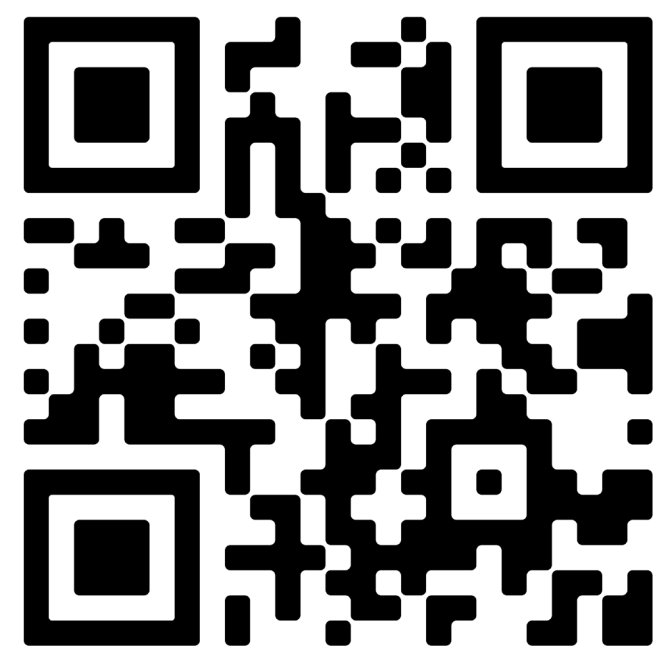


Supporting behavioral change in integrative medicine: Insights from a patient-user survey and systematic scoping review

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Abstract

Objectives

- Develop an understanding of the knowledge base for behavioral change in conventional and integrative medicine
- Survey users of an integrative medicine health technology platform to identify their feelings about their ability to change/maintain healthy behaviors, their most prevalent barriers, and their needs and preferences related to receiving behavioral change support

Results

Success in changing health-related behaviors

- Participants felt the most successful in changing their supplement intake compared to other behaviors.
- Participants felt the least successful in changing their stress management behaviors compared to other behaviors.

Success in maintaining health-related behaviors

- Participants reported **higher adherence** to supplement (96.7%), lab and assessment (96.4%), and pharmaceutical (95.4%) recommendations.
- Participants reported **lower adherence** to exercise (23.9%), massage and other manual therapies (22.6%), mindfulness or stress reduction (20.2%), sleep (13.5%), and nutrition (13.5%).

Barriers to behavioral change

- Most significant barriers (ranked):** cost (35.8%), lack of time (19.2%), lack of motivation or positive attitudes about the ability to make healthy behavioral changes (18.5%), and access to resources (16.5%)

Facilitators of behavioral change

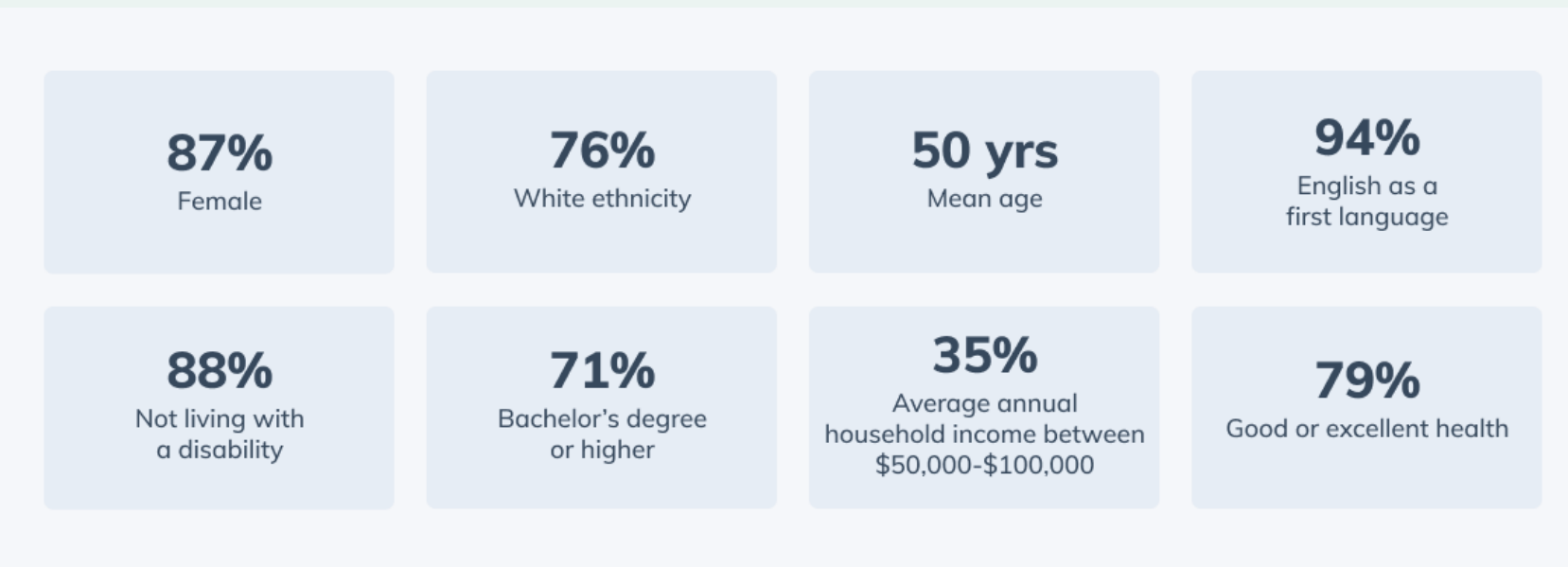
- Most helpful strategies (ranked):** education or treatment plan simplification (68.7%), goals, plans, and commitments (66.5%), practitioner monitoring and feedback (62.1%), and self-monitoring (56.9%)

