

Research

Australian adults expect physiotherapists to provide physical activity advice: a survey

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KEY WORDS

Expectations
Exercise
Physical therapy modalities
Physical activity
Physical therapy



ABSTRACT

Questions: Do Australian adults think that physiotherapists are likely to provide physical activity (PA) advice, general health advice, and physical interventions? Do Australian adults think it is important for physiotherapists to provide each of these services? What factors are associated with adults' expectations of receiving these services from physiotherapists? **Design:** Online nationwide cross-sectional survey. **Participants:** Australian adults aged < 18 years who have or have not had a physiotherapy appointment before. **Outcome measures:** The survey instrument included questions asking respondents if it was both important and likely that a physiotherapist would provide services pertaining to PA and general health-related advice as well as physical interventions. Responses were measured on a 6-point Likert scale. **Results:** Full responses were obtained from 587 respondents. Most respondents reported that it is likely (40%) or extremely likely (29%) and important (47%) or extremely important (29%) that a physiotherapist provides advice to help them increase their PA levels. This was similar to the percentage of respondents reporting that it is likely (46%) or extremely likely (19%) and important (43%) or extremely important (24%) that a physiotherapist provides advice to help them improve their general health. A similar number of respondents also reported that it is likely (37%) or extremely likely (29%) and important (42%) or extremely important (26%) that a physiotherapist provides massage. The odds of respondents expecting physiotherapists to provide PA advice were higher for those who were older (OR 1.2, 95% CI 1.1 to 1.5), chose to see a physiotherapist to feel better and receive a home exercise program (OR 2.0, 95% CI 1.0 to 3.9), and felt that physiotherapists met their expectations (OR 4.5, 95% CI 2.2 to 9.3). **Conclusion:** Australian adults believe it is likely and important that physiotherapists provide PA and general health advice in addition to specific physical interventions. [Kunstler B, Fuller R, Pervan S, Merolli M (2019) Australian adults expect physiotherapists to provide physical activity advice: a survey. *Journal of Physiotherapy* 65:230–236]

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Introduction

Current evidence-based recommendations for physical activity (PA) suggest that adults should participate in at least 150 minutes of moderate-intensity activity (eg, cycling or swimming) or at least 75 minutes of vigorous-intensity activity (eg, running) weekly.^{1,2} To meet global recommendations, adults should also participate in muscle strengthening for all major muscle groups twice weekly.^{1,2}

However, 23% of adults and 81% of adolescents globally are not meeting PA recommendations, prompting the World Health Organization to produce their Global Action Plan on Physical Activity 2018 to 2030.³ In 2014 to 2015, 45% of Australian adults did not achieve the minimum recommended PA levels, being either insufficiently active (30%) or inactive (15%).⁴ Complications associated with not meeting PA recommendations are both expensive and deadly. The cost associated with global inactivity-related deaths and disability reached international \$ (INT\$) 67.5 billion in 2013 alone; in Australia, the cost of inactivity was INT\$805 million.⁵

Physiotherapists are qualified and sufficiently skilled to improve patient PA levels.^{6,7} Physiotherapists can employ PA to prevent and treat several conditions, such as common musculoskeletal conditions (ie, osteoarthritis),^{8,9} and to improve aspects of general health.⁶ Physiotherapists are perceived to be capable of promoting other health behaviours too, such as a healthy diet, smoking cessation and safe alcohol consumption.¹⁰ However, the role of the physiotherapist in the provision of this advice is less established than for PA.¹¹ This is despite there being a strong push by the research and broader public health communities for physiotherapists to become more involved in supporting patients to change behaviours such as these.^{10,12}

Australian physiotherapists consider the provision of PA advice to patients to be part of their role, but they can find it difficult to do.¹³ A qualitative exploration of Australian physiotherapists found that they perceive patients as expecting passive therapies or physical interventions, like hands-on or manual therapy, before advice to participate in more active therapies such as increasing their PA levels.¹³ International research supports this finding, suggesting that

patients expect hands-on therapies from physiotherapists.¹⁴ It is important for physiotherapists to pay attention to patient expectations because they influence satisfaction and repeat patronage.¹⁵ However, this perception suggests that physiotherapists might prioritise services expected by the patient ahead of providing PA advice. This might ultimately result in physiotherapists providing PA advice less often, despite it being clinically indicated.¹⁶

Given that limited evidence exists about patients' expectations for PA advice from physiotherapists, it is important to establish whether physiotherapists' perceptions about this issue are accurate. This study will build on related work¹⁷ and establish whether Australian adults expect PA advice from physiotherapists. The study will also establish whether adults expect other types of health advice and services, such as physical interventions and advice on general health, from physiotherapists.

