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Tung Wah Group of Hospitals

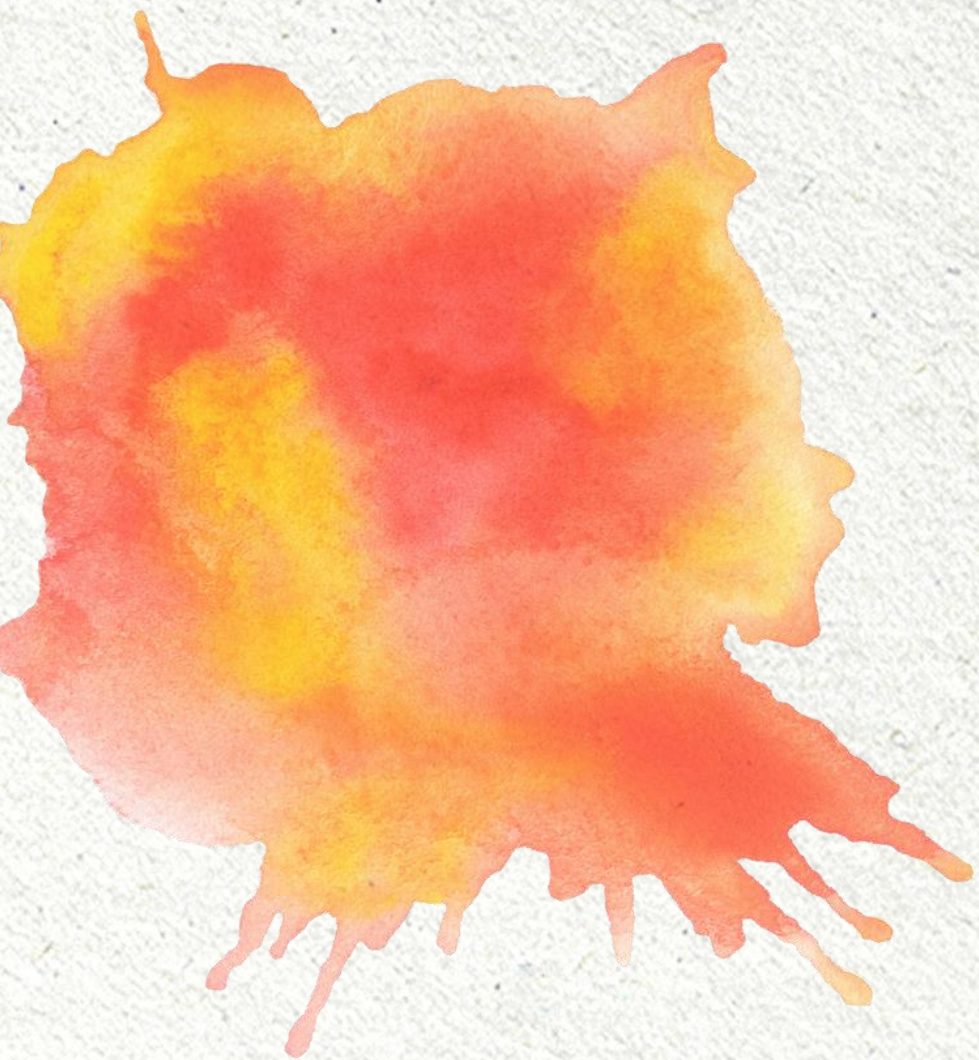
Gottman Method Couple Therapy assisted by PPG heart-rate-measuring devices: Does it enhance marital relationship and quality of life?

by Tung Wah Group of Hospitals

Ms. Bonnie Mak



BACKGROUND OF RESEARCH



- In Hong Kong, approximately 2.9 out of every 1,000 married individuals end up divorcing (Hong Kong Census and Statistics Department, 2023).
- The COVID-19 pandemic has intensified family stress (Chan et al., 2021), with couples facing increasing difficulties in balancing work and family responsibilities, parenting pressures, and financial strain.
- These challenges have led to heightened marital conflict and a gradual erosion of emotional connection, resulting in growing relational distance.



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Objective:

To integrate the use of emotional wristbands with the Gottman Method of couples therapy in order to enhance emotional awareness and emotional connection between partners, thereby promoting greater stability and satisfaction in the marital relationship.

Implementation period:

- From May 2024 to December 2024.

Target Participants:

- Married couples who wish to enrich their emotional connection and strengthen their relationship.

Number of participants :

A total of 80 individuals, divided into two groups:

- Control Group: 40 individuals
- Intervention Group: 20 couples (i.e., 40 individuals)

Group Content:

節數	主題	目標	建議時間
一	建立愛情地圖	透過理論分享與遊戲活動，讓參加者實踐哥特曼模式核心概念，提升情緒覺知並在互動中深化夫妻間的情感連結。	2 小時
二	培養愛戀與愛慕		2 小時
三	找回愛的初心		3.5 小時
四	回顧與展望：夫婦個別諮詢	以夫婦個別諮詢形式進行，幫助夫妻回顧小組中的學習成果，分享彼此欣賞的時刻，並探索小組對夫妻關係帶來的新啟發及未來的實踐。	1 小時



GOTTMAN METHOD COUPLES THERAPY



Gottman, J. M., & Silver, N. (1999). The Seven Principles for Making Marriage Work. Harmony Books.

