Supplementary Material

Table. Detailed Description of Questionnaires

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Construct | Questionnaire | Scale | Items | Possible range | α | Meaning of High Scores | Measurement-point | | | |
| 1 | 2 | 3 | 4 |
| Health Status |  |  |  |  |  |  |  |  |  |  |
| Disability | Roland Morris Disability Questionnaire (RMDQ) (Roland & Morris, 1983) |  | 24 | 0-24 |  | Greater back-related disability over last 24 hours: pain interferes with more activities of daily living | ✓ | ✓ | ✓ | ✓ |
| Pain | Numerical rating scale |  | 1 | 0-10 |  | Greater pain intensity over last 24 hours | ✓ | ✓ | ✓ | ✓ |
| Wellbeing | Arizona Integrative Outcomes Scale (Bell et al., 2004) |  | 1 | 0-100 |  | Greater wellbeing | ✓ | ✓ | ✓ | ✓ |
|  |  |  |  |  |  |  |  |  |  |  |
| Expectancy Theory | |  |  |  |  |  |  |  |  |  |
| Response expectancy | Credibility Expectancy Questionnaire (Devilly & Borkovec, 2000) | Expectancy | 3 | z-scored | .93 | Greater expected pain relief from acupuncture. | ✓ | ✓ | ✓ | ✓ |
|  | |  |  |  |  |  |  |  |  |  |
| Fear Avoidance Model | |  |  |  |  |  |  |  |  |  |
| Catastrophising | Coping Strategies Questionnaire (Rosentiel & Keefe, 1983) | Catastrophising | 6 | 0-6 | .90 | More catastrophic thinking about one’s back pain, e.g. feeling overwhelmed by it | ✓ | ✓ | ✓ | ✓ |
| Fear avoidance beliefs activity | Fear Avoidance Beliefs Questionnaire (Waddell et al., 1993) | Physical activity | 4 | 0-24 | .74 | Stronger fear-avoidance beliefs about physical activity, e.g. fearing physical activity might harm one’s back | ✓ | ✓ | ✓ | ✓ |
| Fear avoidance beliefs work | Work | 7 | 0-42 | .88 | Stronger fear-avoidance beliefs about work, e.g. believing work aggravates one’s back pain. | ✓ | ✓ | ✓ | ✓ |
| Anxiety | Hospital Anxiety Depression Scale (Zigmond & Snaith, 1983) | Anxiety | 7 | 0-21 | .83 | More (severe) anxiety symptoms | ✓ |  |  |  |
| Depression | Depression | 7 | 0-21 | .83 | More (severe) depression symptoms | ✓ |  |  |  |
|  | |  |  |  |  |  |  |  |  |  |
| Common Sense Model | |  |  |  |  |  |  |  |  |  |
| Illness perceptions | Brief Illness Perceptions Questionnaire (Broadbent et al., 2006) | Timeline | 1 | 0-10 |  | Longer perceived likely duration of back pain | ✓ | ✓ | ✓ | ✓ |
|  |  | Consequences | 1 | 0-10 |  | Perceiving more severe consequences of back pain | ✓ | ✓ | ✓ | ✓ |
|  |  | Personal control | 1 | 0-10 |  | Greater perceived control over back pain | ✓ | ✓ | ✓ | ✓ |
|  |  | Treatment control | 1 | 0-10 |  | Perceiving treatment can control back pain | ✓ | ✓ | ✓ | ✓ |
|  |  | Comprehension | 1 | 0-10 |  | Believing one understands back pain | ✓ | ✓ | ✓ | ✓ |
|  |  | Concerns | 1 | 0-10 |  | Feeling more concerned about back pain | ✓ | ✓ | ✓ | ✓ |
|  |  | Emotions | 1 | 0-10 |  | Feeling more affected emotionally by back pain | ✓ | ✓ | ✓ | ✓ |
|  |  | Identity | 1 | 0-10 |  | Perceiving more symptoms | ✓ | ✓ | ✓ | ✓ |
|  |  | Cause1: work |  | 0-1 |  | Attribute back pain to work | ✓ | ✓ | ✓ | ✓ |
|  |  | Cause1: disease |  | 0 or 1 |  | Attribute back pain to a disease or health condition | ✓ | ✓ | ✓ | ✓ |
|  |  | Cause1: injury |  | 0 or 1 |  | Attribute back pain to accident/injury | ✓ | ✓ | ✓ | ✓ |
|  |  | Cause1: age |  | 0 or 1 |  | Attribute back pain to age/genes | ✓ | ✓ | ✓ | ✓ |
|  |  | Cause1: activity |  | 0 or 1 |  | Attribute back pain to daily activities | ✓ | ✓ | ✓ | ✓ |
| Treatment Beliefs | Complementary and Alternative Medicine Beliefs Inventory (Bishop et al., 2005) | Holistic health | 6 | 6-42 | .61 | Stronger belief that health is multifactorial and treatments should address the whole person | ✓ | ✓ | ✓ | ✓ |
|  | Natural treatments | 6 | 6-42 | .82 | Stronger belief that treatments should be natural, non-toxic. | ✓ | ✓ | ✓ | ✓ |
|  | Participation in treatment | 5 | 5-35 | .62 | Stronger belief that patients should actively participate in treatment | ✓ | ✓ | ✓ | ✓ |
|  | Credibility Expectancy Questionnaire (Devilly & Borkovec, 2000) | Credibility | 3 | z-scored | .89 | Perceiving acupuncture as more credible or logical | ✓ | ✓ | ✓ | ✓ |
| Appraisals | Treatment Appraisal Questionnaire (Bishop et al., 2008a) | Perceptions of Therapist | 10 | 10-70 | .91 | Appraising the acupuncturist positively, e.g. their expertise, communication |  | ✓ | ✓ | ✓ |
|  | CARE (Mercer et al., 2004) (Mercer et al., 2004) |  | 10 | 10-50 | .97 | Appraising the acupuncturist as empathic (e.g. friendly and warm) |  | ✓ | ✓ | ✓ |
|  | |  |  |  |  |  |  |  |  |  |
| Social Cognitive Theory | |  |  |  |  |  |  |  |  |  |
| Self-efficacy for coping | Self-Efficacy for Pain Management (Anderson et al., 1995) |  | 5 | 10-100 | .85 | Greater belief in one’s own ability to cope with back pain | ✓ | ✓ | ✓ | ✓ |

1 An open-ended question asked participants to identify three causes of their own back pain. We reviewed all such causes and categorised them qualitatively to identify the five common perceived causes presented here.