Methodology

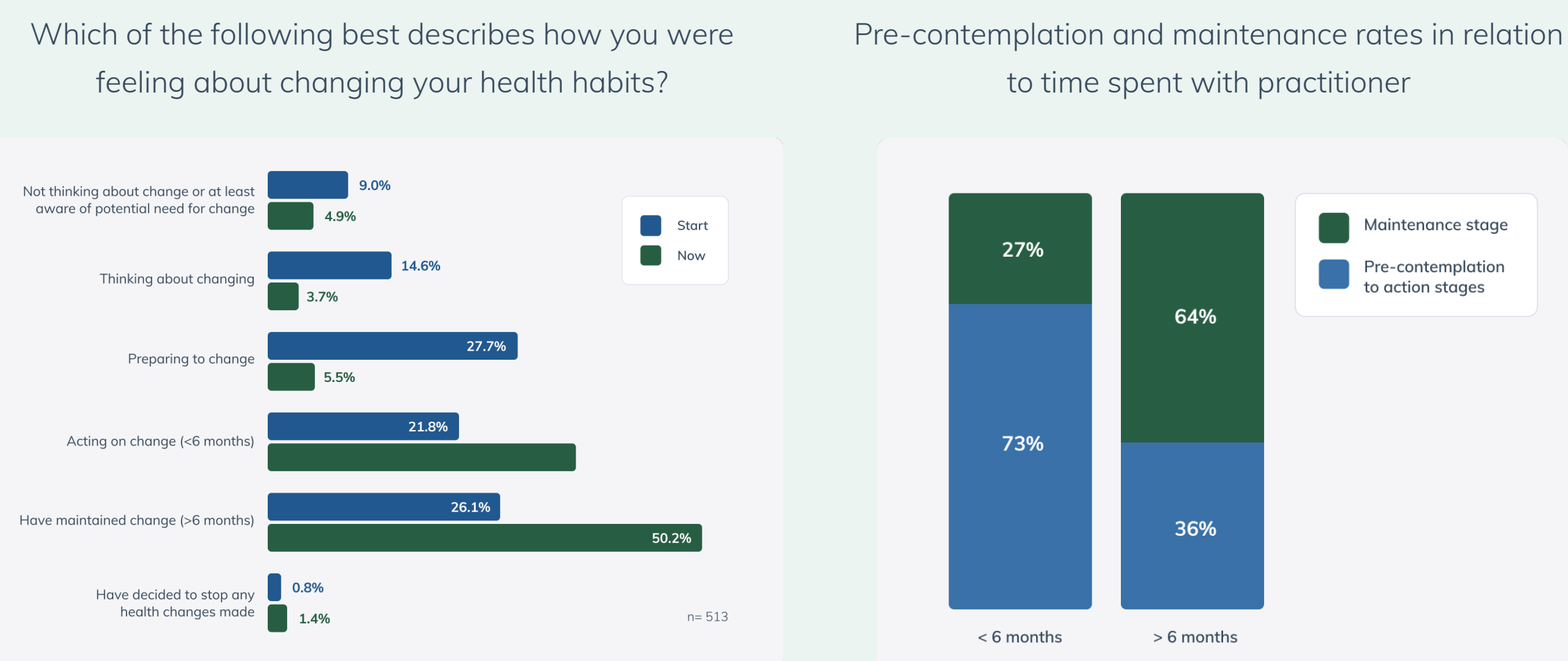
- An email invitation to participate in a 27-question survey was sent to patient users (n=30,000) who had received a treatment plan from their practitioner through an integrative medicine health technology platform (Fullscript) within the last year.
- To gather a representative sample of respondents using the integrative medicine health technology platform, 70% of email invitations were sent to patients seeing chiropractors, medical doctors, naturopathic doctors, nurse practitioners, and doctors of osteopathy. The remaining 30% of email invitations were sent to patients seeing other practitioner modalities (e.g., nutritionists, dietitians, acupuncturists, health coaches).
- Patients were not required to have placed an order through the platform to be eligible for participation.
- The survey was open for eight days.
- Participation incentives included being entered in a draw to win a \$200 USD gift card to Amazon.com (provided to the first-place winner) or five priority shipping credits on the integrative medicine health technology platform (provided to second- and third-place winners).
- Data was collected and analyzed using the SurveyMonkey software.
- Using Google Sheets, several secondary stratification analyses were conducted to determine whether there were any associated links.

