

## INTRODUCTION

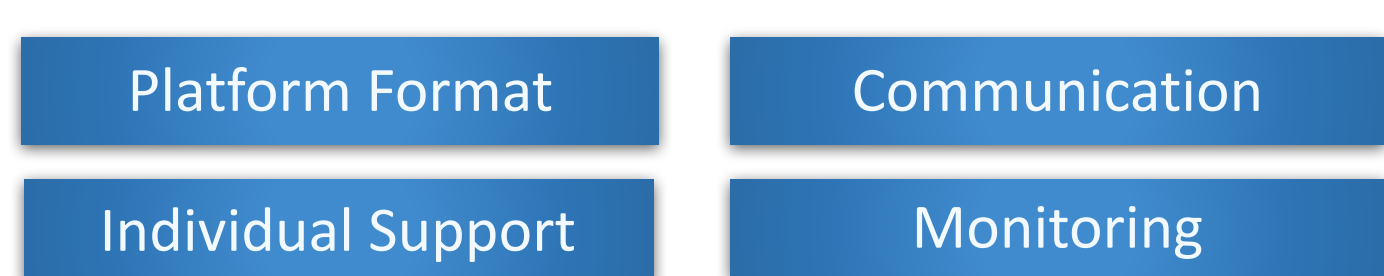
- Fertility treatment relates to increased stress and reduced quality of life in men and women<sup>1,2</sup>.
- Traditional support options (e.g., counselling), however, may not be desired or viewed as necessary by fertility patients<sup>1,3</sup>.
- Many fertility patients use the Internet as a source of factual and experiential information and support from people who understand the challenges of diagnosis and treatment<sup>4</sup>.
- Despite research documenting the existence of online peer support groups, no information is available regarding general levels of interest in, or preferences for, an online infertility peer support network.
- Understanding fertility patients' needs and preferences will allow for tailoring of an online peer support intervention, thereby enhancing relevance and uptake<sup>5</sup>.

## Objectives

- Determine level of interest in online peer support and patient factors that relate to interest.
- Explore preferences for an online peer support network and patient factors that relate to preferences.

## METHODS

- Recruitment**  
746 fertility patients were recruited from 2 Toronto and 2 Montreal fertility clinics. 659/746 completed a patient survey (88.3%). This study analyses data from 519 heterosexual and coupled participants.
- Materials**  
The **Patient Survey** is an anonymous online questionnaire for a larger study on patient preferences for infertility information and support. For the current project, participants were asked:
  - Objective 1** Would you consider using a peer support network that is offered online?  
Yes  Maybe  No
  - Objective 2** Indicate the features that an ideal online peer support network should have.
    - Thirteen features comprised four thematic categories
    - Features rated from 1 = 'Strongly Disagree' to 5 = 'Strongly Agree'
- Other Materials**
  - Demographic characteristics and fertility history
  - Perceived Stress Scale (PSS)**. Four items asking respondents to rate their "...feelings and thoughts during the last month" from 0 = 'Never' to 4 = 'Very Often'
- Data Analysis**
  - Objective 1.** Interest in peer support was collapsed into 'Any' (i.e., yes, maybe) and 'No' interest.
  - Demographic and fertility variables with sig ( $p < .05$ ) univariate relation to Interest included as explanatory variables in logistic regression with Interest as outcome. Separate regressions for men and women.
  - Objective 2.** Correlation analyses used to explore associations between patient variables and online peer support features ( $p = .01$ )