Therefore, the research questions for this cross-sectional survey were:

1. Do Australian adults think that physiotherapists are likely to provide physical activity advice, general health advice, and physical interventions?
2. Do Australian adults think that it is important for physiotherapists to provide each of these services?
3. What factors are associated with adults' expectations of receiving these services from physiotherapists?

Method

Design

A nationwide cross-sectional survey was administered by a commercial market research company^a, who advertised the survey Australia-wide using various online methods (eg, blogs, social media and email) throughout October and November 2018, to obtain a general sample reflective of the Australian adult population.

Participants

Responses from adults residing in Australia, aged > 18 years who were able to read and respond in English were included. Present or past use of physiotherapy services was not an eligibility criterion. No additional exclusion criteria were applied, to ensure that the responding cohort was as representative of the Australian adult population as possible.

Outcome measure

The survey instrument employed was designed and refined by clinical physiotherapy and marketing experts. Data were collected using online survey software^b. The instrument was informed by other valid instruments that have explored patient expectations and satisfaction with physiotherapy services and outcomes but neglected to measure expectations of services.^{17–24}

The instrument (Appendix 1, available on the eAddenda) included sections specific to respondent demographics, general health and PA levels, as well as experience seeing a physiotherapist. The remainder of the instrument explored the perceived *likelihood* of receiving particular physiotherapy services and the level of *importance* respondents placed on physiotherapists providing said services. Most questions were multiple choice, some with the ability to provide further qualitative information, or matrix-style and measured on a 6-point Likert scale (eg, 1 = extremely unimportant, to 5 = extremely important, with an 'I do not know what this [service] is' option).

Data analysis

As of July 2018, there were 19,786,363 people aged 15 to 84 years in Australia.²⁵ Using this value, a confidence level of 0.95 and a

Table 1
Characteristics of survey respondents.

Characteristics	Respondents (n = 671)
Age (yr), n (%) ^a	
18 to 24	68 (10)
25 to 34	150 (23)
35 to 44	80 (12)
45 to 54	57 (9)
55 to 64	100 (15)
65 to 74	164 (25)
75 to 84	47 (7)
≥ 85	2 (< 1)
Gender, n (%) ^b	
female	330 (50)
male	317 (48)
non-binary	12 (2)
Location, n (%) ^c	
Victoria	197 (29)
New South Wales and Australian Capital Territory	159 (24)
Queensland	158 (24)
Western Australia	66 (10)
South Australia	61 (9)
Tasmania	17 (3)
Northern Territory	3 (< 1)
Education level, n (%) ^c	
Primary school	27 (4)
Secondary school	217 (33)
Certificate/technical apprenticeship	98 (15)
Diploma (certificate, graduate)	104 (16)
Advanced diploma	33 (5)
Bachelor's degree	125 (19)
Post-graduate degree (Master's, PhD)	57 (9)
Physical activity level, n (%) ^c	
inactive ^d	328 (50)
insufficiently active ^e	187 (28)
active ^f	146 (22)
Private health insurance: 'extras' cover, n (%) ^c	
no	331 (50)
yes	295 (45)
don't know	35 (5)
Perceived health compared to friends, n (%) ^c	
much healthier	61 (9)
healthier	181 (27)
the same	295 (45)
more injured or ill	94 (14)
much more injured or ill	30 (5)
Exposure to physiotherapy, n (%) ^g	
currently seeing a physiotherapist	83 (13)
not seeing a physiotherapist but have in the past	319 (49)
never seen a physiotherapist	249 (38)
would not choose to see a physiotherapist	7 (1)

Some percentages do not sum to 100 due to the effects of rounding.

^a 3 missing.

^b 12 missing.

^c 10 missing.