Results

Demographic information (n=605)

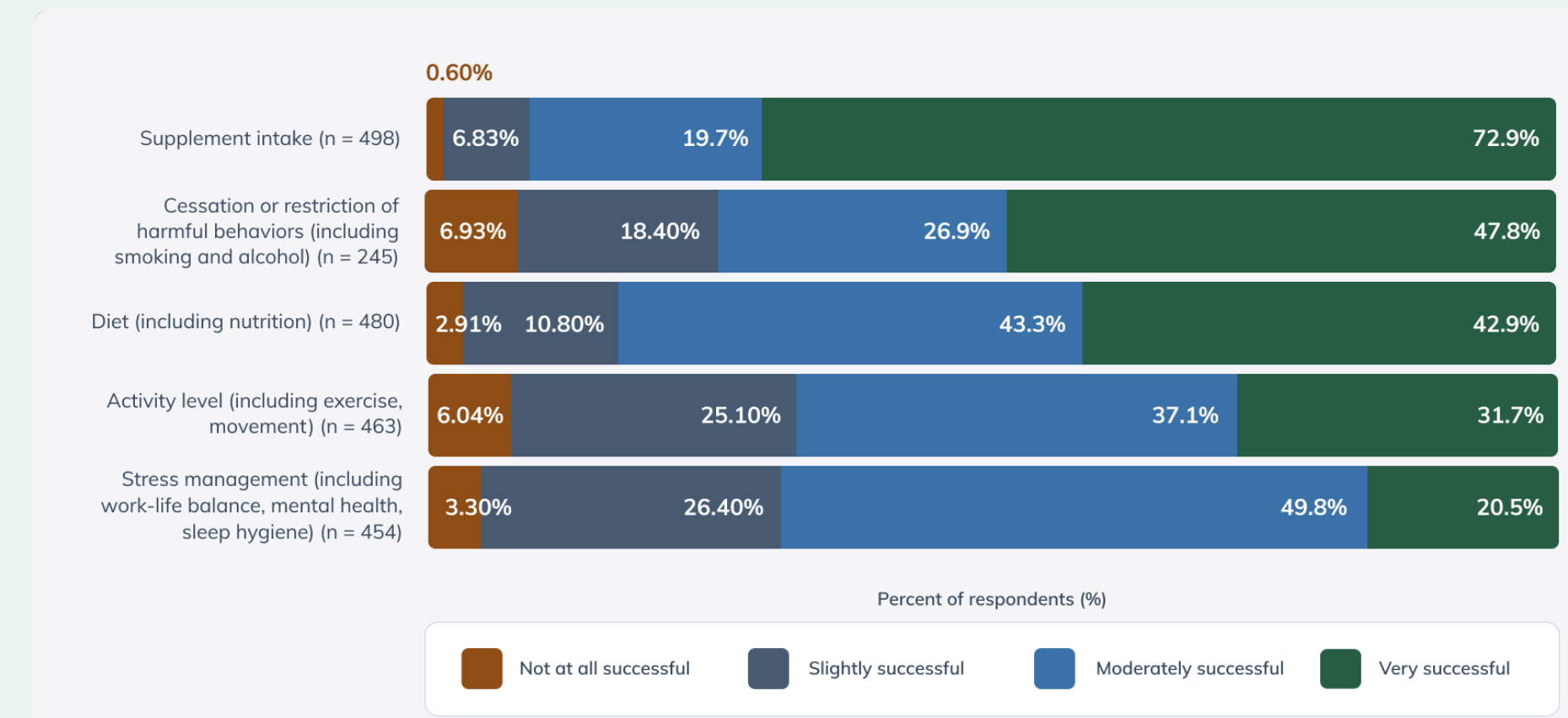


Patient readiness to change



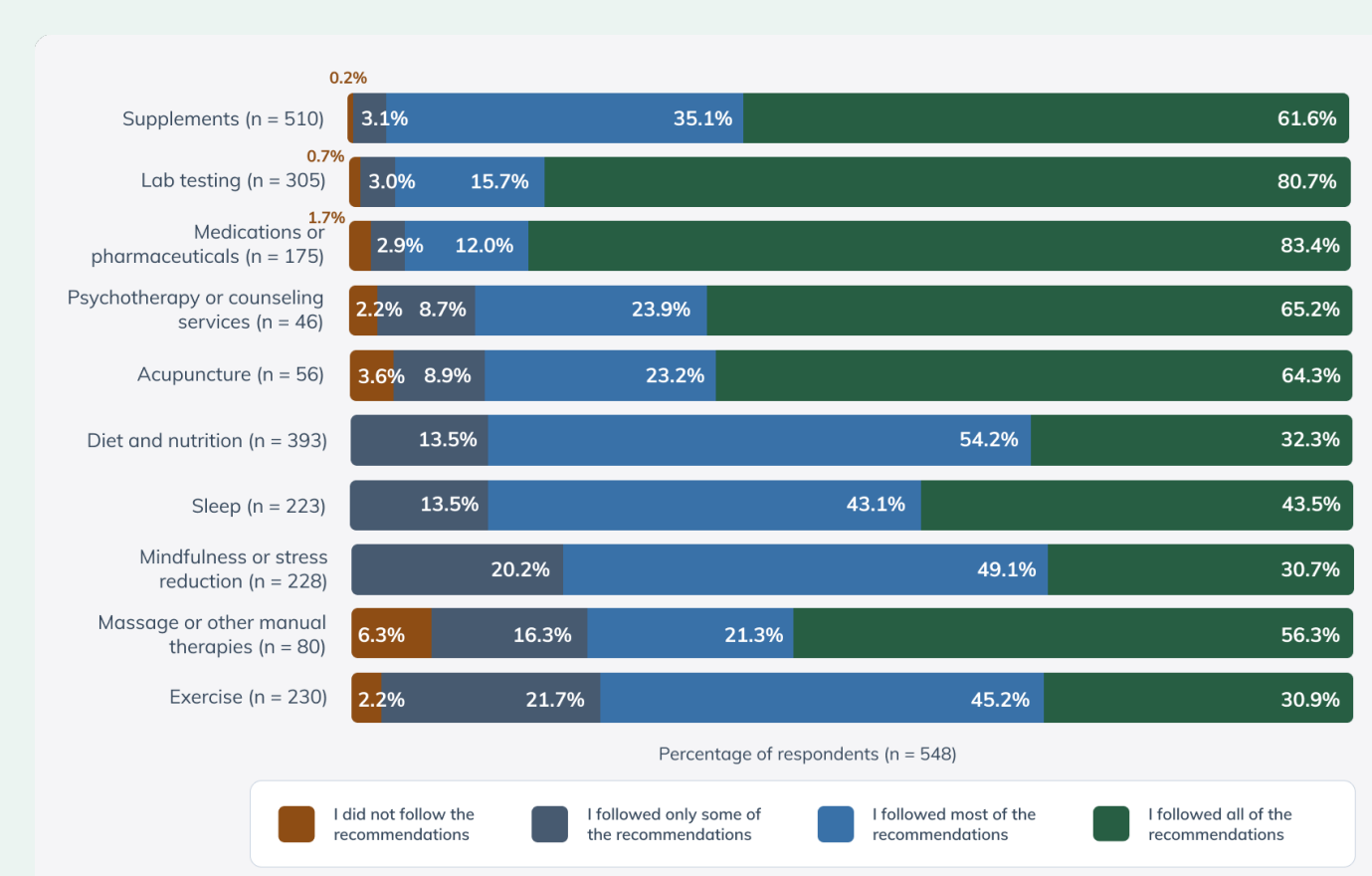
Success in changing health behaviors

Since starting your treatment plan, to what extent have you been successful in changing the following behaviors?

