

Supplementary material

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Supplement to: M Zhu, PKH Mo, K Wang, et al. Willingness to pay and preferences for mindfulness-based interventions among patients with chronic low back pain in the Hong Kong public healthcare sector. Hong Kong Med J 2025;Epub 14 Apr 2025.
<https://doi.org/10.12809/hkmj2311445>.

Supplementary Figure. Introduction and explanation of mindfulness-based interventions using a text description and video QR code



靜觀治療介紹

慢性腰背痛症者對靜觀治療的支付意願和偏好研究計劃

掃描右側QR-Code
看靜觀治療介紹影片



簡介：
靜觀治療是一個以靜觀理念為基礎的心理療法，靜觀是指有意識地、不加批判地、留心當下此刻而升起的覺察力。靜觀修習有助培養對當下的專注覺察，讓我們與身心重新連繫，如實地觀察自己內心的狀態和此時此刻的體驗，並學習以開放、接納的態度面對當下的各種經歷。

治療形式：
一般的療程為期八週，每週一節，每節課程約1.5-2.5小時。治療形式通常由具備專業資格的靜觀導師介紹講解靜觀，指導做靜觀練習及小組討論/分享。

內容主要包括：

- 各種正式靜觀練習：包括身體掃描、呼吸空間、靜心伸展、靜坐、靜觀步行等
- 生活中的靜觀 - 非正式練習
- 反思練習、認知練習及瞭解自己面對壓力的反應
- 每堂都有家中練習、練習聲檔及筆記

應用：
科學研究顯示靜觀練習不但能提升心理質素，也能有效地減輕壓力和痛楚。靜觀治療亦應用在幫助慢性腰背痛患者減低疼痛，提高身體功能，對治療慢性腰背痛患者的情緒問題也有顯著的幫助。

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Supplementary Table 1. Reasons for unwillingness to pay for mindfulness-based interventions (n=237)*

| | |
|---|------------|
| Limited knowledge of MBIs | 74 (31.2%) |
| Unwilling to spend money on treatment | 58 (24.5%) |
| Lack of time to attend | 27 (11.4%) |
| Uncertainty about the effects of MBIs | 25 (10.5%) |
| Financially unaffordable | 15 (6.3%) |
| No perceived need for treatment | 8 (3.4%) |
| Minimal pain | 5 (2.1%) |
| Unwilling to spend money on MBIs | 3 (1.3%) |
| Lack of interest in attending | 2 (0.8%) |
| Impatience with attending sessions | 2 (0.8%) |
| Unable to attend due to physical illness | 2 (0.8%) |
| Unwilling to practice yoga or stretching exercises | 1 (0.4%) |
| Availability of free online meditation courses | 1 (0.4%) |
| No immediate need for MBIs | 1 (0.4%) |
| Existing treatments are effective | 1 (0.4%) |
| MBIs cause increased pain | 1 (0.4%) |
| Residence too far from MBI locations | 1 (0.4%) |
| Ability to practice MBIs independently | 1 (0.4%) |
| Inability to practice meditation or yoga due to religious beliefs | 1 (0.4%) |
| Inability to perform stretching exercises | 1 (0.4%) |

Abbreviation: MBIs = mindfulness-based interventions

* Data are shown as No. (%)

Supplementary Table 2. Results of multicollinearity tests

| | Tolerance | VIF |
|--|------------------|------------|
| Age | 0.47 | 2.13 |
| Gender | 0.84 | 1.19 |
| Education | 0.68 | 1.46 |
| Employment | 0.36 | 2.81 |
| Personal monthly income | 0.32 | 3.12 |
| Family monthly income | 0.52 | 1.94 |
| General health status | 0.74 | 1.35 |
| Duration of pain | 0.90 | 1.11 |
| No. of treatments for chronic LBP in the past year | 0.78 | 1.28 |
| NRS | 0.70 | 1.43 |
| RMDQ | 0.57 | 1.76 |
| Satisfaction with current treatments for chronic LBP | 0.85 | 1.18 |
| Monthly expenses on chronic LBP treatment | 0.82 | 1.21 |
| Knowledge of MBIs | 0.62 | 1.60 |
| Opinions on the helpfulness of MBIs in treating chronic pain | 0.95 | 1.06 |
| Usage of MBIs (Yes/No) | 0.18 | 5.64* |
| No. of MBI sessions attended | 0.18 | 5.42* |

Abbreviations: LBP = low back pain; MBIs = mindfulness-based interventions; NRS = Numeric Rating Scale; RMDQ = Roland-Morris Disability Questionnaire; VIF = variance inflation factor