- Between 2018 and 2023, we facilitated over **300** Gottman Method Couples Therapy (GMCT) **groups and programs**, reaching more than **8,000 attendances**.
- Based on research conducted from 2018 to 2020 involving **103 participants**, quantitative survey analysis indicates that the service effectively enhances mental well-being and increases **satisfaction in marital relationships**.



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THE EMOTION WRISTBANDS

The emotion Wristbands algorithm analyzes physiological changes through heart rate variability (HRV) to assess a person's emotions by understanding the autonomic nervous system (ANS).



Since 2022, emotion wristbands have been used in couples coaching and personal growth activities.

Emotion Index (Valence)

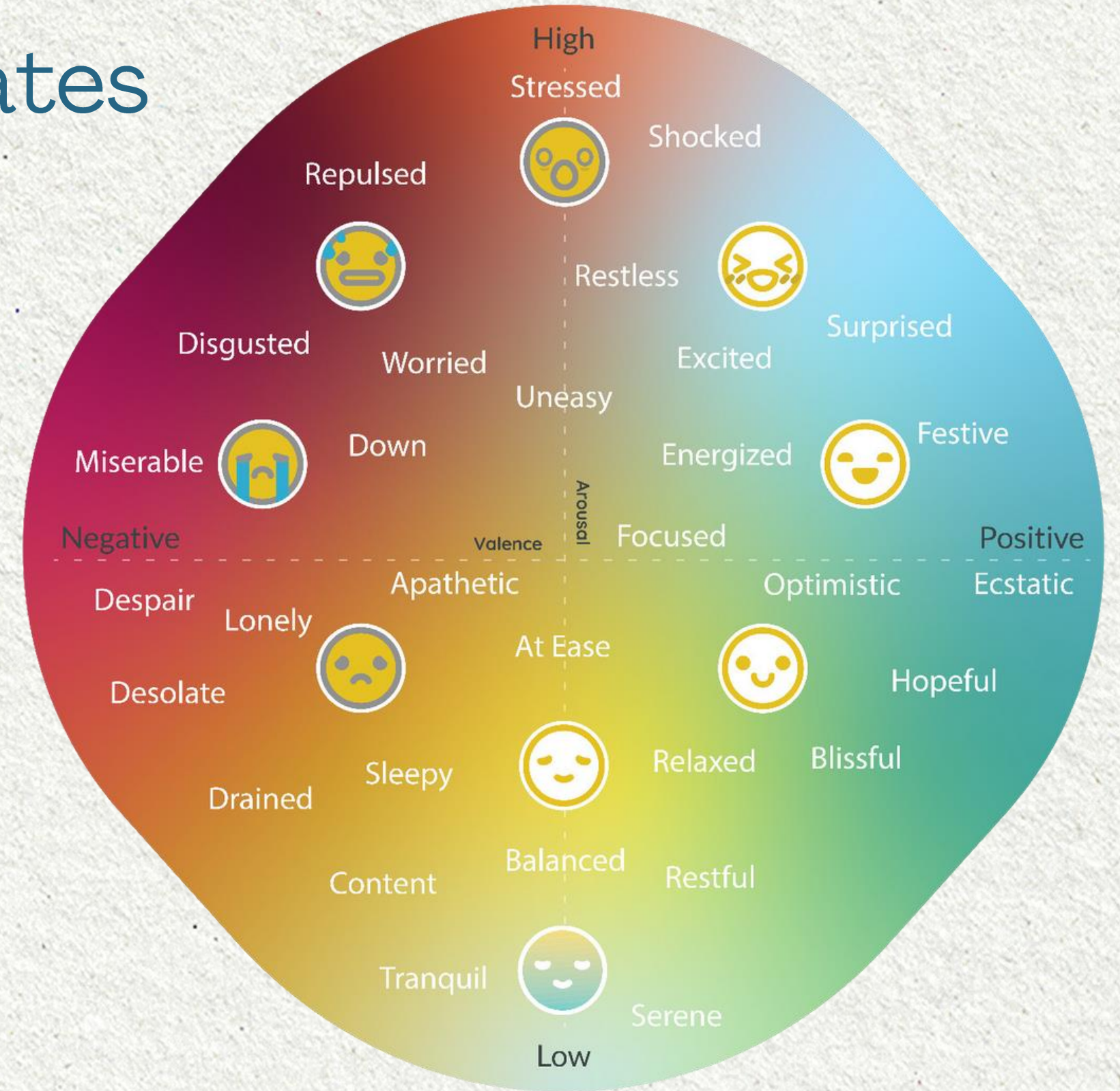
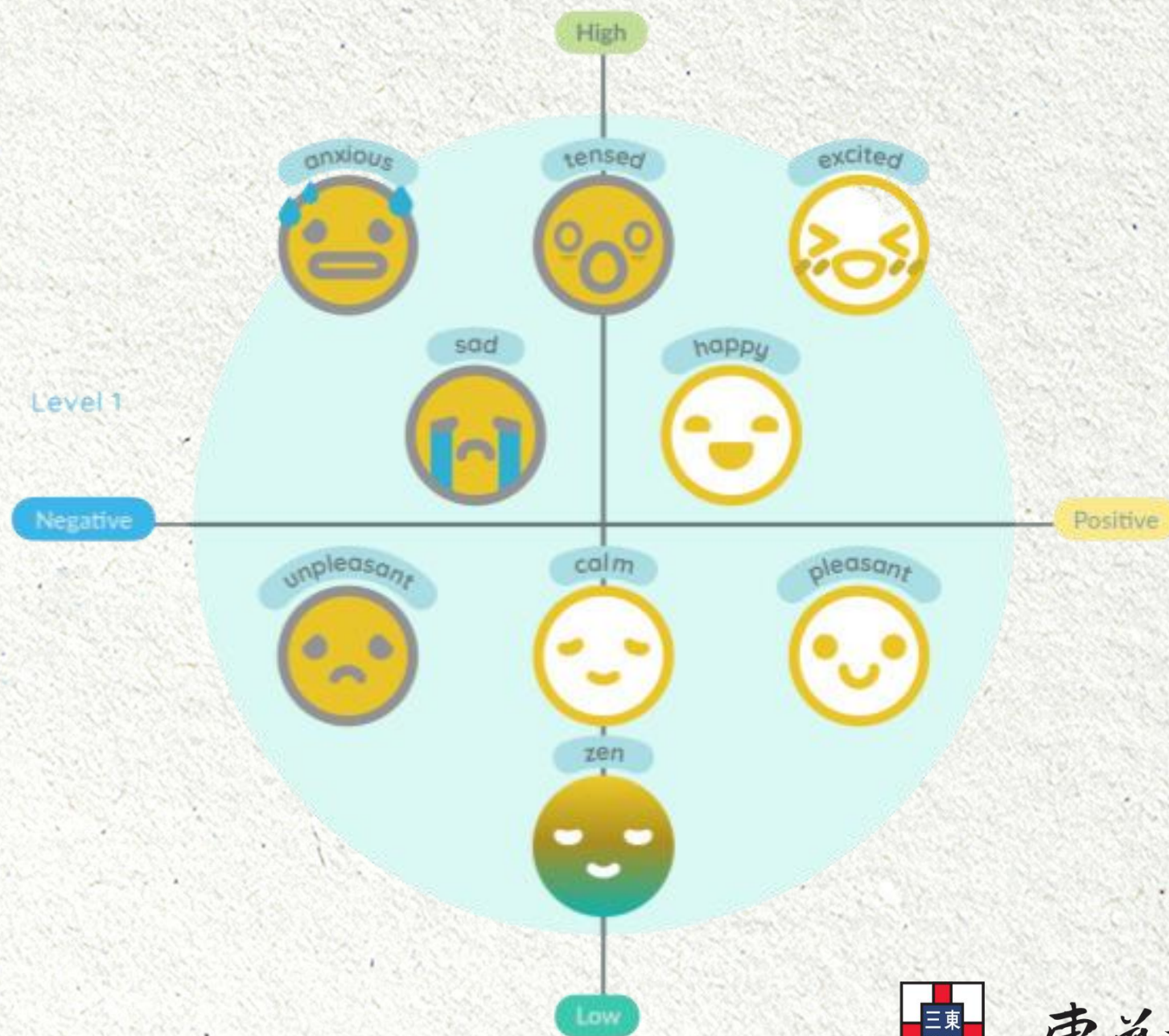
Stress Index (Arousal)



