑     | 能力感  |
| 青年期 (13-18歲)  | 自我認同VS身份混淆 | 忠誠   |
| 青壯年期 (19-25歲) | 親密VS隔離     | 愛    |
| 中年期 (26-65歲)  | 生產VS停滯     | 關懷   |
| 老年期 (65歲或以上)  | 完整VS絕望     | 智慧   |

Successful resolution of each stage fosters healthy psychological development and contributes to overall well-being, and vice versa

# Transition Period

- New environment
- Expectation & Reality
- Comparison with past peers
- Enlargement by social media

Any observations about emotional management from youngsters?

「喺 Threads 講好過去搵 counsellor」

Any observations about emotional management from youngsters?

「見過 Gen Z 喺 Threads po 自己嘅  
DASS2 result 去搵同溫層但拒絕搵  
counselling 」



# Any observations about emotional management from youngsters?

DASS21 is a self-report questionnaire assessing depression, anxiety, and stress through three subscales. Each subscale has seven items rated on a 0-3 scale based on the past week, making it a useful tool for identifying and monitoring these psychological conditions in clinical and research settings.

## DASS21

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Please read each statement and circle a number 0, 1, 2 or 3 which indicates how much the statement applied to you **over the past week**. There are no right or wrong answers. Do not spend too much time on any statement.

The rating scale is as follows:

- 0 Did not apply to me at all
- 1 Applied to me to some degree, or some of the time
- 2 Applied to me to a considerable degree or a good part of time
- 3 Applied to me very much or most of the time

|        |                                                                                                                           |   |   |   |   |
|--------|---------------------------------------------------------------------------------------------------------------------------|---|---|---|---|
| 1 (s)  | I found it hard to wind down                                                                                              | 0 | 1 | 2 | 3 |
| 2 (a)  | I was aware of dryness of my mouth                                                                                        | 0 | 1 | 2 | 3 |
| 3 (d)  | I couldn't seem to experience any positive feeling at all                                                                 | 0 | 1 | 2 | 3 |
| 4 (a)  | I experienced breathing difficulty (e.g. excessively rapid breathing, breathlessness in the absence of physical exertion) | 0 | 1 | 2 | 3 |
| 5 (d)  | I found it difficult to work up the initiative to do things                                                               | 0 | 1 | 2 | 3 |
| 6 (s)  | I tended to over-react to situations                                                                                      | 0 | 1 | 2 | 3 |
| 7 (a)  | I experienced trembling (e.g. in the hands)                                                                               | 0 | 1 | 2 | 3 |
| 8 (s)  | I felt that I was using a lot of nervous energy                                                                           | 0 | 1 | 2 | 3 |
| 9 (a)  | I was worried about situations in which I might panic and make a fool of myself                                           | 0 | 1 | 2 | 3 |
| 10 (d) | I felt that I had nothing to look forward to                                                                              | 0 | 1 | 2 | 3 |
| 11 (s) | I found myself getting agitated                                                                                           | 0 | 1 | 2 | 3 |
| 12 (s) | I found it difficult to relax                                                                                             | 0 | 1 | 2 | 3 |
| 13 (d) | I felt down-hearted and blue                                                                                              | 0 | 1 | 2 | 3 |
| 14 (s) | I was intolerant of anything that kept me from getting on with what I was doing                                           | 0 | 1 | 2 | 3 |
| 15 (a) | I felt I was close to panic                                                                                               | 0 | 1 | 2 | 3 |

# Any observations about emotional management from youngsters?



without.s\_\_ 20/4/24

...

我覺得 threads 最棒的是，  
在聊到這些情緒問題，  
憂鬱症也好，自殘也好，甚至自殺也好，  
我們能接觸到同溫層。

跟病友一起同行，  
我們可以把情緒攤在陽光下，  
讓自己知道我們不是這個世界的異類。

♡ 2.8K

💬 144

🔄 123



# Any observations about emotional management from youngsters?



laugh\_after\_dark 4d



如果你有點 emo  
又不確定應該找誰聊  
我還蠻建議可以找 chatGPT 聊聊的  
(用語音功能 更有真實感)

指令下「你可以假設你是一名心理諮商師陪我聊天嗎」  
剛剛聊了半小時  
心情變好了 😊

\*有心理及情緒問題還是建議找專業諮商師諮詢，我上述單純只是心情不好的時候可以有一個閒聊但正面回饋的聊天對象。



3.2K



99



168



380

04

*Is AI a solution?*

Can AI solve the problem?