* A tolerance value <0.25 or a VIF >4 indicates possible multicollinearity

Supplementary Table 3. Subgroup analysis of factors influencing patients' preferences for mindfulness-based interventions according to a mixed logit model grouped by age

| | Age <60 y (n=163) | | | Age ≥60 y (n=240) | | |
|--|-------------------|-------|---------|-------------------|-------|---------|
| | β coefficient | SE | P value | β coefficient | SE | P value |
| Improvement in capacity to perform daily life activities | | | | | | |
| Small | Reference | | | Reference | | |
| Moderate | -0.003 | 0.094 | 0.975 | 0.430 | 0.105 | <0.001 |
| Large | 0.165 | 0.119 | 0.167 | 0.595 | 0.136 | <0.001 |
| Risk of adverse events | | | | | | |
| 0.1% | Reference | | | Reference | | |
| 0.5% | 0.064 | 0.094 | 0.499 | 0.171 | 0.103 | 0.099 |
| 1% | 0.010 | 0.126 | 0.938 | 0.028 | 0.140 | 0.843 |
| Improvement in pain relief | | | | | | |
| Small | Reference | | | Reference | | |
| Moderate | 0.497 | 0.097 | <0.001 | 1.246 | 0.115 | <0.001 |
| Large | 0.974 | 0.131 | <0.001 | 2.22 | 0.166 | <0.001 |
| Out-of-pocket costs | -1.351 | 0.091 | <0.001 | -2.673 | 0.141 | <0.001 |
| Treatment frequency | | | | | | |
| Once per week | Reference | | | Reference | | |
| Twice per week | -0.115 | 0.096 | 0.234 | -0.079 | 0.103 | 0.443 |
| Three times per week | -0.051 | 0.117 | 0.663 | 0.123 | 0.141 | 0.382 |
| Group size | | | | | | |
| 1 person | Reference | | | Reference | | |
| 2-6 people | 0.029 | 0.120 | 0.810 | -0.109 | 0.134 | 0.418 |

| | | | | | | |
|----------------|-----------|-------|-------|-----------|-------|--------|
| 7-12 people | -0.297 | 0.120 | 0.014 | -0.034 | 0.129 | 0.791 |
| >12 people | -0.215 | 0.145 | 0.139 | 0.012 | 0.173 | 0.943 |
| Treatment mode | | | | | | |
| Online | Reference | | | Reference | | |
| Face-to-face | 0.320 | 0.094 | 0.001 | 0.383 | 0.105 | <0.001 |

Abbreviation: SE = standard error

Supplementary Table 4. Subgroup analysis of factors influencing patients' preferences for mindfulness-based interventions according to a mixed logit model grouped by gender

| | Female (n=284) | | | Male (n=123) | | |
|--|---------------------|-------|---------|---------------------|-------|---------|
| | β coefficient | SE | P value | β coefficient | SE | P value |
| Improvement in capacity to perform daily life activities | | | | | | |
| Small | Reference | | | Reference | | |
| Moderate | 0.114 | 0.081 | 0.160 | 0.442 | 0.137 | 0.001 |
| Large | 0.347 | 0.103 | 0.001 | 0.407 | 0.179 | 0.023 |
| Risk of adverse events | | | | | | |
| 0.1% | Reference | | | Reference | | |
| 0.5% | 0.072 | 0.079 | 0.360 | 0.178 | 0.146 | 0.224 |
| 1% | -0.047 | 0.107 | 0.660 | 0.192 | 0.185 | 0.300 |
| Improvement in pain relief | | | | | | |
| Small | Reference | | | Reference | | |
| Moderate | 0.810 | 0.084 | <0.001 | 0.986 | 0.145 | <0.001 |
| Large | 1.524 | 0.118 | <0.001 | 1.800 | 0.217 | <0.001 |
| Out-of-pocket costs | -1.866 | 0.091 | <0.001 | -2.376 | 0.176 | <0.001 |
| Treatment frequency | | | | | | |
| Once per week | Reference | | | Reference | | |
| Twice per week | -0.134 | 0.081 | 0.099 | 0.108 | 0.137 | 0.429 |
| Three times per week | 0.057 | 0.103 | 0.580 | 0.083 | 0.175 | 0.638 |
| Group size | | | | | | |
| 1 person | Reference | | | Reference | | |
| 2-6 people | 0.064 | 0.102 | 0.528 | -0.264 | 0.177 | 0.137 |

| | | | | | | |
|----------------|-----------|-------|-------|-----------|-------|--------|
| 7-12 people | -0.106 | 0.100 | 0.288 | -0.304 | 0.169 | 0.072 |
| >12 people | -0.034 | 0.126 | 0.790 | -0.325 | 0.224 | 0.147 |
| Treatment mode | | | | | | |
| Online | Reference | | | Reference | | |
| Face-to-face | 0.224 | 0.079 | 0.005 | 0.657 | 0.143 | <0.001 |