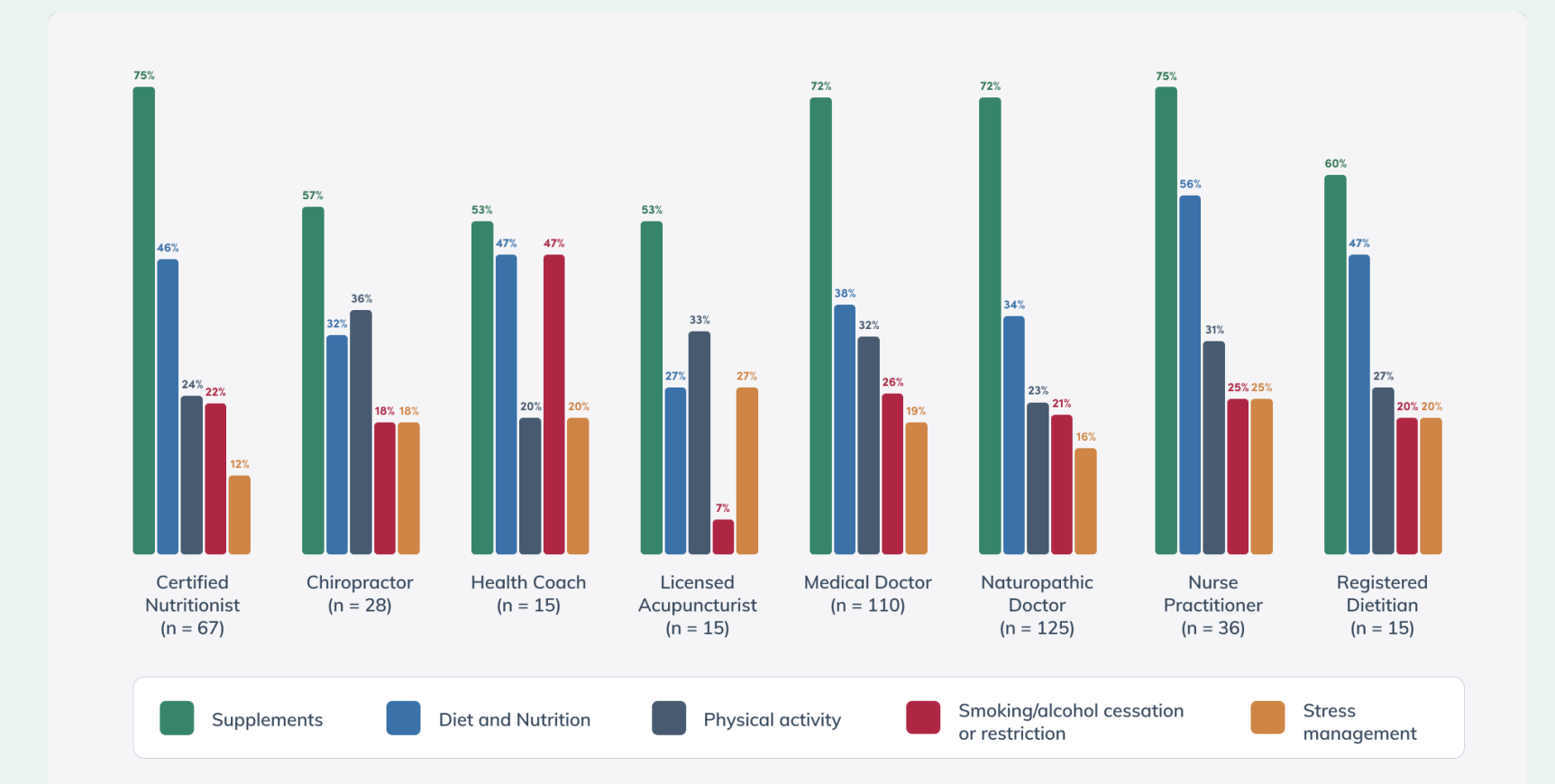


Success in maintaining health behaviors (adherence)

For each of the following treatment plan components, please indicate how closely you followed (or are following) the recommendations.