# What stops them from seeking professional help from counselor?

「家醜不可外揚」

「唔去理, 就無事」

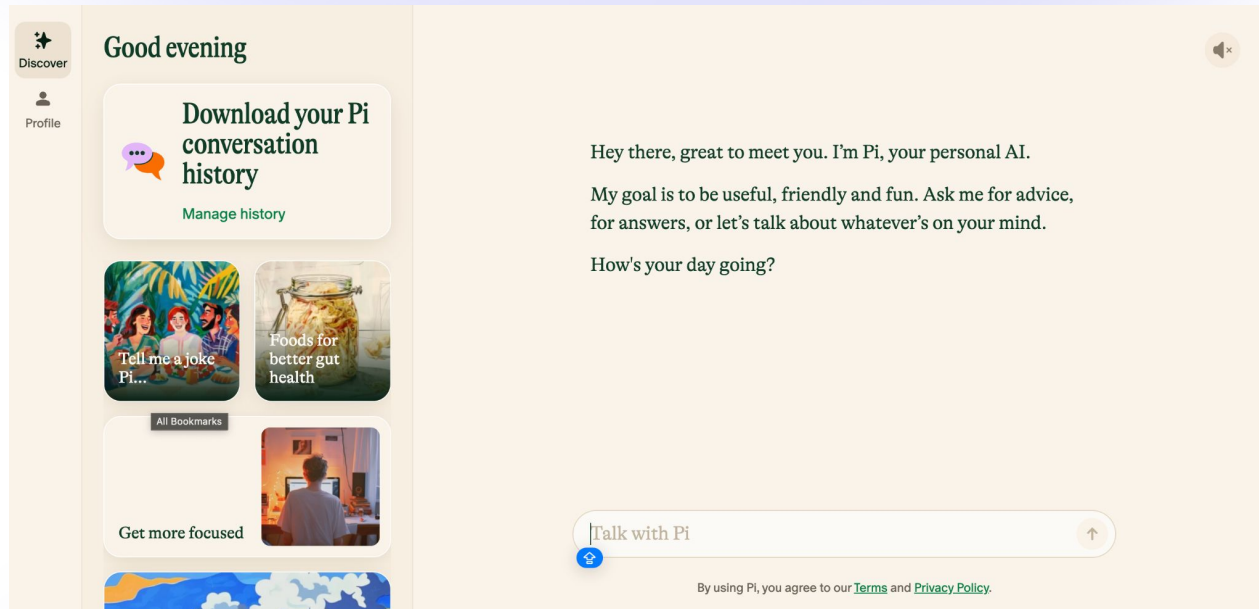
「報喜不報憂」

「搵人幫手 = 弱」



Can counselling becomes more effective and easy in a self operation mode, with the help of AI?

# AI emotional support chatbot: Pi



I have a bad day, I feel down because I have to do a presentation this afternoon and I feel very stressed

I'm sorry to hear that, that sounds tough. Presentations can be nerve wracking and it's normal to feel stressed about it. Remember, you are capable and prepared. Do you want to talk through your presentation, or are you feeling worried about something else?

yah i wanna talk about it...

Okay, I'm here to listen and help you work through it. What specific parts of the presentation are you stressed about? Is it a specific part of the content, or just the idea of presenting in general?

I feel it's a lot of workload and I didn't do a good job at all

Well, that's definitely not the best feeling. Maybe you could start by breaking it down a little bit. Start with one part of the workload you are comfortable with, and then you can move on to the next one. Remember, you can always go back and revise things. Do you have any specific concerns about the content of your presentation?

i just don't wanna continue with it anymore, i wanna drop out of university

Okay, it's totally understandable to feel overwhelmed and exhausted, but I'd encourage you to consider the bigger picture before making a decision like dropping out. Let's take a minute to talk through your options. Is there anything else

## Helplines in Hong Kong for suicide.

### 撒瑪利亞會 The Samaritans, 24 Hour Multi-Lingual Suicide Prevention Services



All topics

Everyone

撒瑪利亞會是一個義工主導、獨立、非宗教的組織，於1974年在香港成立，旨在為感到絕望和有自殺念頭的人們提供情緒支援。我們相信，能被傾聽意味著生與死的區別。我們的核心服務是 24/7/365...