Abbreviation: SE = standard error

Supplementary Table 5. Subgroup analysis of factors influencing patients' preferences for mindfulness-based interventions according to a mixed logit model grouped by family monthly income

| | Family monthly income <HK\$30 000 (n=250) | | | Family monthly income ≥HK\$30 000 (n=92) | | |
|--|--|-------|---------|---|-------|---------|
| | β coefficient | SE | P value | β coefficient | SE | P value |
| Improvement in capacity to perform daily life activities | | | | | | |
| Small | Reference | | | Reference | | |
| Moderate | 0.257 | 0.098 | 0.009 | 0.071 | 0.128 | 0.581 |
| Large | 0.380 | 0.123 | 0.002 | 0.298 | 0.162 | 0.065 |
| Risk of adverse events | | | | | | |
| 0.1% | Reference | | | Reference | | |
| 0.5% | 0.076 | 0.098 | 0.436 | 0.143 | 0.122 | 0.240 |
| 1% | -0.029 | 0.129 | 0.820 | 0.165 | 0.168 | 0.327 |
| Improvement in pain relief | | | | | | |
| Small | Reference | | | Reference | | |
| Moderate | 1.049 | 0.104 | <0.001 | 0.524 | 0.128 | <0.001 |
| Large | 1.796 | 0.146 | <0.001 | 1.097 | 0.177 | <0.001 |
| Out-of-pocket costs | -2.485 | 0.132 | <0.001 | -1.208 | 0.112 | <0.001 |
| Treatment frequency | | | | | | |
| Once per week | Reference | | | Reference | | |
| Twice per week | -0.026 | 0.096 | 0.788 | -0.200 | 0.129 | 0.12 |
| Three times per week | 0.137 | 0.125 | 0.273 | -0.028 | 0.155 | 0.859 |
| Group size | | | | | | |
| 1 person | Reference | | | Reference | | |

| | | | | | | |
|----------------|-----------|-------|--------|-----------|-------|-------|
| 2-6 people | -0.142 | 0.126 | 0.259 | 0.128 | 0.151 | 0.397 |
| 7-12 people | -0.170 | 0.121 | 0.161 | -0.350 | 0.157 | 0.026 |
| >12 people | -0.016 | 0.151 | 0.916 | -0.293 | 0.195 | 0.134 |
| Treatment mode | | | | | | |
| Online | Reference | | | Reference | | |
| Face-to-face | 0.360 | 0.098 | <0.001 | 0.177 | 0.124 | 0.155 |

Abbreviations: HK\$ = Hong Kong dollars; SE = standard error

Supplementary Table 6. Subgroup analysis of factors influencing patients' preferences for mindfulness-based interventions according to a mixed logit model grouped by education level

| | Primary school or below (n=123) | | | High school or above (n=281) | | |
|--|---------------------------------|-------|---------|------------------------------|-------|---------|
| | β coefficient | SE | P value | β coefficient | SE | P value |
| Improvement in capacity to perform daily life activities | | | | | | |
| Small | Reference | | | Reference | | |
| Moderate | 0.020 | 0.145 | 0.889 | 0.25 | 0.080 | 0.002 |
| Large | 0.188 | 0.187 | 0.315 | 0.43 | 0.102 | <0.001 |
| Risk of adverse events | | | | | | |
| 0.1% | Reference | | | Reference | | |
| 0.5% | 0.113 | 0.142 | 0.427 | 0.124 | 0.079 | 0.119 |
| 1% | -0.054 | 0.197 | 0.784 | 0.062 | 0.106 | 0.560 |
| Improvement in pain relief | | | | | | |
| Small | Reference | | | Reference | | |
| Moderate | 1.268 | 0.161 | <0.001 | 0.710 | 0.082 | <0.001 |
| Large | 2.127 | 0.219 | <0.001 | 1.383 | 0.118 | <0.001 |
| Out-of-pocket costs | -2.602 | 0.191 | <0.001 | -1.783 | 0.088 | <0.001 |
| Treatment frequency | | | | | | |
| Once per week | Reference | | | Reference | | |
| Twice per week | -0.001 | 0.143 | 0.997 | -0.111 | 0.080 | 0.167 |
| Three times per week | 0.210 | 0.190 | 0.270 | -0.001 | 0.100 | 0.994 |
| Group size | | | | | | |
| 1 person | Reference | | | Reference | | |
| 2-6 people | 0.184 | 0.187 | 0.327 | -0.090 | 0.100 | 0.368 |

| | | | | | | |
|----------------|-----------|-------|-------|-----------|-------|--------|
| 7-12 people | -0.127 | 0.175 | 0.467 | -0.156 | 0.100 | 0.117 |
| >12 people | -0.019 | 0.224 | 0.933 | -0.120 | 0.127 | 0.342 |
| Treatment mode | | | | | | |
| Online | Reference | | | Reference | | |
| Face-to-face | 0.166 | 0.145 | 0.252 | 0.380 | 0.080 | <0.001 |

Abbreviation: SE = standard error