^d Not participating in any weekly cardiovascular or strength-based activities.

^e Participating in some cardiovascular or strength-based activity, but not enough to meet the guidelines.

^f Participating in enough physical activity to meet the guidelines.

^g 13 missing.

margin of error of 5%, an estimated desired sample size of 385 was calculated a priori.

Data were exported from the online survey software and imported into statistical software^c for analysis. Incomplete responses were included. Data were cleaned with missing data removed pairwise. Negatively/inversely worded questions were reverse coded prior to analysis. Descriptive statistics (frequencies and percentages) were used to present responses to all questions measuring *likelihood* and *importance*. For the purposes of multivariable analysis, variables reflecting *expectations* of respondents were created by merging variables measuring *likelihood* and *importance*, as expectations are informed by both perceived likelihood and importance of receiving a certain service.²⁶ This allowed for the identification of factors influencing adults' expectations for particular services.²⁶ Non-parametric multivariable analyses (binary logistic regression) were used to

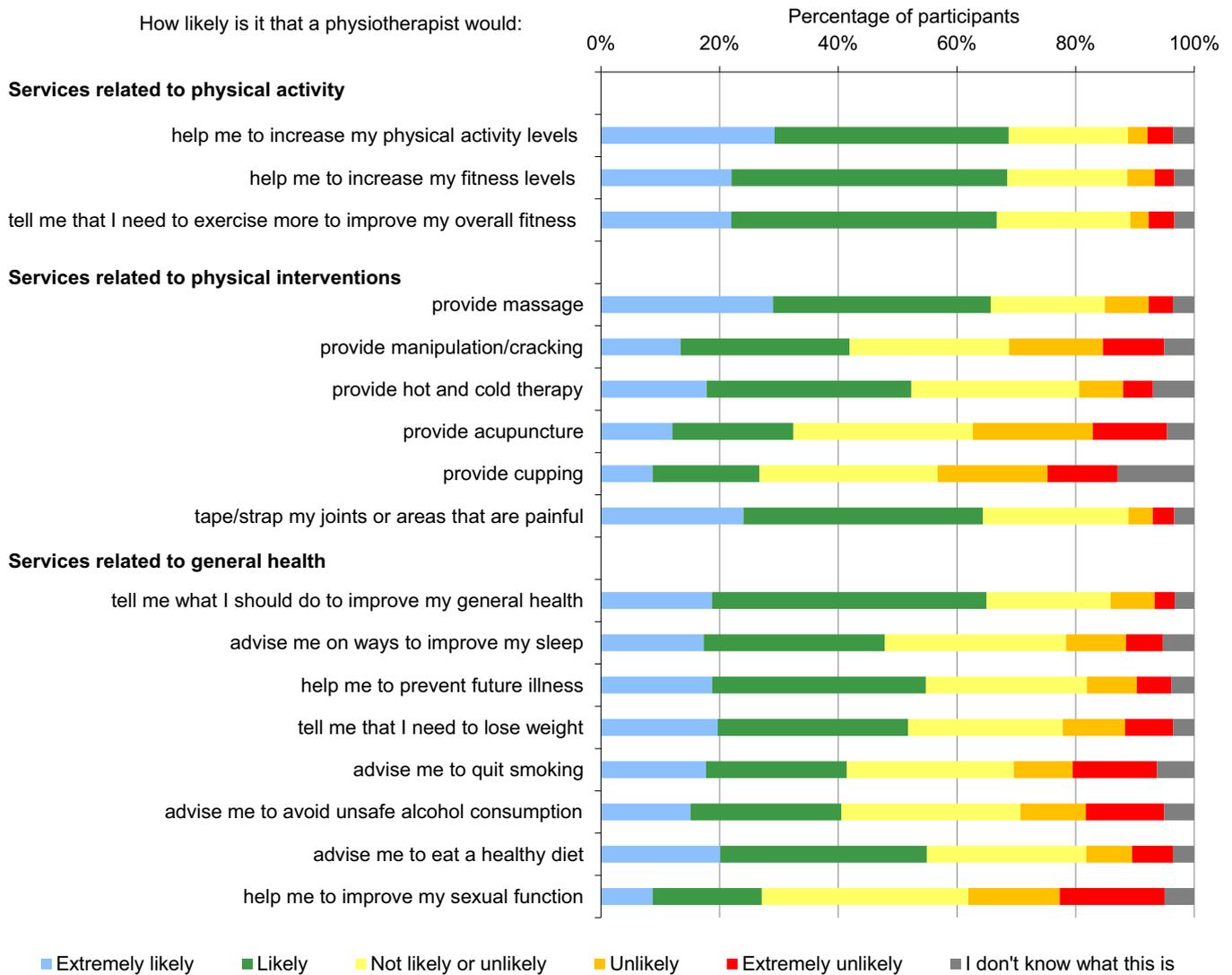


Figure 1. Frequency of responses to questions related to the likelihood of physiotherapists providing specific services (n = 583). Numerical data are presented in Appendix 2 on the eAddenda.

identify odds ratios (OR), and 95% confidence intervals (CIs) were reported to demonstrate strength of associations.²⁷

Results

Characteristics of the participants

A total of 671 responses, comprising 587 full responses, were received. Most respondents were female (n = 330, 50%), from Victoria (n = 197, 30%), aged 18 to 64 years (n = 455, 68%), had higher education beyond secondary schooling (n = 417, 62%), considered themselves just as healthy as their friends (n = 295, 45%), and were physically inactive or insufficiently active (n = 515, 77%). Furthermore, most respondents had seen a physiotherapist in the past or were currently seeing one (n = 402, 60%) and did not have 'extras cover' to fund physiotherapy services (n = 331, 50%) (Table 1).