Open 24/7

Volunteers

2896 0000

[samaritans.org.hk](https://samaritans.org.hk)





# Hong Kong's Chinese University launches AI chatbot to provide mental health support amid rising demand for counselling services

- ← Platform integrates generative AI into the existing Jockey Club TourHeart+ project and offers free online therapy, self-help tools to the city's university students
- ← Schools have struggled to meet requests for mental health services, saying complexity of student concerns has also intensified

 Listen to this article ▶

by **Kelly Fung** | Published: 4:43pm, 19 Apr, 2024 ▼



# Jockey Club x CUHK: 心導遊 project



關於我們 ▾ 與阿本聊天 ▾ 活動 ▾ 文章 ▾ 互動旅程 ▾ 大專心理健康支援 ▾

我的練習 我的課程 EN

A



## 體驗升級版聊天機械人

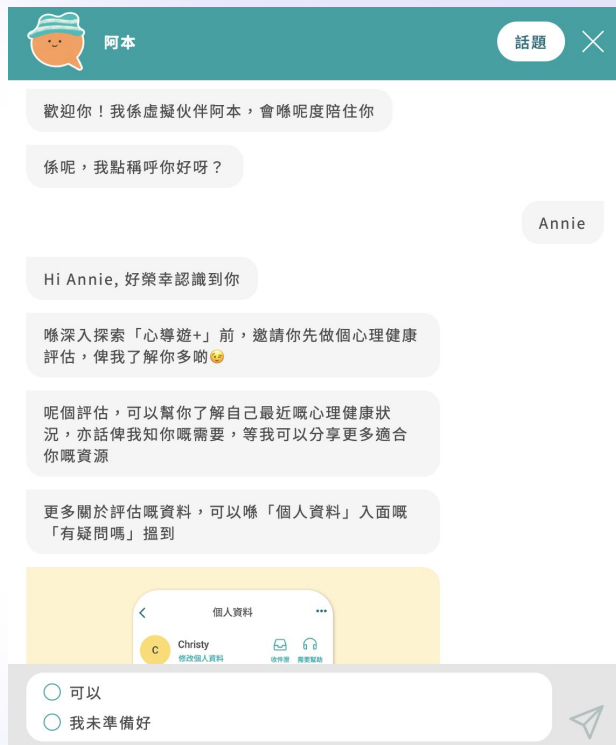
情緒低落？焦慮不安？孤獨和憤怒？與聊天機械人穿梭探索各種情緒。它會因應你的情緒狀態，推介針對性練習。

開始聊天

<https://wacc.osa.cuhk.edu.hk/psychological-counselling-service/waccxtourheart/>



Turns out it is not really AI-driven, but instead a preset chatting experience to access your emotional management status and provide solution



# Can AI counselling chatbot solve youngsters' reluctance to talk to counsellor?

「body language, 微表情, body language, 呢啲AI睇唔到, 唔夠有效」

‘The use of “body” language by an adequately motivated counselor, can communicate to the client the fact that his emotional needs will be partially filled in the counseling setting.’

The Importance of "BODY" LANGUAGE in Counseling  
ROUTH, THOMAS A.

Routh, T. A. (1958). The importance of "BODY" LANGUAGE in counseling. *Vocational Guidance Quarterly*, 6(3), 134-137. <https://doi.org/10.1002/j.2164-585x.1958.tb00318.x>

Can AI counselling chatbot solve  
youngsters' reluctance to talk to  
counsellor?

「搵AI傾好過完全唔搵傾」

Do you think projects like 心導遊  
can help counselling process

「都有少少用嘅, social media level 易接  
觸到, alert咗有意識先」

Is there any PRO of using AI in  
counselling process?