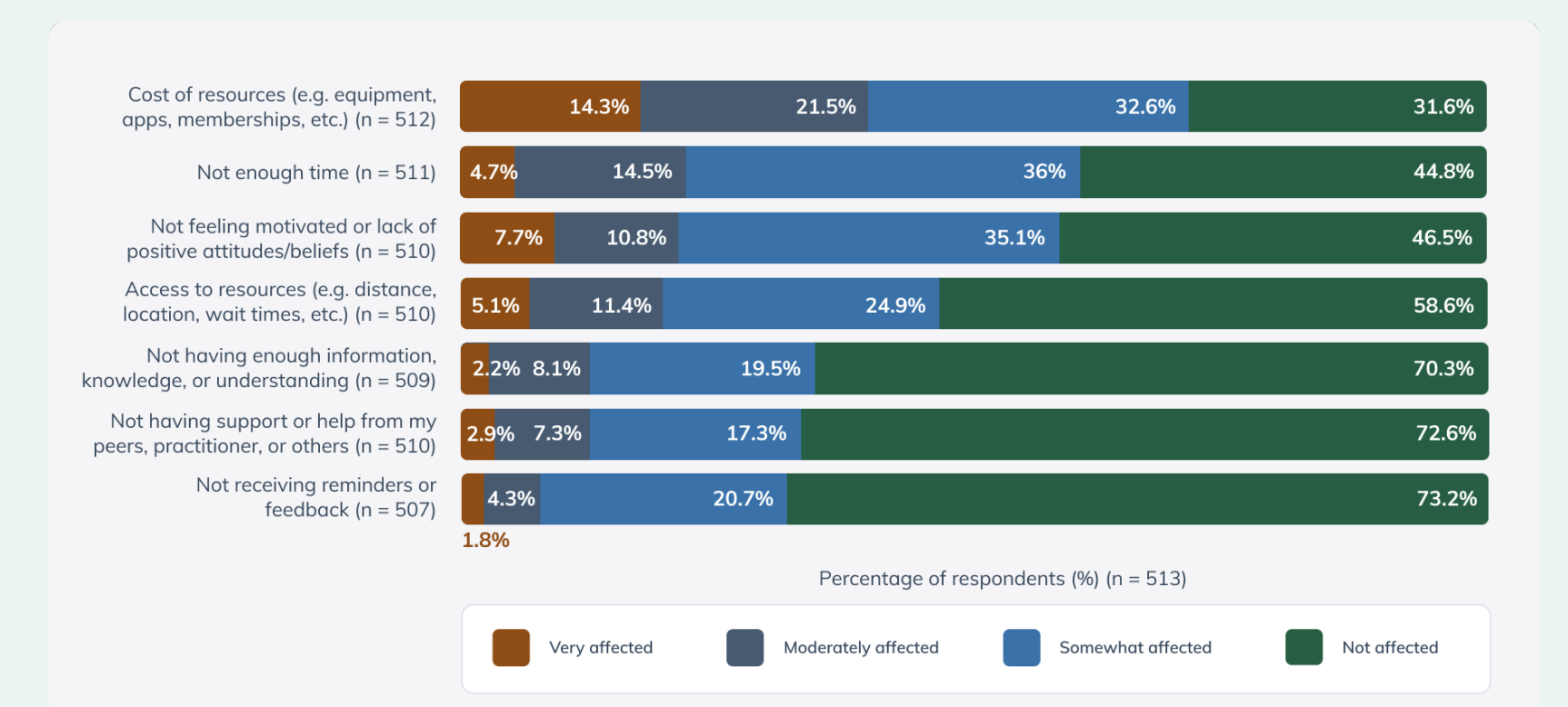


Proportion of patients who reported being "very successful" in changing health behaviors, according to practitioner type



