

Family Building After Cancer: Supporting Young Women Making Decisions and Planning for the Future



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BACKGROUND

Gonadotoxic cancer treatments can limit family-building options for young adult female (YA-F) survivors.

Many survivors will need to consider reproductive medicine or adoption/fostering to have a child.

Our prior work leveraged qualitative and quantitative community-based research methods to identify high rates of unmet informational and decision support needs related to fertility and family building in post-treatment survivorship.

We developed the **Roadmap to Parenthood** decision aid and planning tool (website) for family building after cancer.

OBJECTIVES

Two single-arm pilot trials were conducted to test the feasibility, acceptability, and preliminary efficacy of the Roadmap to Parenthood tool.

METHODS

Participants: assigned female at birth, 18-45 yo, completed gonadotoxic cancer treatment, and desired a future child or unsure of family-building plans.

Procedures:

Two single-arm pilot studies were conducted in which YA-Fs completed a baseline survey (T1), accessed the Roadmap website, then completed surveys at one- and three-months (T2 and T3, respectively).

Study 1: Participants (N=98) were primarily recruited through social media and partnership with young adult cancer organizations.

Study 2: Participants (N=20) were recruited through Stanford Health Care and completed a cancer survivorship visit between T1 and T2.

Measures:

- Decision Conflict Scale
- Information Needs Questionnaire (investigator designed)
- PROMIS Self-Efficacy scales
- Reproductive Concerns After Cancer Scale
- COMRADE patient-provider communication

Data Analysis

Paired-samples t-test and repeated measures ANOVA

RESULTS

Roadmap to Parenthood decision aid and planning tool

- Web-based resource to provide information and support for YA-F survivors considering family-building options after cancer if natural conception is not possible.
- It is for women who have completed gonadotoxic cancer treatment (disease-agnostic) and goes beyond fertility preservation to address *post-treatment* challenges related to fertility and family building.
- Prompts decision making about family-building options and early planning to prepare for (potential) future challenges such as the physical/medical, emotional, interpersonal, financial, legal, and logistical barriers to reproductive medicine and adoption/fostering.

Participants

- **Study 1:** Participants (N=98) averaged 31.0 yo (SD=5.61) and were mostly White (87%) and nulliparous (74%)
- **Study 2:** Participants (N=20) averaged 30.70 yo (SD=7.83), identified as White (55%), Asian (30%), Latinx (20%), and other/mixed race (15%); most were nulliparous (85%)

Feasibility

Completion rates were 71-90% across studies

Acceptability

93-100% of participants accessed the website and participant feedback was positive, e.g.,

"This is a good one-stop-shop tool to learn about fertility options and to help you make informed decisions."

Intervention Effects

Study 1:

- Decreased decisional conflict (p<.001; Cohen's d=.85)
- Improved information needs (p<.001; Cohen's d=.70),
- Improved self-efficacy (p=.003; Cohen's d=.40)
- Improved self-efficacy for managing negative emotions (p=.03; Cohen's d=.29)
- 94% reported increased consideration of preparatory actions; 20-61% completed such actions

Study 2:

- Greater satisfaction with provider communication (p=.003; Cohen's d=.82)
- Greater confidence in decision making with providers about fertility/family-building issues (p=.03; Cohen's d=.55)
- Improved information needs (p<.001; $\eta^2=.39$), reproductive concerns (p=.014; $\eta^2=.22$), and decisional conflict (p<.001; $\eta^2=.38$)

Figure 1. Sample pages from the Roadmap to Parenthood website.