Do Australian adults think that physiotherapists are likely to provide physical activity advice, general health advice, and physical interventions?

Most respondents agreed that it is likely or extremely likely that a physiotherapist would provide advice to help them increase their PA (n = 401, 69%) and fitness levels (n = 399, 68%), and suggest that they need to exercise more to improve their fitness (n = 389, 67%). Provision of advice on how to improve their general health was also

perceived as likely or extremely likely by most respondents (n = 379, 65%) (Figure 1).

A similar number reported that it was likely or extremely likely that a physiotherapist would provide massage (n = 383, 66%) and taping/strapping (n = 375, 64%). However, this was not representative of all physical interventions, with fewer respondents reporting that it would be likely or extremely likely for a physiotherapist to provide manipulation/cracking (n = 244, 42%) and acupuncture (n = 189, 32%) (Figure 1).

Fewer respondents reported that specific general health advice was likely or extremely likely to be provided by physiotherapists compared to PA advice, including advice on: weight loss (n = 302, 52%), smoking cessation (n = 241, 41%), avoiding unsafe alcohol consumption (n = 236, 40%), and healthy eating (n = 320, 55%) (Figure 1).

Do Australian adults think it is important for physiotherapists to provide physical activity advice, general health advice, and physical interventions?

Most respondents agreed that it is important or extremely important for a physiotherapist to provide advice to help them increase their PA (n = 444, 76%) and fitness levels (n = 427, 73%), and suggest that they need to exercise more to improve their fitness (n = 392, 67%). Providing advice on how to improve their general health was also perceived as important or extremely important by most respondents (n = 388, 67%) (Figure 2).