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THE EMOTION WRISTBANDS

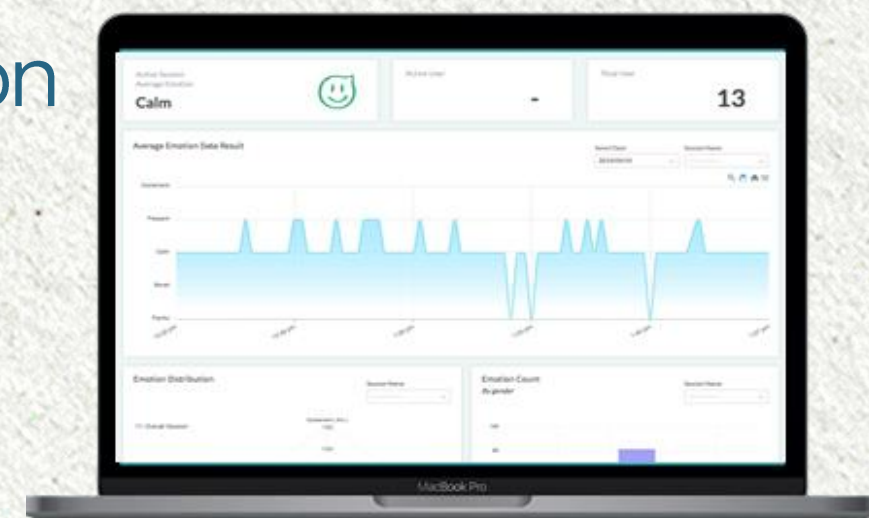
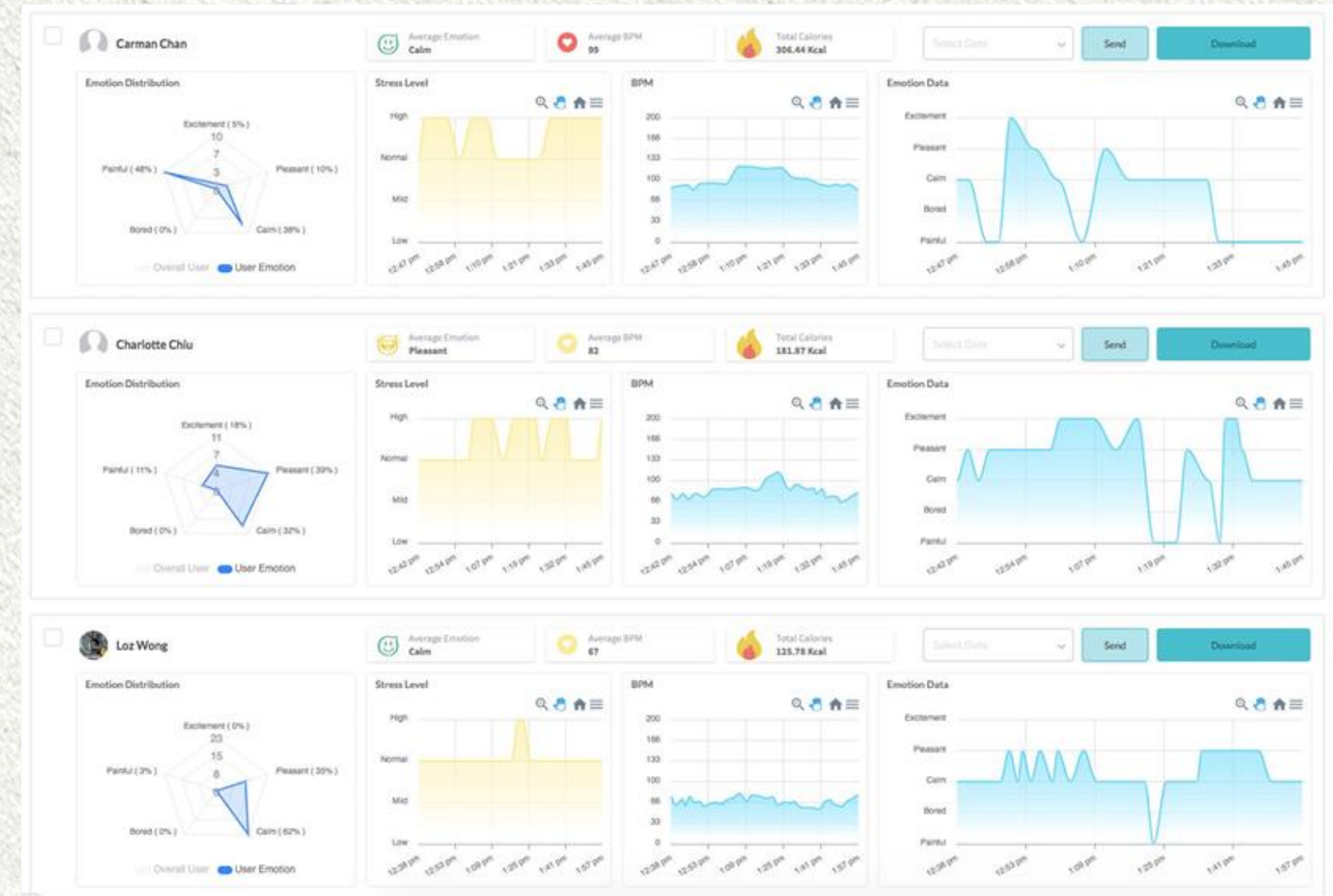
11 Emotional States



