



Psychology Week 2020

Pain: Finding the way forward with psychology

THE AUSTRALIAN PAIN AND PSYCHOLOGY REPORT 2020 APPENDICES

Detailed methodology: Sample and timeframe

Pain: Finding the way forward with psychology

Who/What: The Australian Psychological Society¹ and the Australian College of Applied Psychology,¹ with assistance from a market research agency, Pureprofile, conducted an online survey of a representative sample of Australian adults.

How: *Sampling approach:* An ISO-accredited sampling partner, Pureprofile, recruited a nationally-representative cohort of 1022, based on the 2016 census demographic profile for age, gender and geographic location. Adults in their panel lists were given a general invitation to complete a 20 minute survey, that contained no information on the survey topic. They were informed they would earn between \$0.10 and \$4.00². Once they clicked on the survey link they were shown a detailed participant information statement about the project. Ethics approval was obtained for all aspects of the research from the ethics committee of the Australian College of Applied Psychology (approval #599290520).

When: Data were collected over a period of 2 ½ weeks, from 19 July to 6 August 2020. Additional recruitment by the research partners also occurred but will be reported on separately.

1. Contributors: Australian Psychological Society – Dr Jo Abbott; Australian College of Applied Psychology – Prof Kathryn Nicholson Perry, Ms Angela Colson.

2. Payment amount depending on whether screened out due to quota being met and whether completed the survey.

The full survey covered questions relating to pain experience, psychological distress, confidence in coping in spite of pain, unhelpful thinking about pain, medical and psychological treatment, attitudes and barriers towards and experiences with psychological treatment. Several psychological and behavioural scales were used, including the following:

- **36-Item Short Form Survey (SF-36):** The two pain items of the SF-36 were used to assess among all participants pain severity [6-point Likert scale: 1 (none) to 6 (very severe)] and degree of interference with paid and unpaid work [5 point Likert scale: 1 (not at all) to 5 (extremely) in the last 4 weeks.
- **Örebro Musculoskeletal Pain Screening Questionnaire, Short Form (OMPSQ-10):** A 10-item measure of risk of disability and failure to return to work due to pain, scored on an 11-point Likert scale (0-10 with varying scale anchors). An initial question on how long individuals had experienced their pain for went to everyone, while the remaining questions went only to people with pain of less than 3 months duration.
- **Brief Pain Inventory – Short Form (BPI-SF):** A measure of pain experience in the last 24 hours, including areas where pain is felt, pain severity [4 items, 11 point Likert scale: 0 (no pain) to 10 (pain as bad as you can imagine) and pain interference [7 items, 11 point Likert scale: 0 (does not interfere) to 10 (completely interferes)]. An initial question on whether any pain had been experienced that day went to everyone, while the remaining questions went only to people with pain of 3 months or longer duration.

1. **SF-36:** Ware, J. E., & Sherbourne, C. D. (1992). The MOS 36-item Short Form Health Survey (SF-36): I. Conceptual framework and item selection. *Medical Care*, 30, 473-483.

2. **OMPSQ-10:** Linton, S. J., Nicholas, M., & MacDonald, S. (2011). Development of a short form of the Örebro Musculoskeletal Pain Screening Questionnaire. *Spine*, 36(22), 1891-1895.

3. **BPI-SF:** Cleeland, C., & Ryan, K. (1994). Pain assessment: global use of the Brief Pain Inventory. *Annals of the Academy of Medicine, Singapore*, 23(2), 129-138. (licensed for use from The University of Texas M.D. Anderson Cancer).