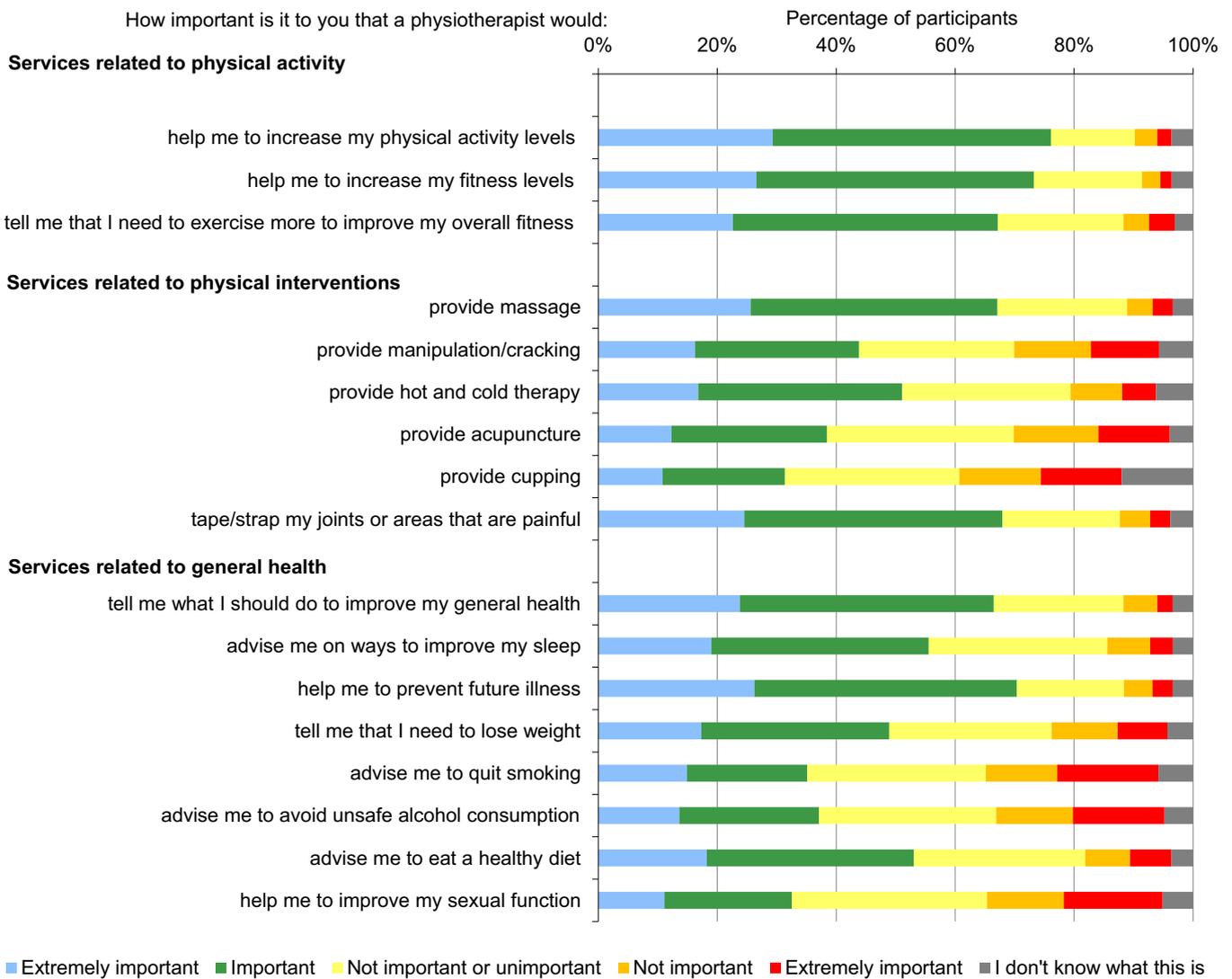


Figure 2. Frequency of responses to questions related to the *importance* of physiotherapists providing specific services (n = 583). Numerical data are presented in Appendix 3 on the eAddenda.

A similar percentage of respondents reported that it was important or extremely important that a physiotherapist provides massage (n = 391, 67%) and taping/strapping (n = 396, 68%). Again, this was not representative of all physical interventions, with fewer respondents reporting that it is important or extremely important for a physiotherapist to provide manipulation/cracking (n = 256, 44%) and acupuncture (n = 224, 38%) (Figure 2).

Fewer respondents reported that receiving specific general health advice from physiotherapists was important or extremely important compared to PA advice, including advice on: weight loss (n = 285, 49%), smoking cessation (n = 205, 35%), avoiding unsafe alcohol consumption (n = 216, 37%), and healthy eating (n = 309, 53%) (Figure 2).

What factors are associated with adults' expectations of receiving specific services from physiotherapists?

The results of logistic regression analyses demonstrated that the likelihood of expecting PA advice was higher for those who were older (OR 1.2, 95% CI 1.1 to 1.5) and felt that physiotherapists met their expectations (OR 4.5, 95% CI 2.2 to 9.3) (Table 2).