THE EMOTION WRISTBANDS



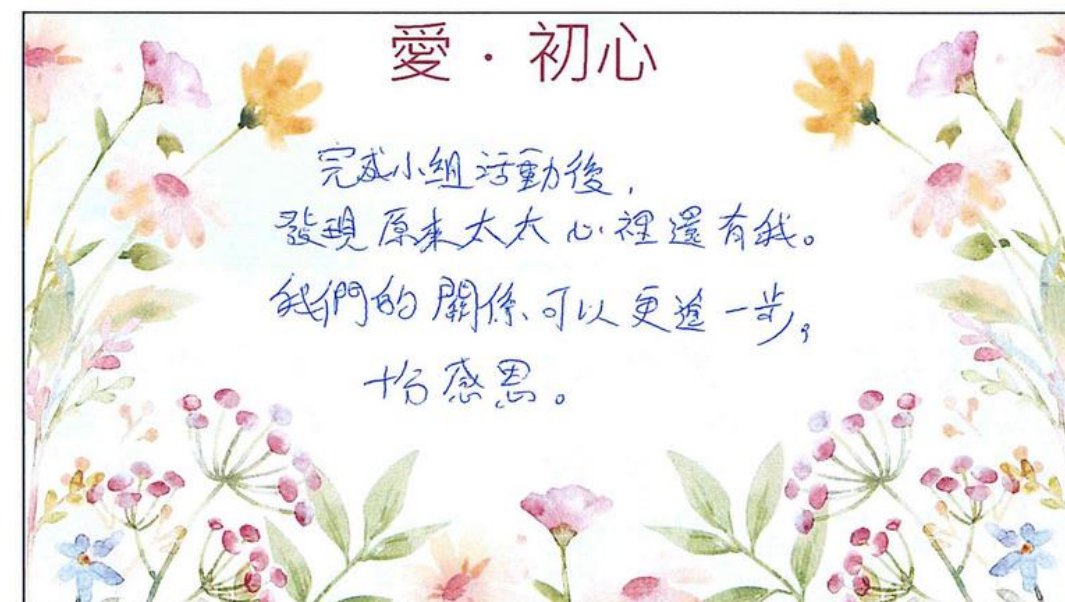
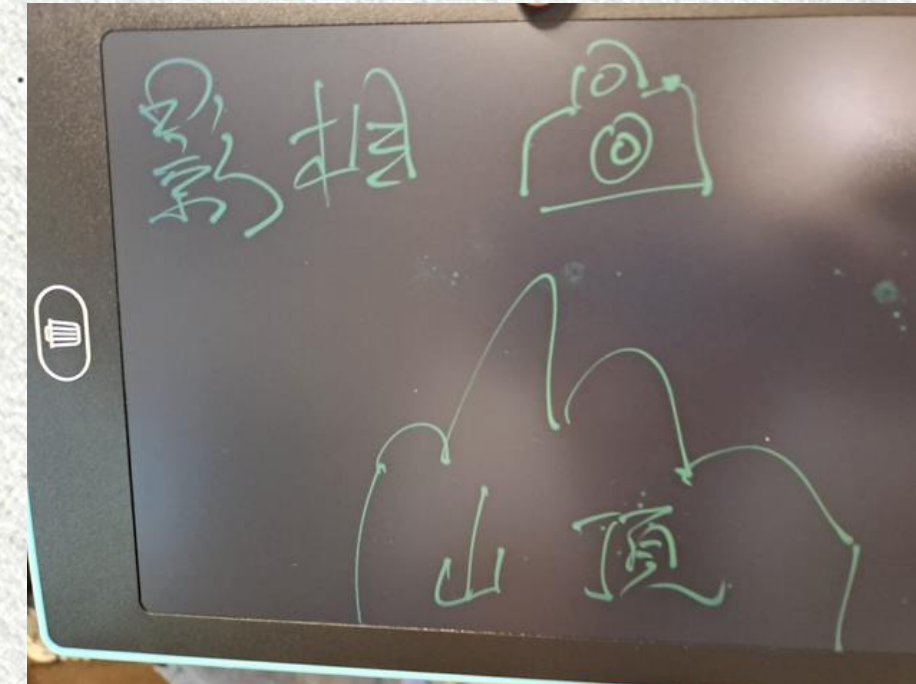
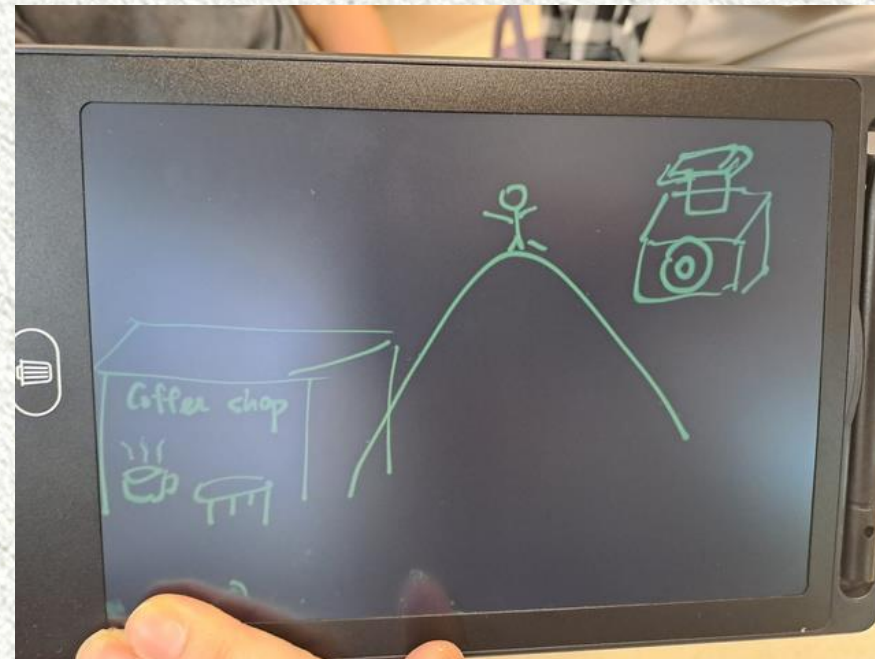
- Average Emotion
- Average Stress
- Calories burn
- Emotion Distribution
- Stress Level
- BPM
- Raw PPI Data