- **electronic Persistent Pain Outcomes Collaboration (ePPOC) referral questionnaire.** Several questions from this were used, including about pain persistence, how pain began and health professional treatment. These questions went to people with pain only.
- **Psychological treatment questions:** Additional questions were developed for the study on access to psychological treatment and views on its importance in pain management. This included a questions on visits to a psychologist that was made equivalent to questions used from the ePPOC referral questionnaire for other health professional visits and an adapted version of the Patient Global Impression of Improvement (PGI-I) scale. There were different questions tailored to those with pain who had and had not seen a psychologist about their pain and for those without pain.
- **Perceived Barriers to Psychological Treatment (PBPT):** This adapted measure assessed individuals' perception of the degree of difficulty different factors would make it for them to attend regular appointments with a psychologist. There were 28 items including an additional one on anxiety about coronavirus. Each item was scored on a 5-point Likert scale from 1 (not difficult at all) to 5 (impossible). This measure went to all participants.

ePPOC referral questionnaire: University of Wollongong. electronic Persistent Pan Outcomes Collaboration referral questionnaire. <https://www.uow.edu.au/ahsri/eppoc/resources>

PGI-I: Hossack, T., & Woo, H. (2014). Validation of a patient reported outcome questionnaire for assessing success of endoscopic prostatectomy. *Prostate International*, 2(4), 182-187. <https://doi.org/10.12954/pi.14066>

PBPT: Mohr, D. C., Ho, J., Duffecy, J., Baron, K. G., Lehman, K. A., Jin, L., & Reifler, D. (2010). Perceived barriers to psychological treatments and their relationship to depression. *Journal of Clinical Psychology*, 66(4), 394-409. <https://doi.org/10.1002/jclp.20659>

Detailed methodology: Psychological measures

Pain: Finding the way forward with psychology

- **Pain Treatment Willingness Scale (PTWS):** This measure assessed how willing individuals with and without pain were to try different pain treatments, scored on a 6-point Likert scale from 1 (not at all willing) to 6 (completely willing). Two additional items were added to the original 5 items to expand on psychological treatments.
- **Pain Self-Efficacy Questionnaire (PSEQ):** A 10-item measure of an individual's confidence in their ability to do a range of activities in spite of pain. Each item was scored on a 7-point Likert scale from 0 (not at all confident) to 7 (completely confident). This measure went to individuals with pain only.
- **Pain Catastrophising Scale (PCS):** A 13-item measure of the degree to which individuals have unhelpful thoughts and feelings about pain. Each item was scored on a 5-point Likert scale from 0 (not at all) to 4 (all the time). This measure went to all participants

PTWS: Haythornthwaite, J. A., Wegener, S., Benrud-Larson, Fisher, B., Clark, M., Dillingham, T., Cheng, L., & DeLateur, B. (2003). Factors associated with willingness to try different pain treatments for pain after a spinal cord injury. *The Clinical Journal of Pain*, 19(1), 31-38, <https://doi.org/10.1097/00002508-200301000-00004>

PSEQ: Nicholas, M. K. (2007). The Pain Self-Efficacy Questionnaire: Taking pain into account. *European Journal of Pain*, 11(2), 153-163. <https://doi.org/https://doi.org/10.1016/j.ejpain.2005.12.008>

PCS: Sullivan, M. J., Bishop, S. R., & Pivik, J. (1995). The Pain Catastrophizing Scale: Development and validation. *Psychological Assessment*, 7(4), 524-532. <https://doi.org/https://doi.org/10.1037/1040-3590.7.4.524>

Detailed methodology: Psychological measures

Pain: Finding the way forward with psychology

- **Depression Anxiety Stress Scales, short form (DASS-21):** A 21-item measure of symptoms of psychological distress, including anxiety, stress and depressive symptoms. Each item was scored on a 5-point Likert scale from 1 (not at all) to 5 (all the time). This measure went to all participants.
- **Theory of Planned Behaviour Questionnaire (TPBQ):** A modified version of the Theory of Planned Behaviour Questionnaire was used to measure intention, self-efficacy, attitudes (of the individual with pain, their family, friends and doctor), perceived control and feelings around engaging in psychological treatment. These findings are the focus of a separate study. This included 27 questions scored on 7-point Likert scale. This measure went to individuals with pain only.
- **Demographics:** Standard demographic questions were asked of all participants.