The likelihood of expecting a physiotherapist to provide general health advice, help to increase their fitness levels and advice on using exercise to do so, was also higher for those who were older (OR 1.1, 95% CI 1.0 to 1.3; OR 1.2, 95% CI 1.0 to 1.4; and OR 1.2, 95% CI 1.1 to 1.4, respectively) and for those who felt that physiotherapists met their

expectations (OR 2.9, 95% CI 1.4 to 5.8; OR 3.6, 95% CI 1.8 to 7.2; and OR 2.6, 95% CI 1.3 to 5.2, respectively) (Table 2).

There were some notable differences in the likelihood of expecting that a physiotherapist would provide PA advice compared to general health advice. The likelihood of expecting that a physiotherapist would provide PA advice was higher for respondents attending physiotherapy to feel better *and* receive a home exercise program (HEP) (OR 2.0, 95% CI 1.0 to 3.9), whereas the likelihood of expecting general health advice was only higher when respondents attended physiotherapy to feel better *without* receiving a HEP (OR 2.1, 95% CI 1.1 to 4.1) (Table 2).

For physical interventions, the likelihood that respondents expected a physiotherapist to provide massage was lower if they chose to see a physiotherapist for injury prevention purposes (OR 0.45, 95% CI 0.23 to 0.86) and higher if they attended physiotherapy to feel better *without* receiving a HEP (OR 2.3, 95% CI 1.1 to 4.5). The likelihood that respondents expected a physiotherapist to provide massage was also higher for those who felt physiotherapists met their expectations (OR 4.5, 95% CI 2.2 to 9.3) (Table 2).

Discussion

This study identified services that Australian adults perceived to be important and likely to be provided by a physiotherapist, while also identifying some factors that are associated with expectations of receiving these services. More respondents felt that receiving advice pertaining to improving PA, fitness levels and general health,

Table 2
The factors associated with Australian adults' expectations of services provided by physiotherapists.

Dependent variable	Independent variable	OR	95% CI
Expect physical activity advice from physiotherapists	Age	1.247	1.072 to 1.450
	Gender	1.446	0.851 to 2.457
	Education	1.068	0.923 to 1.235
	Satisfaction level with physiotherapy	1.162	0.849 to 1.591
	Physiotherapist meets their expectations ^a	4.545	2.225 to 9.286
	Chose to see a physiotherapist to feel better <i>and</i> receive a HEP	2.012	1.039 to 3.894
	Chose to see a physiotherapist to feel better <i>without</i> receiving a HEP	1.505	0.735 to 3.082
	Chose to see a physiotherapist to have a greater level of health	0.592	0.307 to 1.143
Expect general health advice from physiotherapists	Age	1.148	1.004 to 1.312
	Gender	1.360	0.847 to 2.186
	Education	0.980	0.860 to 1.116
	Satisfaction level with physiotherapy	1.095	0.821 to 1.460
	Physiotherapist meets their expectations ^a	2.887	1.443 to 5.779
	Chose to see a physiotherapist to feel better <i>and</i> receive a HEP	1.205	0.696 to 2.086
	Chose to see a physiotherapist to feel better <i>without</i> receiving a HEP	2.116	1.102 to 4.063
	Chose to see a physiotherapist to have a greater level of health	0.971	0.531 to 1.775
Expect physiotherapists to help increase fitness levels	Age	1.202	1.038 to 1.392
	Gender	1.536	0.913 to 2.582
	Education	1.077	0.934 to 1.242
	Satisfaction level with physiotherapy	1.224	0.899 to 1.668
	Physiotherapist meets their expectations ^a	3.594	1.785 to 7.236
	Chose to see a physiotherapist to feel better <i>and</i> receive a HEP	1.531	0.819 to 2.859
	Chose to see a physiotherapist to feel better <i>without</i> receiving a HEP	1.496	0.737 to 3.035
	Chose to see a physiotherapist to have a greater level of health	1.067	0.552 to 2.064
Expect physiotherapists to advise them to exercise more to increase fitness levels	Age	1.232	1.072 to 1.416
	Gender	1.142	0.702 to 1.857
	Education	0.954	0.835 to 1.091
	Satisfaction level with physiotherapy	1.104	0.822 to 1.482
	Physiotherapist meets their expectations ^a	2.579	1.286 to 5.172
	Chose to see a physiotherapist to feel better <i>and</i> receive a HEP	1.704	0.957 to 3.036
	Chose to see a physiotherapist to feel better <i>without</i> receiving a HEP	2.026	1.035 to 3.968
	Chose to see a physiotherapist to have a greater level of health	1.007	0.539 to 1.883
Expect physiotherapists to provide massage	Age	1.137	0.990 to 1.307
	Gender	1.378	0.840 to 2.261
	Education	1.055	0.921 to 1.208
	Satisfaction level with physiotherapy	1.280	0.949 to 1.727
	Physiotherapist meets their expectations ^a	4.536	2.210 to 9.313
	Chose to see a physiotherapist to feel better <i>and</i> receive a HEP	1.276	0.716 to 2.276
	Chose to see a physiotherapist to feel better <i>without</i> receiving a HEP	2.266	1.134 to 4.525
	Chose to see a physiotherapist to have a greater level of health	0.936	0.502 to 1.746
Expect physiotherapists to prevent illness or injury	Age	1.137	0.990 to 1.307
	Gender	1.378	0.840 to 2.261
	Education	1.055	0.921 to 1.208
	Satisfaction level with physiotherapy	1.280	0.949 to 1.727
	Physiotherapist meets their expectations ^a	4.536	2.210 to 9.313
	Chose to see a physiotherapist to feel better <i>and</i> receive a HEP	1.276	0.716 to 2.276
	Chose to see a physiotherapist to feel better <i>without</i> receiving a HEP	2.266	1.134 to 4.525
	Chose to see a physiotherapist to have a greater level of health	0.936	0.502 to 1.746