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Remembering How We Met



**Seeing myself
again in the eyes
of my wife**

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Home-Based Relationship Enrichment Tasks



行動一：共識一個每天道別時的小行動（例如擁抱、輕吻、說「我愛你」等），並維持兩個星期。

向我們分享你們共識的小行動是什麼。

****伴侶充滿愛意的小行動能為這一天帶來美好的開始****



行動二：在工作一整日後花至少 10 分鐘與伴侶分享這一天的感受/經歷，

並維持兩個星期（只需要星期一至五進行）。

向我們分享其中一天你們向對方分享的事件分別是什麼。

****不帶批評、站在對方的角度地聆聽以及作出感同感受的回應是對話的關鍵。**

****這樣的對話不但能得到對方的支持，讓壓力得以紓解；更能促進互相扶持的關係****

行動三：每天至少向伴侶表達感謝/欣賞一次，並維持兩個星期。

向我們分享你們欣賞對方的三個特質。

****在關係中建立互相感謝和欣賞的習慣能抵禦批評和輕蔑的出現****



行動四：睡前請親吻/擁抱一下對方，並維持兩個星期。

****睡前的親密接觸能消除一整天所累積的不愉快和壓力，更大大提昇關係的親密感****

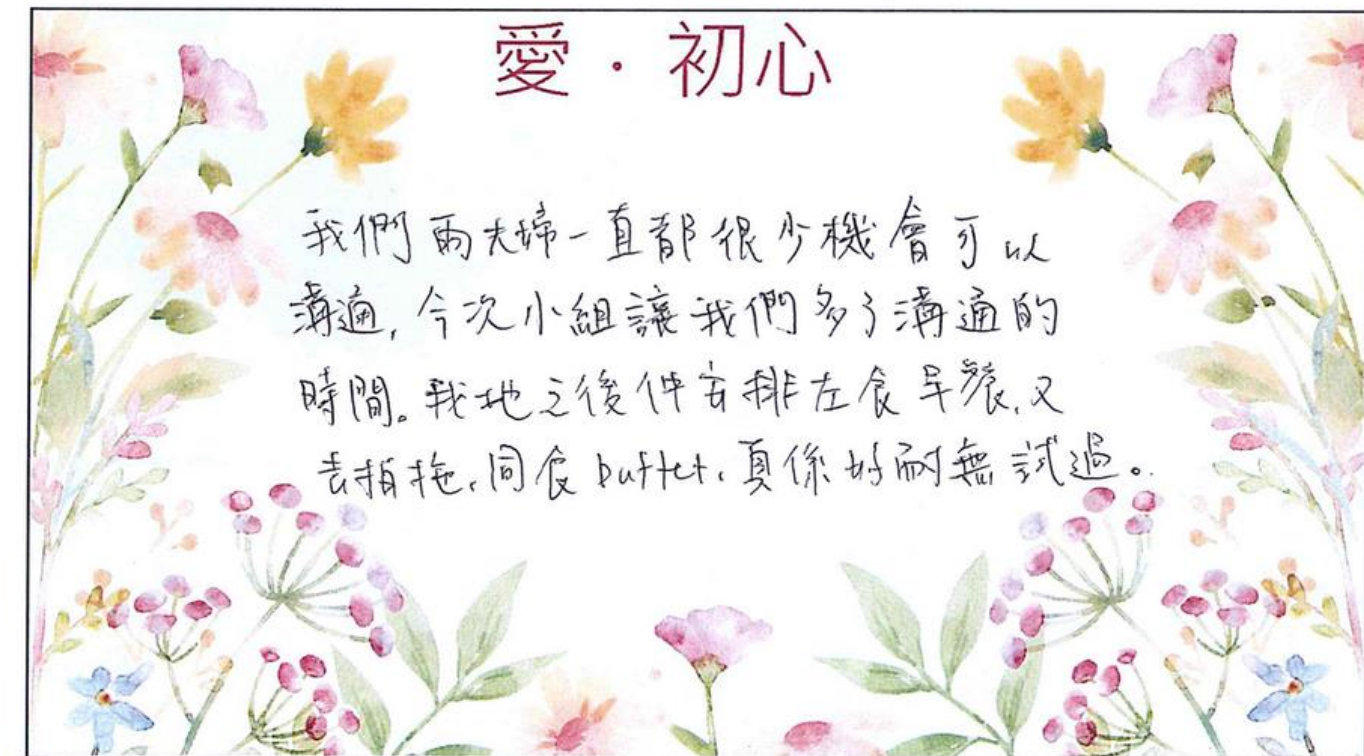
行動五：計劃一次約會，一個專屬兩個人的約會，並拍照留念。

向我們分享一張約會的照片。

****一個輕鬆的約會既能提供傾心吐意的機會，又能為關係製造美好的回憶****

參考資料：

約翰·高曼、妮安·希維爾著；陳謙宜、沈基恩譯（2016）。七個讓愛延續的方法：個人幸福過一生的關鍵秘訣。臺北市：遠流出版事業股份有限公司。



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The couple hadn't gone on a date for 3 to 4 years, but after joining the group, **they've been trying to schedule monthly date time.**