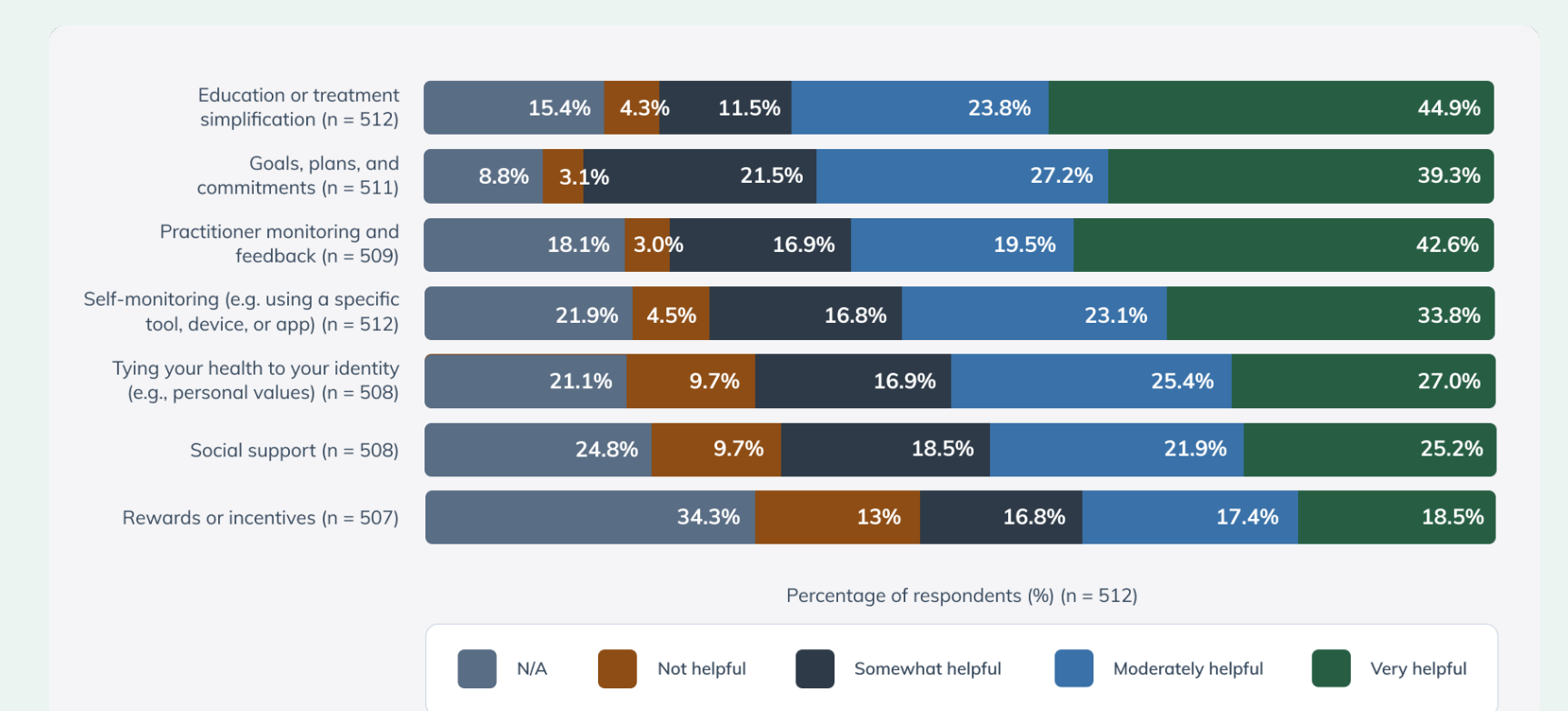
Barriers to behavioral change

Please rate the extent to which the following factors have negatively affected your ability to change behaviors or habits.



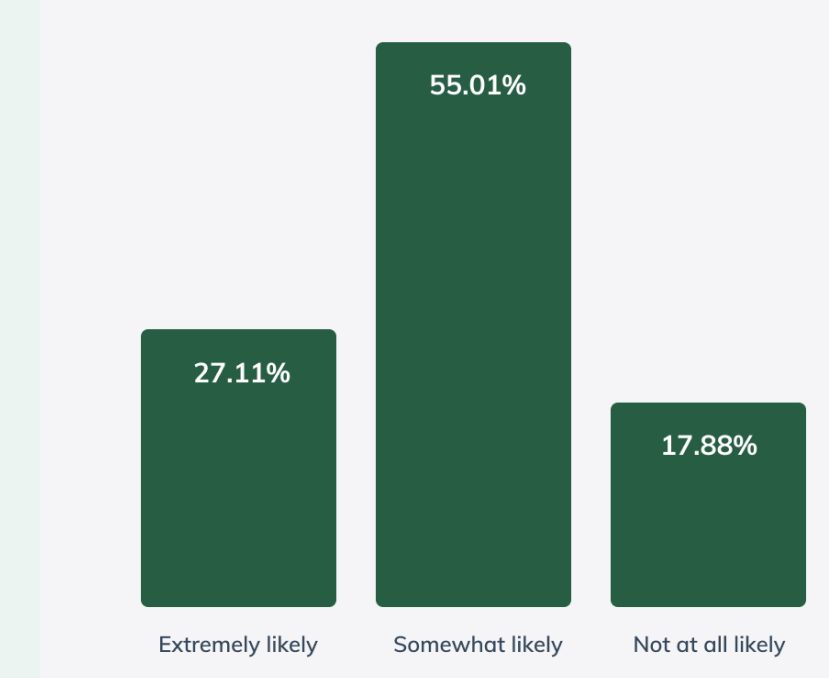
Facilitators of behavioral change

Please rate the extent to which you have found the following strategies to be helpful in following your treatment plan or changing behavior.