「AI(暫時)唔會有越線嘅問題」

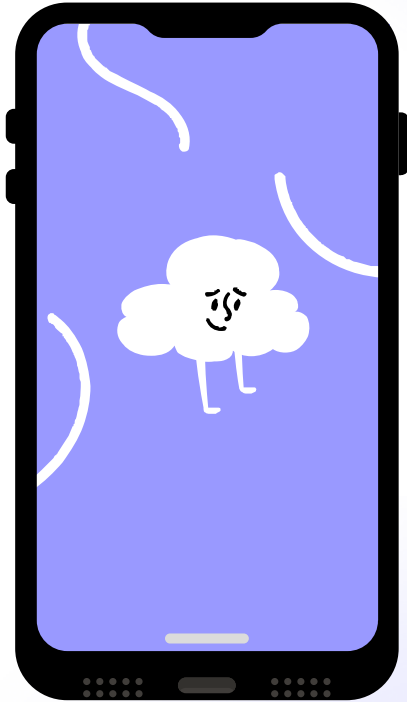




# Qualitative Research

Interview with the students

# Thoughts about AI



**Interview** : Mostly Negative Thoughts

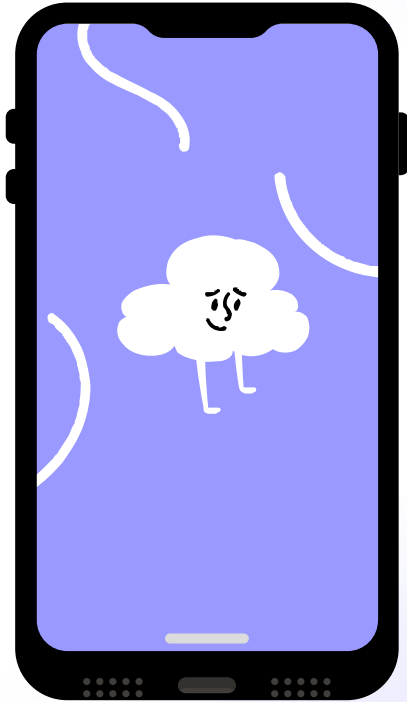
**Main Pt:** AI cannot understand complex human emotion

Hardly can do real therapy

Not sure if AI chatbot works

Afraid cannot providing real supportment

# Thoughts about AI



Some neutral point

Might work if someone alone who cannot find others for a talk (giving 即時 response)

Easy to access and affordable

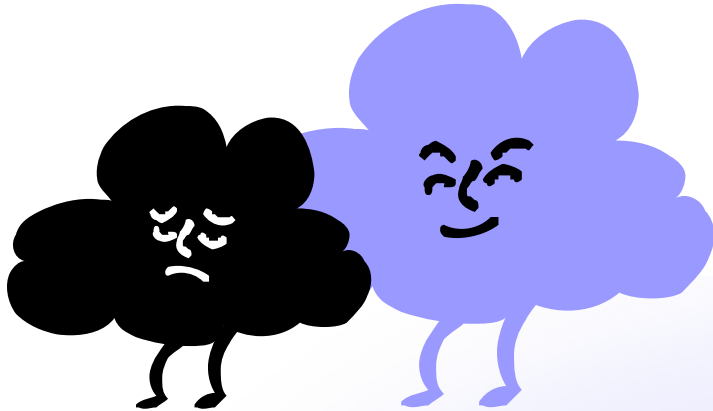
Calm the users' emotions

# What now?

On the status quo and using AI as support channel

# University Counsellors

- Can be an effective safety net for suicide prevention
- Can be effective in the short term

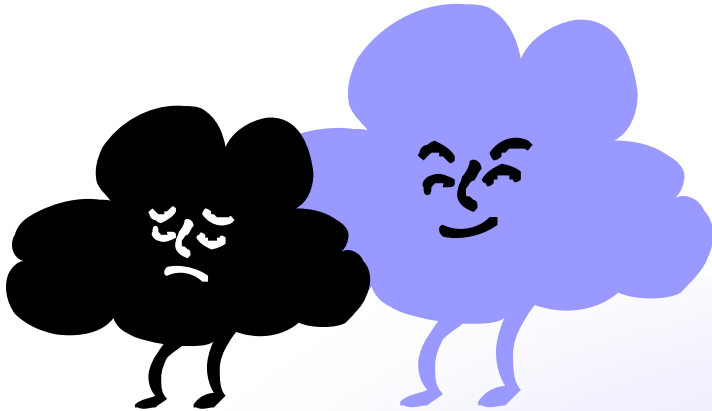


Diab, P., & Andrews, K. (2024). Supports for university counselors impacted by student suicide: A systematic review and thematic synthesis. *Death Studies*, 48(6), 609-620. <https://doi.org/10.1080/07481187.2024.2304780>

# University Counsellors

BUT...

- University emotional counselling services are underfunded
- Very high counsellee-to-counsellor ratio
- Counsellors unable to cater for each student's needs



Diab, P., & Andrews, K. (2024). Supports for university counselors impacted by student suicide: A systematic review and thematic synthesis. *Death Studies*, 48(6), 609-620. <https://doi.org/10.1080/07481187.2024.2304780>

# Survey Feedback

💬 你有沒有甚麼想分享的？

Anything you want to share?