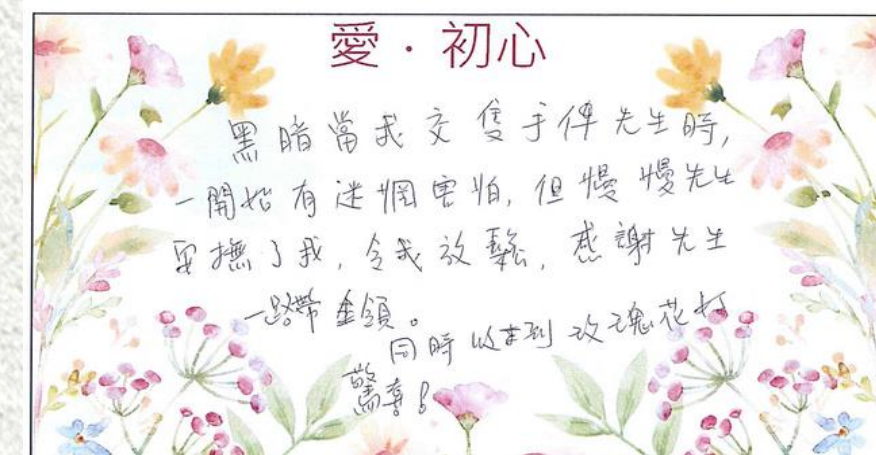


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Love Map



In the darkness, when I placed my hand in my husband's, I felt a wave of security and love.

I've discovered so much more about my wife's inner world



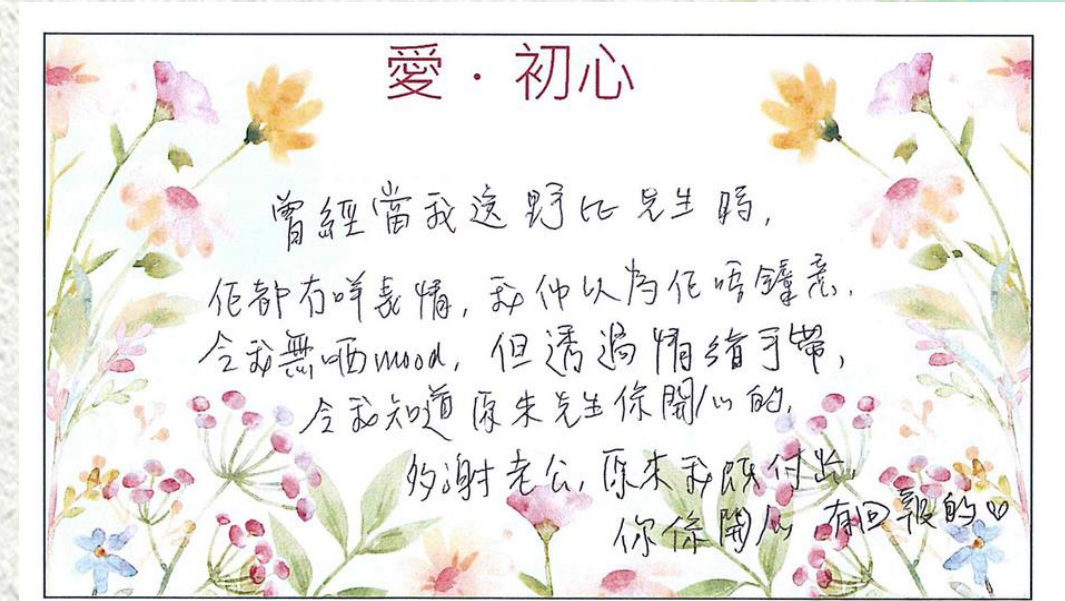
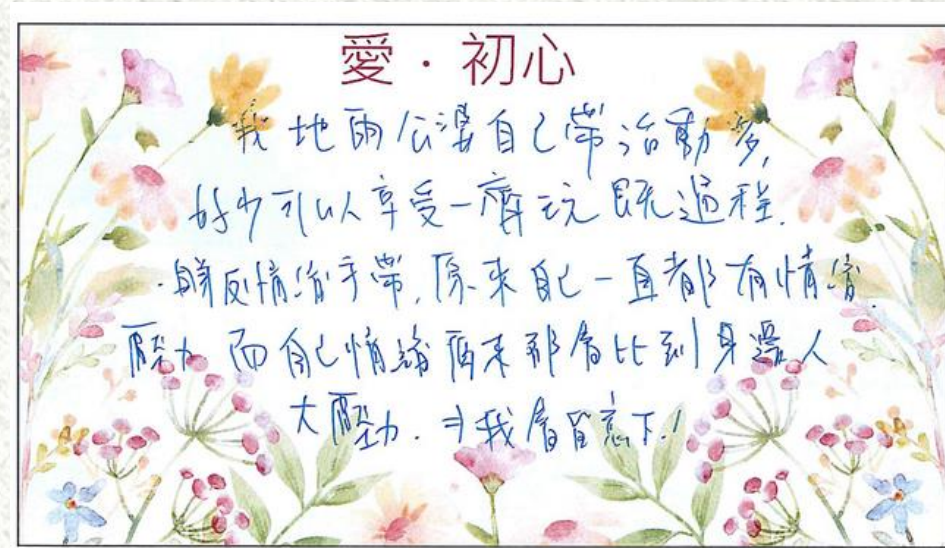
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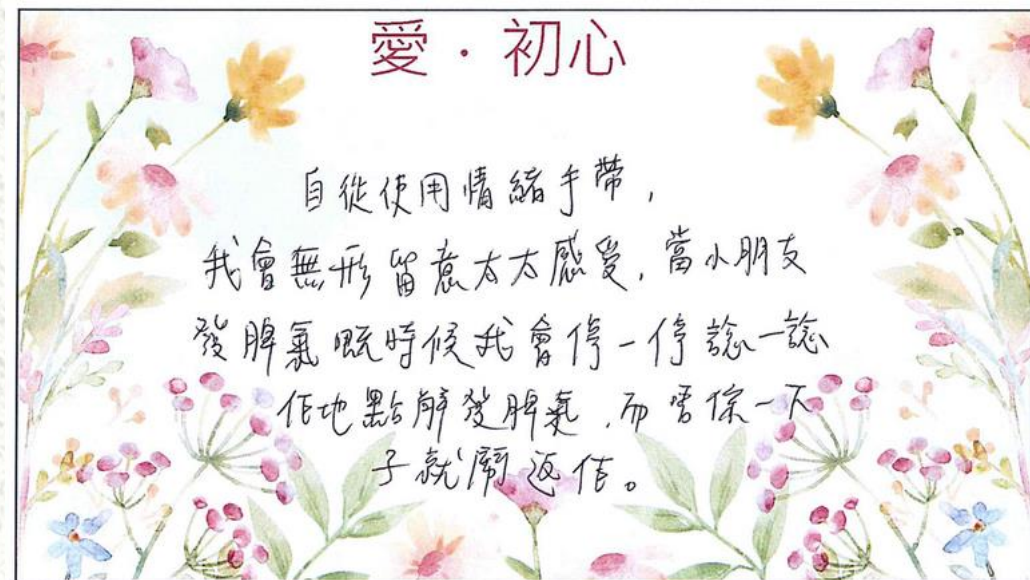
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I've become more aware of how I respond to stress and the patterns behind it