Technology and behavioral change

If you are trying to engage in a new behavior, how likely are you to turn to technology-based tools or support for assistance? These could be mobile applications, health websites, programmed reminders, etc.

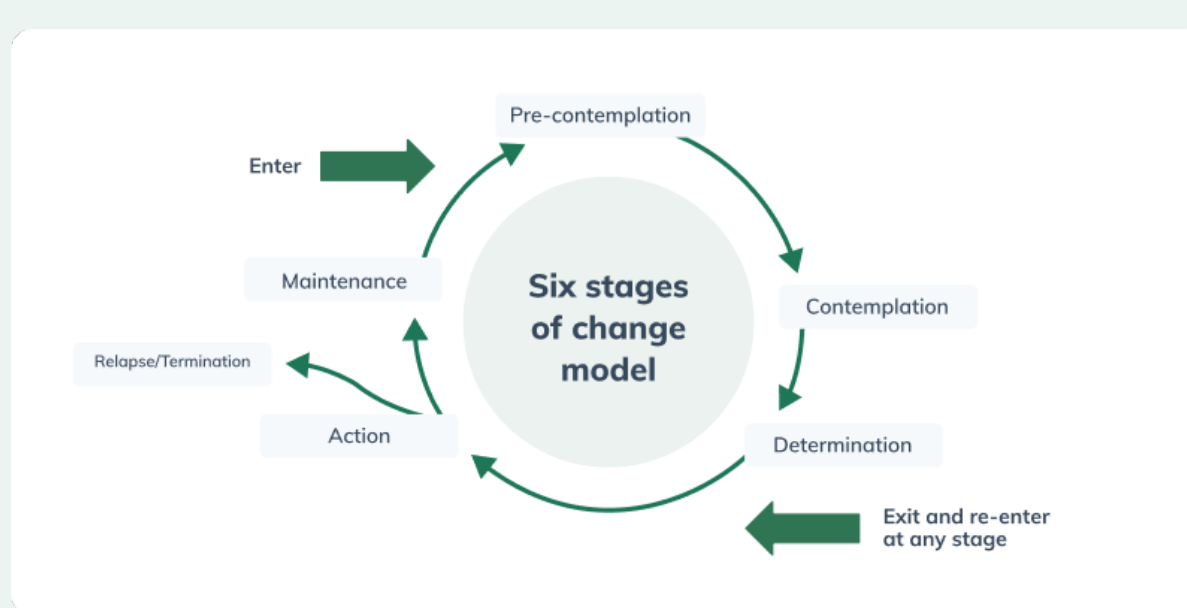


Background

What is behavioral change?