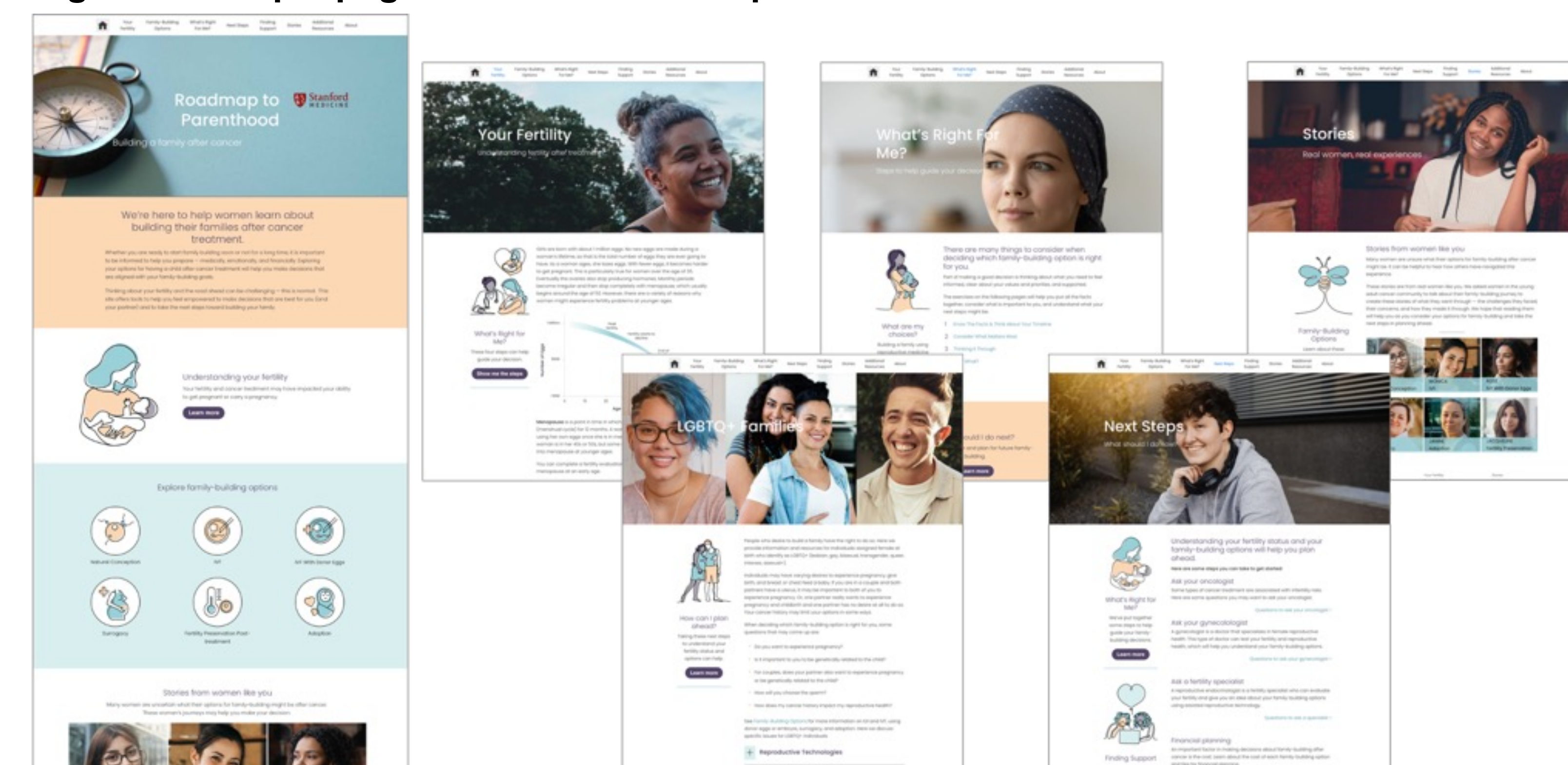


Figure 2. The Roadmap tool led to decreases in decisional conflict.