10 responses

Feeling worried about important examinations and assignments

校內社工難約，有心，但唔到肉  
感覺學生最需要嘅係同行

NA

想知多d關於抗焦慮嘅方法，包括臨床心理學上嘅治療手段

siuuu

沒有。

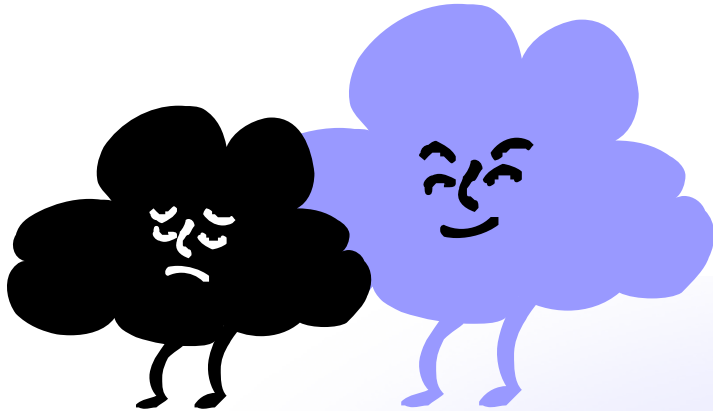
nope

Good survey design bros

# University Counsellors

## University counsellors

- Inadequate staff can lead to counsellor emotional exhaust and burnout
- Failed counselling (e.g. student suicide) can lead to counsellor trauma
- **Lacks long-term sustainability**
- Needs supporting methods like integrating mental health in curriculum



Diab, P., & Andrews, K. (2024). Supports for university counselors impacted by student suicide: A systematic review and thematic synthesis. *Death Studies*, 48(6), 609-620. <https://doi.org/10.1080/07481187.2024.2304780>

Pérez-Marín, M., Lacomba-Trejo, L., Giménez-Benavent, S. et al. Mental health promotion and suicide prevention in emerging adulthood: importance of psychoeducational interventions in University students. *Curr Psychol* 43, 22333-22345 (2024). <https://doi.org/10.1007/s12144-024-05932-7>



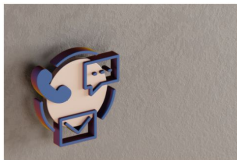
## CUHK 24-Hour Emotional Support Hotline

Wellness and Counselling Centre > Psychological Counselling Service > CUHK 24-Hour Emotional Support Hotline

### CUHK 24-hour Emotional Support Hotline

This 24-hour hotline serves to provide emotional support to CUHK full-time students and part-time PGDE students. The service is provided by professional counsellors of the Christian Family Service Centre (CFSC).

CUHK 24-hour Emotional Support Hotline: 5400 2055



Who will answer my call? +

What languages are available? +

What procedure will I go through if I call this hotline? —

#### What procedure will I go through if I call this hotline?

When you call, you will be asked to provide your student ID to confirm your eligibility for the service. After that, you will be able to talk to a counsellor about your situation.

Why do I need to provide my SID? —

#### Why do I need to provide my SID?

We understand that providing your student ID during a time of emotional distress might feel challenging. Given available resources, we are grateful for your understanding of this practice as we hope to limit the service to CUHK students only.

# CUHK

## 24-hr hotline

- Counsellors are outsourced
- Questionable anonymity (needs to provide SID)

# Chat Support

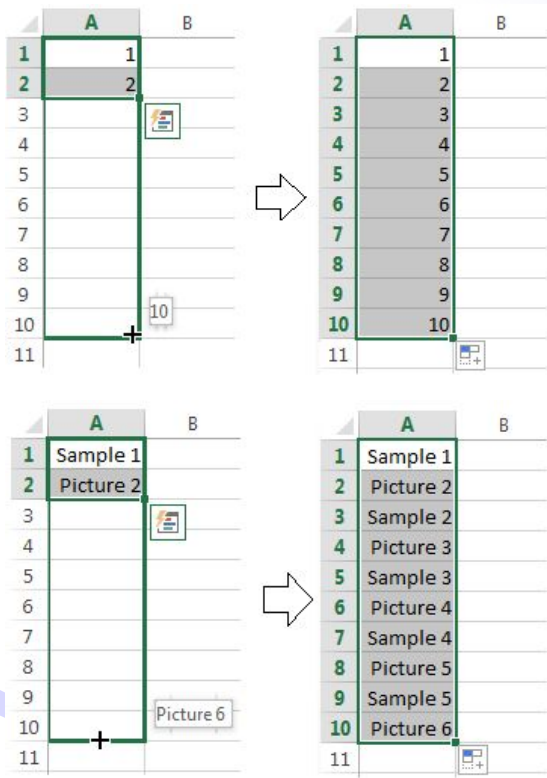


陪我講  
SHALL WE TALK



# What even is AI?

LLM (Large Language Model): GPT, etc...