The process of adopting and adhering to a health-promoting behavior long-term (≥ six months), ideally without continuous practitioner support (Kwasnicka 2016) (Ory 2010)

The Transtheoretical Model of Change (Prochaska 1997)



Why is supporting behavioral change important?

The relative risk of all-cause mortality when adopting health-promoting behaviors (Loef 2012)

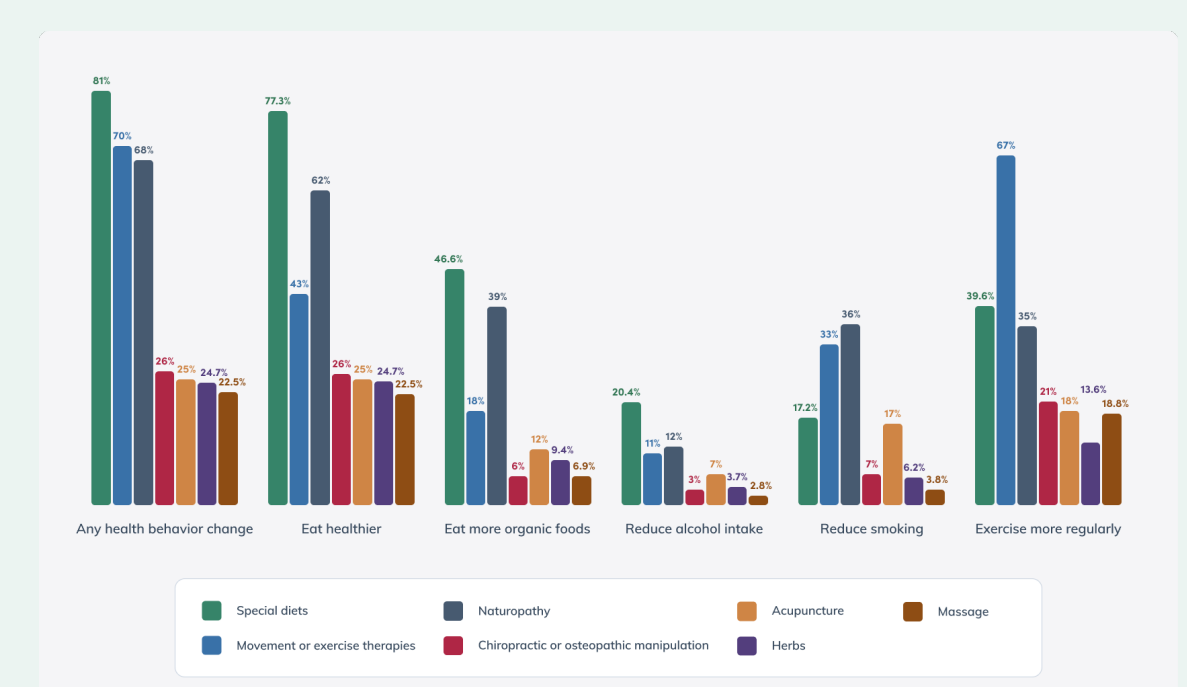
Percentage of Americans engaging in health behaviors in 2005 and 2015 (Hecht 2020)



Does integrative medicine support behavioral change?

Approximately 45% of respondents to a survey including 10,201 individuals indicated that engaging with complementary and alternative medicine (CAM) modalities motivated them to start at least one new healthy behavior.

Percentage of respondents motivated for healthy behavioral changes when using various CAM therapies (Bishop 2019)



Conclusion

- The results of the survey suggest that patients may require additional support in adopting lifestyle changes.
- Although the patient users of the integrative medicine health technology platform did not report extensive barriers, practitioners should ask patients about factors that negatively impact behavioral change.
- The top strategies for behavior change are education, treatment plan simplification, monitoring, feedback, and/or goal setting.
- It may take a minimum of six months of actively engaging in new health behaviors before feeling that it has become a habit (transitioned to an active or maintenance stage).

Take-home message: Behavioral change is challenging. However, utilizing evidence-based strategies may facilitate behavioral change, improving long-term treatment adherence and health outcomes.

Limitations

- There was a low response rate (605 out of 30,000).
- Survey responses relied heavily on patient memory with inclusion criteria of having received a treatment plan within the last year.