Effect Size T1-T3: Cohen's d=.85

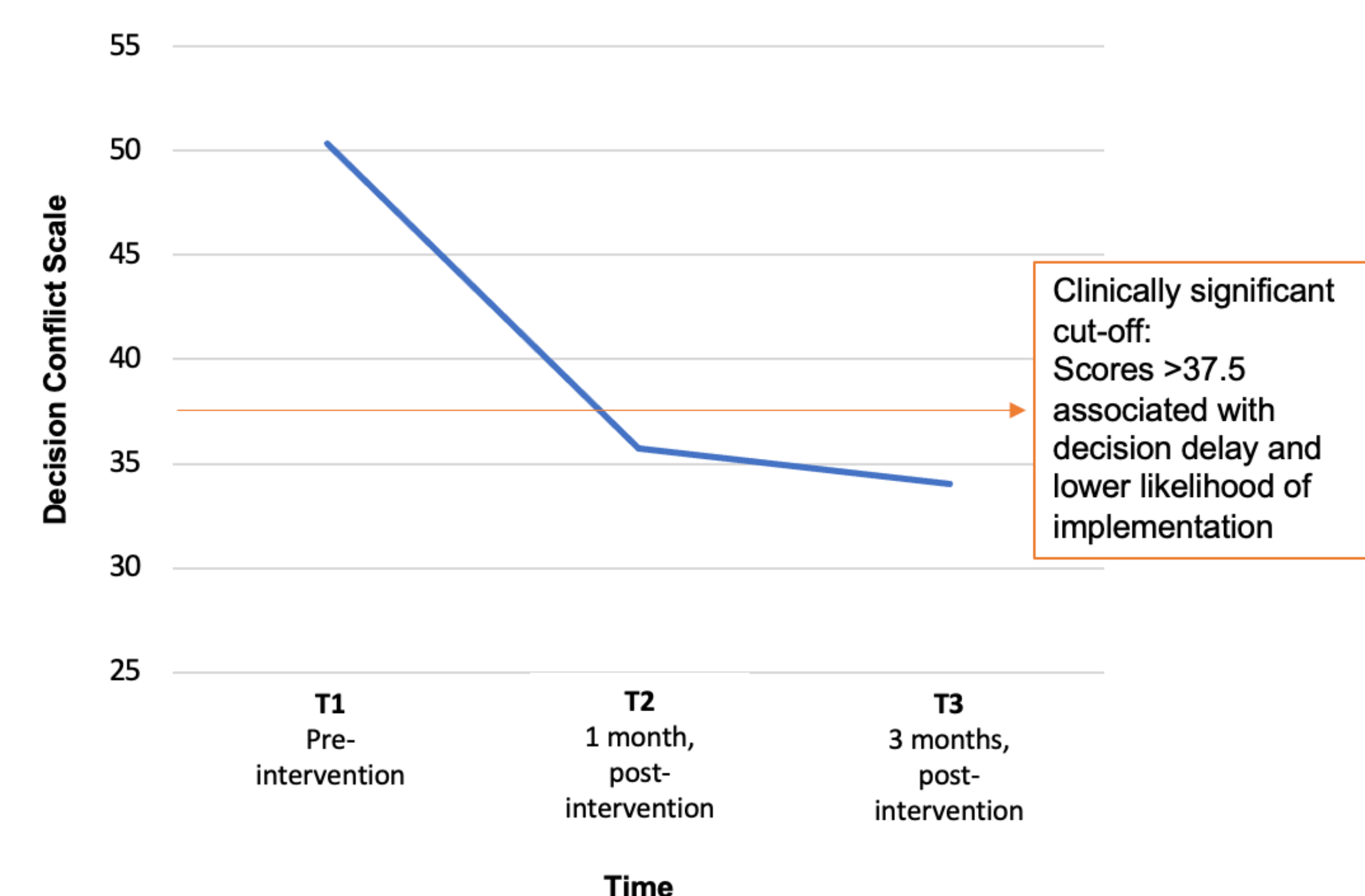
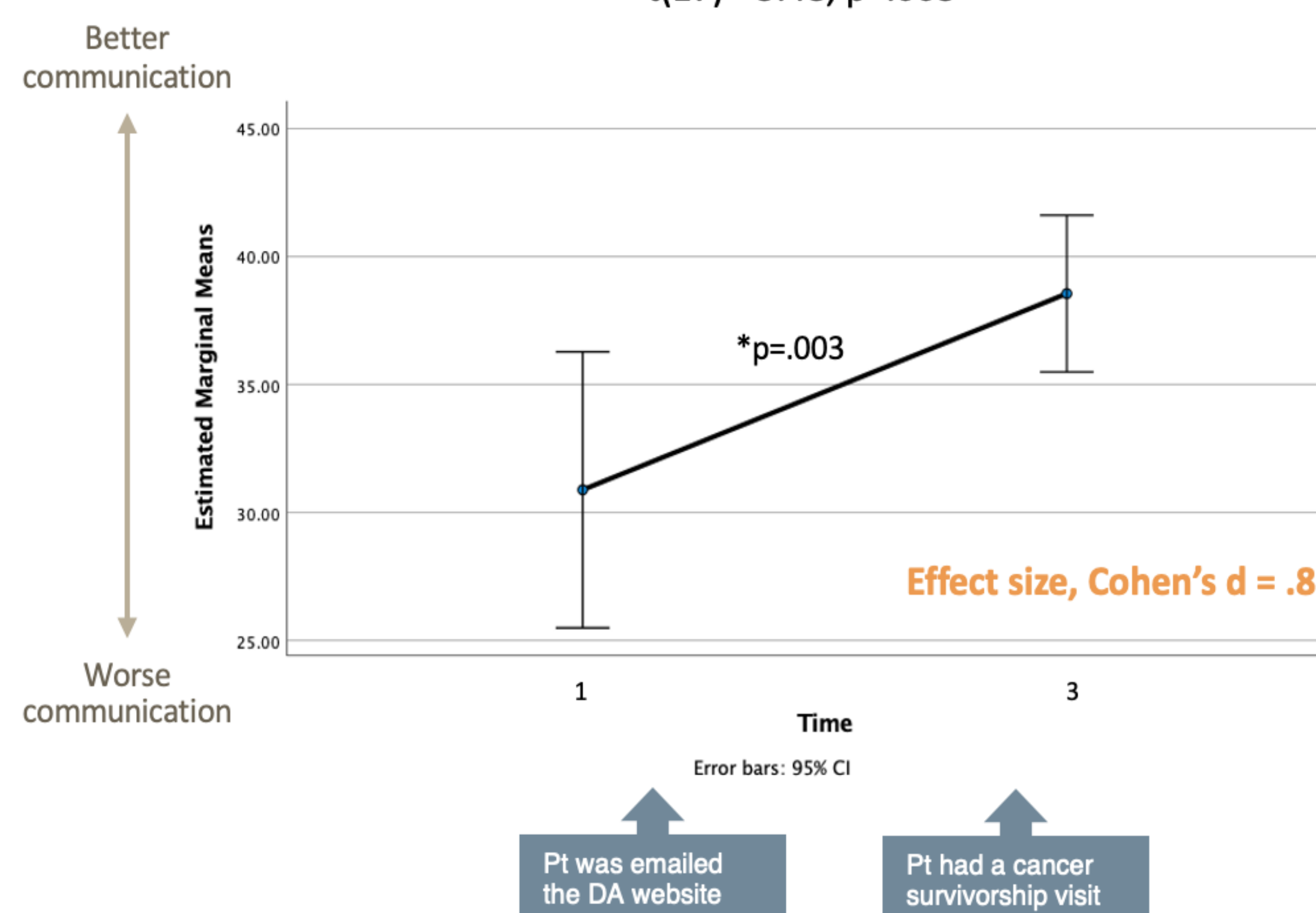


Figure 3. The Roadmap tool led to improved satisfaction with provider communication about fertility/family-building topics.

Satisfaction with Provider Communication
t(17)=-3.48, p=.003



CONCLUSIONS

- The Roadmap tool is feasible and useful to YA-Fs interested in future family building and can be easily integrated into survivorship care.
- Women reported improvements in key psychosocial outcomes related to decision making, self-efficacy, patient-provider communication, and planning.

FUTURE DIRECTIONS

- We are currently testing the efficacy of the Roadmap to Parenthood intervention in a randomized controlled trial (RCT).
- Future work will explore implementation potential across disciplines in which women may receive reproductive health care and counseling including oncology, gynecology, primary care, and reproductive medicine.
- Further iterations will adapt the website content and design to address the unique needs of sexual and gender minorities and barriers to LGBTQ+ family building.