HEP = Home exercise program.

^a Answered only by respondents who had experience seeing a physiotherapist.

followed by massage and taping services, was likely and important compared with receiving manipulation, acupuncture and more specific general health advice on weight loss, healthy eating, sleep, safe alcohol consumption and smoking cessation. Adults were more likely to expect advice on PA and general health from physiotherapists if they were older and reported that physiotherapists met their expectations. These findings suggest that Australian adults expect physiotherapists to provide PA and general health-related advice, possibly more so than physical interventions and advice on specific chronic disease risk factors such as smoking.

It is important for physiotherapists to pay attention to patient expectations because not meeting them might lead to poor patient satisfaction. Previous experience with physiotherapy can inform patient expectations for certain outcomes at future visits.²⁸ Fulfilling or not fulfilling these expectations can influence patient satisfaction¹⁵ and, potentially, the desire of the patient to return to the physiotherapist in the future. Patient satisfaction with physiotherapy for musculoskeletal conditions in Australia has been reported as high.²⁹ To maintain high satisfaction levels, Australian physiotherapists must be familiar with patient expectations and provide the expected services. Considering the findings from this study, this means providing both passive and active interventions, as appropriate, and

evidence-based alternative interventions should also be provided where the expected service is not appropriate.³⁰

Physiotherapists might not have an accurate understanding of exactly what patients expect from them.¹⁴ To date, research has suggested that Australian physiotherapists are hesitant to provide PA advice because they perceive that patients do not expect PA advice from them, instead preferring physical interventions.¹³ This makes physiotherapists hesitant to provide PA advice to avoid damaging rapport.¹³ However, based on the findings of this study, Australian adults expect both PA advice and physical interventions from physiotherapists, with slightly more respondents reporting PA advice as important and likely to be provided rather than massage. This finding is supported by other studies that have found that patients expect self-management strategies³⁰ as well as hands-on treatment.¹⁴ This implies that expectations are not just limited to activities that are simply 'done to' patients, but are broader to include those that are 'done with' them.

Two explanations for the disconnect between what physiotherapists think patients expect and what patients actually expect could arise from the credence-based nature of the physiotherapy service. Credence-based services are difficult for patients to evaluate, during or after the exchange, so they rely heavily on the expertise of the

provider to guide them in knowing whether they have received appropriate treatment.^{31,32} If some physiotherapists are not offering PA advice, it is possible that patients will not demand it even if they consider it important, preferring instead to receive guidance from the expert as to what they need, leading physiotherapists to believe that patients do not expect or want PA advice. Another explanation is that patients are seen by physiotherapists to have preconceived ideas around the condition they have and the treatments they will receive.¹⁴ Thus, there may be a disconnect between what physiotherapists might interpret as patients not expecting PA advice and a reluctance to act on said advice outside of the clinic. Further research is needed to explore a possible point of tension or dissatisfaction for a patient from receiving PA advice and the personal involvement needed to act on the advice.