Even without the emotion wristband, I continue to pay attention to my children's and my wife's emotions.

Helping wife better understand her husband's perspective and release emotional blockages for deeper connection.



RESEARCH FINDING

Improvements in couple relationships:

- Compared to control, dyadic adjustment improved after intervention ($\gamma = 2.29$, $p < .05$)
- Quality of life improved after intervention (Mean Change = 2.30, $p < .05$) and at 2-month follow-up (Mean Change = 1.46 , $p < .05$)
- Change in emotional intimacy was correlated with changes in dyadic adjustment ($\beta = .57$, $p < .01$) and quality of life ($\beta = .66$, $p < .01$)



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Benefits of Integrating ICT into Intervention Services

Real-time emotional data

- Helps social workers and therapists better understand participants' emotional states, reducing biases from subjective judgment and enhancing the precision of interventions.



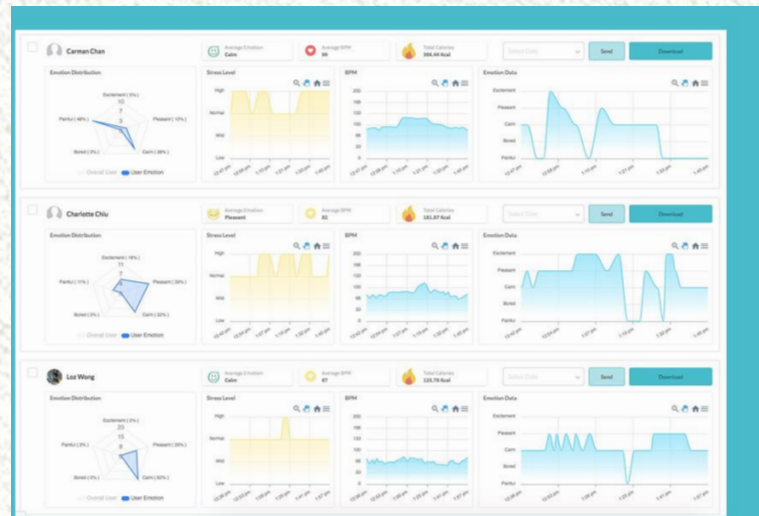
Promoting participants' self-awareness

- The emotion wristband helps participants gain a clearer understanding of their emotional fluctuations, improving their emotional management skills, fostering self-improvement, and reducing dependence on services.



Enhancing therapeutic outcome tracking

- Provides quantitative data to help service providers monitor participants' progress, adjust intervention plans based on the data, and improve the sustainability of the services.



Future Development and Reflections on the Blended Model

 **Enhanced Service Potential** **Digital Integration Benefit** **Need for Ongoing Reflection**

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THANKS