The boy went to the

Previous words (Context)



LLM

Probability Distribution  
over next word/token

0.1 Cafe

0.05 Hospital

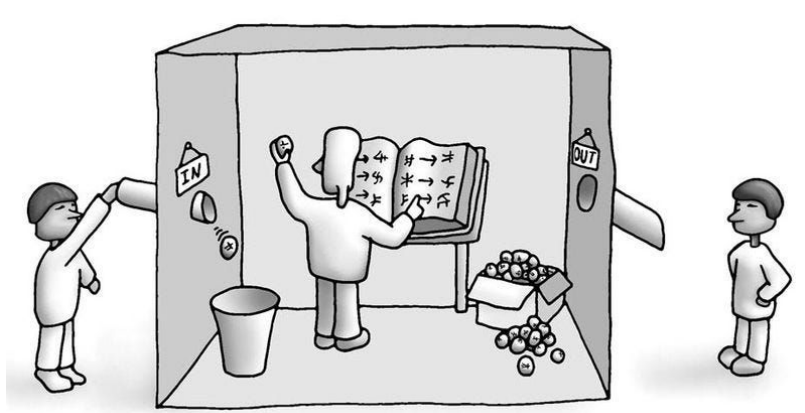
0.4 Playground

0.15 Park

0.3 School

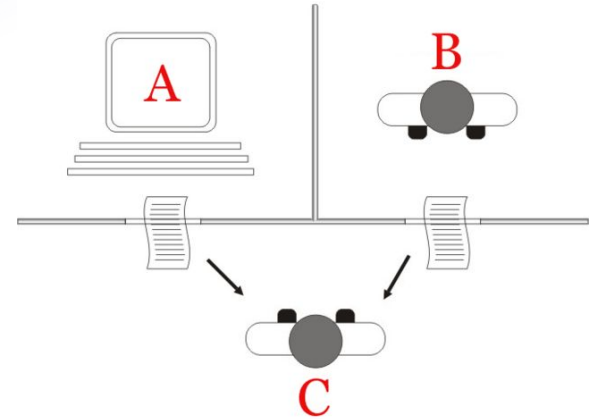
Words being predicted

# What even is AI?



## Chinese Room Thought Experiment

Response =? Comprehension/Understanding



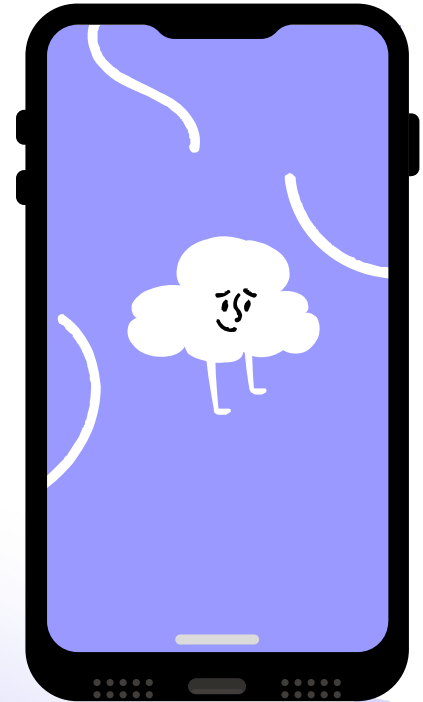
## Turing Test

Can the machine generate responses that are indistinguishable from a human's?

# Chat Support vs Chatbot

In **text-based contexts** (e.g. support chat),  
AI chatbots can be **more effective** than human chat support

- AIs **focus on listening** and avoid giving excessive practical suggestions vs Humans **over-sharing** thoughts and more judgemental