Expecting PA advice from physiotherapists was more likely among respondents who were older, chose to see a physiotherapist to receive a HEP and felt that physiotherapists met their expectations. Living a physically active lifestyle has been promoted strongly in Australia, for example through government-funded campaigns such as 'Life. Be in It'³³ and, more recently, 'Move it Aus – Find your 30'.³⁴ Thus, Australian adults are likely to have been exposed to accumulating PA messaging as they age, making them aware that they should be physically active and expect that physiotherapists will encourage them to do so. Furthermore, physiotherapists are promoted as 'exercise experts'³⁵ and can visually appear as fit themselves, thus their appearance and the profession's relationship with exercise might also make people inclined to expect PA advice from physiotherapists.³⁶ Although these findings appear valid, the lower limit of the confidence intervals for these associations was close to one. Thus, the observed relationships may or may not be substantial enough to inform physiotherapy practice.

There are strengths and limitations to this study. Previous research has commonly focused on patient expectations for outcome (eg, complete pain resolution),^{28,37} rather than for certain treatments (eg, massage) and other service provisions such as PA and general health advice.^{14,17} Thus, this study fills an important gap in the literature pertaining to expectations of physiotherapy as the profession enters an era focused on health promotion.

All Australian adults who had or had not seen a physiotherapist previously were eligible to participate in the survey, in an attempt to gain a representation of the general adult population. In doing so, over one third of respondents had not seen a physiotherapist previously. This group presumably had less exposure to physiotherapy as a profession compared to those who have seen a physiotherapist clinically, potentially reducing the experiences they could use to inform their responses. However, the service experience of a person is not limited to clinical consultations and can include reflections of others' experiences (eg, family members) and exposure to the profession in the media (eg, the Australian Physiotherapy Association's 'Choose Physio' campaign).³⁶ Thus, this group would still have experiences to reflect on, albeit different experiences to those who have engaged with physiotherapy clinically.

This study was unable to identify any valid and reliable survey instruments that specifically measure physiotherapy service expectations, especially instruments that include PA and general health constructs. It has previously been reported that instruments like these are scarce.³⁸ Thus, a new survey instrument specifically addressing expectations for physiotherapy services was created using questions from existing instruments that have been validated and administered in similar contexts. The instrument was not piloted with Australian adults prior to distribution but was refined and had readability improved after several reviews by the research team and colleagues. The instrument should be tested for validity and reliability prior to use in future studies.

In conclusion, this study found that Australian adults perceive the provision of PA advice by physiotherapists as important and likely. The findings from this study suggest that marginally more Australian adults expect PA advice from physiotherapists than general health advice and physical interventions. Thus, physiotherapists should not

assume that patients expect passive before active therapies, and should not hesitate to provide PA advice to their patients, as this advice is likely to be welcomed.

What was already known on this topic: Many adults do not achieve recommended physical activity levels. Physiotherapists can advise patients about physical activity and other health behaviours to prevent and treat several conditions. Past research suggests that patients expect physical interventions more than advice about physical activity and health behaviours, and that physiotherapists perceive these expectations in their patients. **What this study adds:** Most Australian adults think that it is likely and important that a physiotherapist would provide advice about physical activity and general health behaviours. This was similar or greater than their expectations about specific physical interventions. Physiotherapists should anticipate that patients expect to receive advice about physical activity and other health behaviours.

Footnotes: ^a Cint, Sydney, Australia. ^b Qualtrics, Provo, USA. ^c SPSS, IBM Corporation, New York, USA.

eAddenda: Appendices 1, 2 and 3 can be found online at <https://doi.org/10.1016/j.jphys.2019.08.002>.

Ethics approval: The La Trobe University Human Ethics Committee (HEC18370) approved this study. Consent was implied upon voluntary commencement of the survey.

Competing interests: Nil.

Source(s) of support: Nil.

Acknowledgements: Nil.

Provenance: Not invited. Peer reviewed.

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