DASS-21: Lovibond, S. H., & Lovibond, P. F. (1995). Manual for the Depression Anxiety Stress Scales (2nd ed.). Psychology Foundation.

TPBQ: Rowland, G., Robinson, G., Chilcot, J., & Troop, N.A. (2014). Theory of planned behavior questionnaire. <https://dx.doi.org/10.1037/t34977-000>

Data analyses. Descriptive analyses were conducted across all major variables to describe the prevalence and experience of pain, participants' knowledge, experience and views of psychological treatment, their willingness to receive psychological treatment and perceived barriers to psychological treatment. When comparing two groups (those with and without pain, those who had and hadn't seen a psychologist), independent samples t-tests were used for comparisons of two groups. For groups of more than two (age, gender) one-way Analyses of Variance were used in conjunction with Tukey's post-hoc tests to look at differences in sub-groups. Bonferroni adjustments to p-values were made. Correlational analyses were conducted to examine associations of pain severity and pain interference with psychological variables.

Findings: The results presented in this report have been selected based on issues or trends currently of interest in relation to psychological treatment of pain, and any findings that were deemed noteworthy. All significance testing has been conducted at the 5% significance level. Where no significant findings were uncovered for given groups or demographic variables, results were omitted from this report.

Demographics of survey sample

Pain: Finding the way forward with psychology

		Percentage of respondents
AGE	18 - 24	11.5%
	25 - 34	17.4%
	35 - 44	17.5%
	45-54	17.4%
	55-64	14.4%
	65 and older	21.8%
GENDER	Male	49.3%
	Female	50.1%
	Non-binary	0.2%
	Gender not listed (please describe)	0%
	Prefer not to say	0.4%
SEX ASSIGNED AT BIRTH	Male	49.3%
	Female	50.1%
	Prefer not to say	0.6%
INTERSEX	Yes	3.3%
	No	95%
	Prefer not to say	1.7%
SEXUAL ORIENTATION	Lesbian	1.6%
	Gay or homosexual	2.8%
	Straight or heterosexual	87.8%
	Bisexual	3.6%
	Queer	0.3%
	Different identity (please specify)	1.1%
	Prefer not to say	2.8%
	Total respondents	1022

Demographics of survey sample

Pain: Finding the way forward with psychology

		Percentage of respondents
ABORIGINAL AND/OR TORRES STRAIT ISLANDER	Aboriginal	2.7%
	Torres Strait Islander	0.5%
	Both	1.0%
	Neither	93.7%
	Don't know/not sure	0.1%
	Prefer not to say	2.1%
STATE	NSW	30.8%
	VIC	25.8%
	QLD	20.5%
	SA	6.9%
	WA	10.1%
	ACT	2.2%
	TAS	2.7%
	NT	1.1%
CURRENT PARTNER	Yes	63.6%
	No	35.2%
	Prefer not to say	1.3%
LIVE WITH OTHERS	Yes	62.6%
	No	36.3%
	Prefer not to say	1.1%
	Total respondents	1022

Associations between pain severity, pain interference and other factors

Pain: Finding the way forward with psychology

High levels of pain severity were associated with:	Pearson's <i>R</i> correlation ¹
Greater degree of pain interference with normal work (paid and unpaid)	0.73
Lower degree of confidence that one can do things in spite of pain	-0.52
Greater degree of unhelpful thoughts and feelings about pain	0.49
Psychological distress	0.33
Greater belief that barriers make it difficult to access psychological treatment	0.25

High levels of pain severity were associated with:	Pearson's <i>R</i> correlation ¹
Greater degree of pain interference with normal work (paid and unpaid)	0.73
Lower degree of confidence that one can do things in spite of pain	-0.61
Greater degree of unhelpful thoughts and feelings about pain	0.55
Psychological distress	0.43
Greater belief that barriers make it difficult to access psychological treatment	0.35

1. All associations/correlations were significant at the $p < .01$ level..