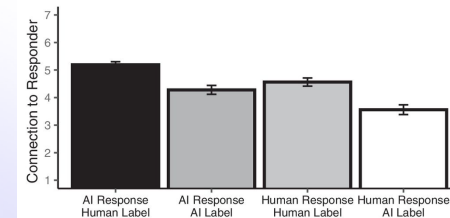
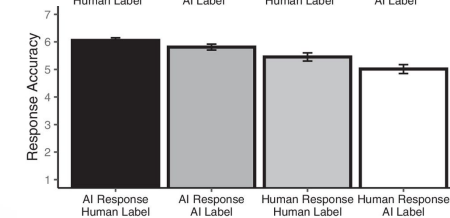
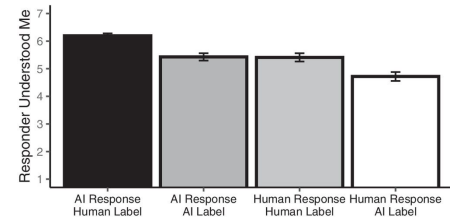
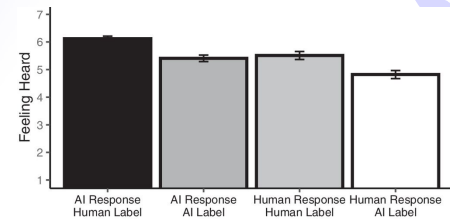
Yin Y, Jia N, Wakslak CJ. AI can help people feel heard, but an AI label diminishes this impact. Proc Natl Acad Sci U S A. 2024 Apr 2;121(14):e2319112121. doi: 10.1073/pnas.2319112121. Epub 2024 Mar 29. PMID: 38551835; PMCID: PMC10998586.

# Chat Support vs Chatbot

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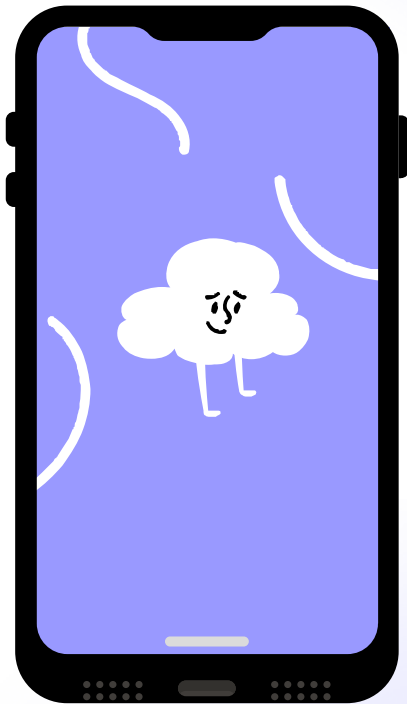
- AIs have **higher empathic (同理心) accuracy** vs humans

but if user knows it is AI, effectiveness will decrease but still be better than human effectiveness overall



Yin Y, Jia N, Wakslak CJ. AI can help people feel heard, but an AI label diminishes this impact. Proc Natl Acad Sci U S A. 2024 Apr 2;121(14):e2319112121. doi: 10.1073/pnas.2319112121. Epub 2024 Mar 29. PMID: 38551835; PMCID: PMC10998586.

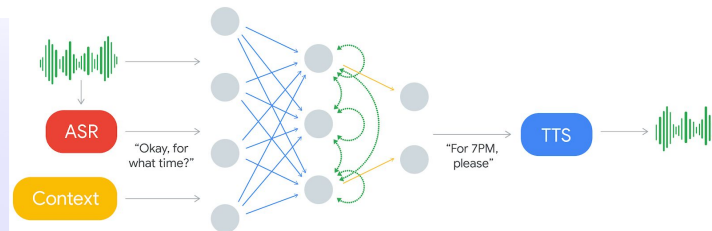
# Ethical?



Can AI replace human chat support?

- Higher empathic accuracy
- Higher effectiveness
- Higher accessibility

Can AI replace human hotline support?

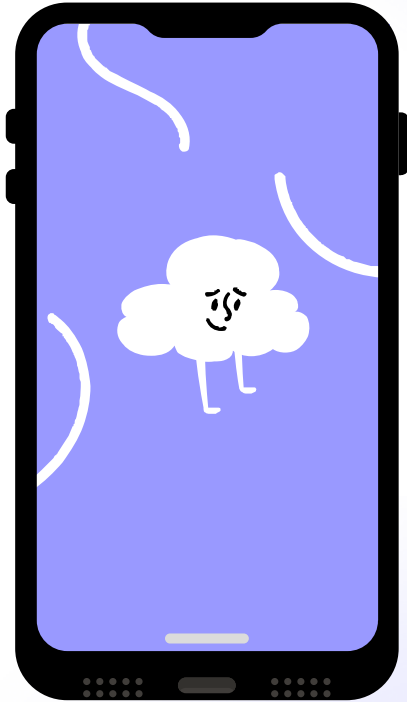


# Conclusion

- Students
  - Anyone can emotional support
  - Do not be afraid to use AI chat bot
- Friends
  - Treat emotional support users as normal, try to understand before assuming the worst
- School
  - Invest more resources into providing emotional support
  - Set up a filtering system for students seeking help



# Reciprocal Self-Disclosure



- **Reciprocal self-disclosure** (counsellor sharing their own stories) is an important part of emotional support
- AIs cannot do that without deception

Jingbo Meng, Yue (Nancy) Dai, Emotional Support from AI Chatbots: Should a Supportive Partner Self-Disclose or Not?, Journal of Computer-Mediated Communication, Volume 26, Issue 4, July 2021, Pages 207-222, <https://doi.org/10.1093/jcmc/zmab005>

# Thanks!

Do you have any questions?

youremail@freepik.com

+91 620 421 838

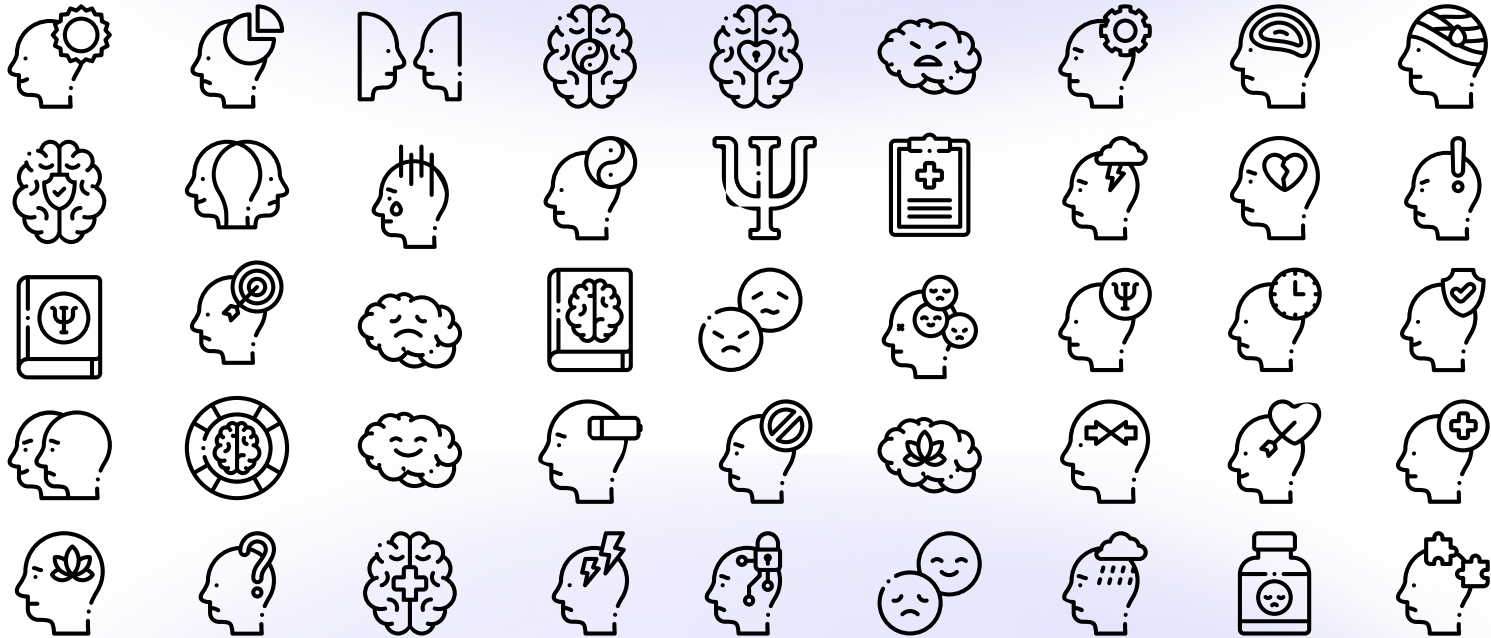
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- [Upset man in therapy close up](#)
- [Young person with anxiety talking to specialist](#)

## Vectors

- [Cloud hand drawn](#)
- [Hand drawn mental health instagram post](#)
- [Bubble chat for messenger application in flat style](#)
- [Brain infographic template in pastel colors](#)

## Icons

- [Icon Pack: Mental Health | Lineal](#)

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