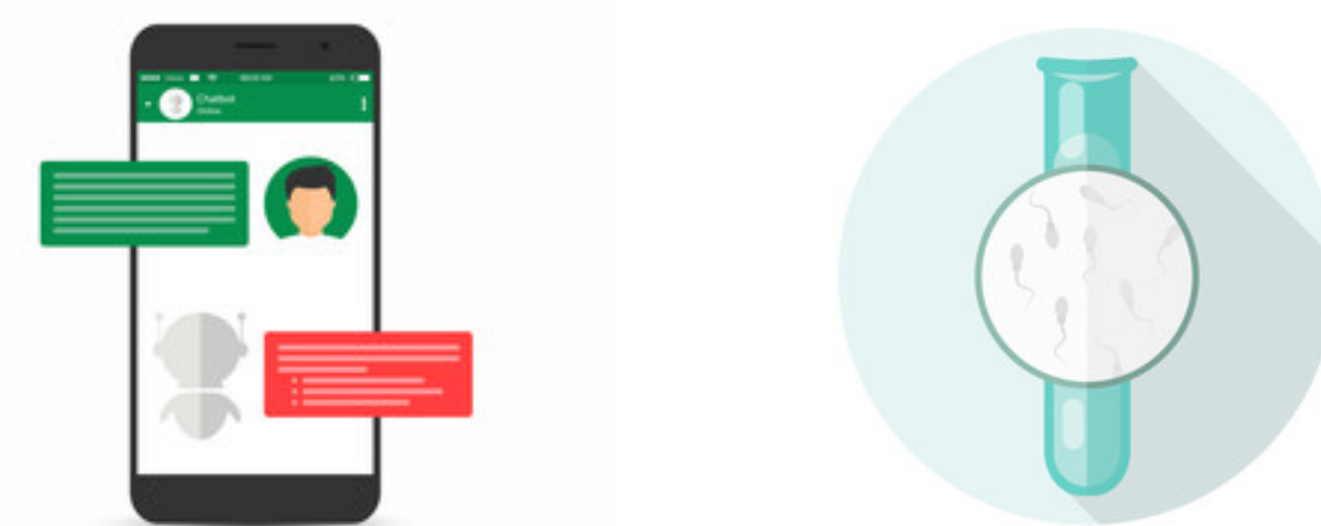


## RESULTS

### Sample Characteristics (n = 519)

Demographic Variables	n (%)
<b>Education Level</b>	
Less than University	178 (34.3)
University Graduate	340 (65.5)
<b>Income (Household)</b>	
≤ \$79, 000	239 (46.1)
> \$79, 000	274 (52.8)
<b>Ethnicity</b>	
White	260 (50.1)
Other	259 (49.9)
<b>Immigrant Status</b>	
Born in Canada	274 (52.8)
Born Outside Canada	245 (47.2)

Fertility Variables	n (%)
<b>Diagnosis</b>	
Male Factor	171 (32.9)
Female Factor	178 (34.3)
Male and Female	41 (7.9)
Unexplained	93 (17.9)
<b>Time Trying Before Treatment</b>	
0 to 6 Months	29 (5.6)
6 Months to 1 Year	125 (24.1)
1 to 2 years	226 (43.5)
3 to 5 Years	98 (18.9)
≥ 5 Years	39 (7.5)
<b>Treatment Duration</b>	
0 to 6 Months	199 (38.3)
6 Months to 1 Year	114 (22.0)
1 to 2 years	121 (23.3)
3 to 5 Years	58 (11.2)
≥ 5 Years	22 (4.2)
<b>Number of Children</b>	
0	373 (71.9)
> 0	135 (26.0)



### Objective 1: Interest in Online Peer Support and Determinants of Interest

#### Step 1: Level of Interest



**85.9% reported interest in an online infertility peer support network**

- 89.8% of women ( $n = 254$ ) and 80.1% of men ( $n = 189$ ) reported interest in online peer support

#### Step 2: Associations with Interest



- For men and women, higher PSS scores sig related to interest
- For men only: those with interest were sig more likely to report income ≤ \$79, 000 and non-white ethnicity

#### Step 3: Variables Explaining Unique Variance in Interest

Table 2. Results of two logistic regressions predicting interest in online peer support for men and women

Variable	B	SE	OR	95% CI	p
<b>Men (n = 233)</b>					
Perceived Stress Scale-4	0.14	0.07	1.15	[1.01, 1.31]	.03
Household Income					
≤ \$79,000	0.71	0.38	2.03	[0.96, 4.28]	.06
> \$80, 000 <sup>a</sup>	-	-	-	-	-
Ethnicity					
White	-0.46	0.36	0.63	[0.31, 1.28]	.20
Non-White <sup>a</sup>	-	-	-	-	-
<b>Women (n = 280)</b>					
Perceived Stress Scale-4	0.15	0.07	1.16	[1.00, 1.34]	< .05

PSS explains unique variance in interest in online peer support

### Objective 2: Preferences for features of an online peer support network

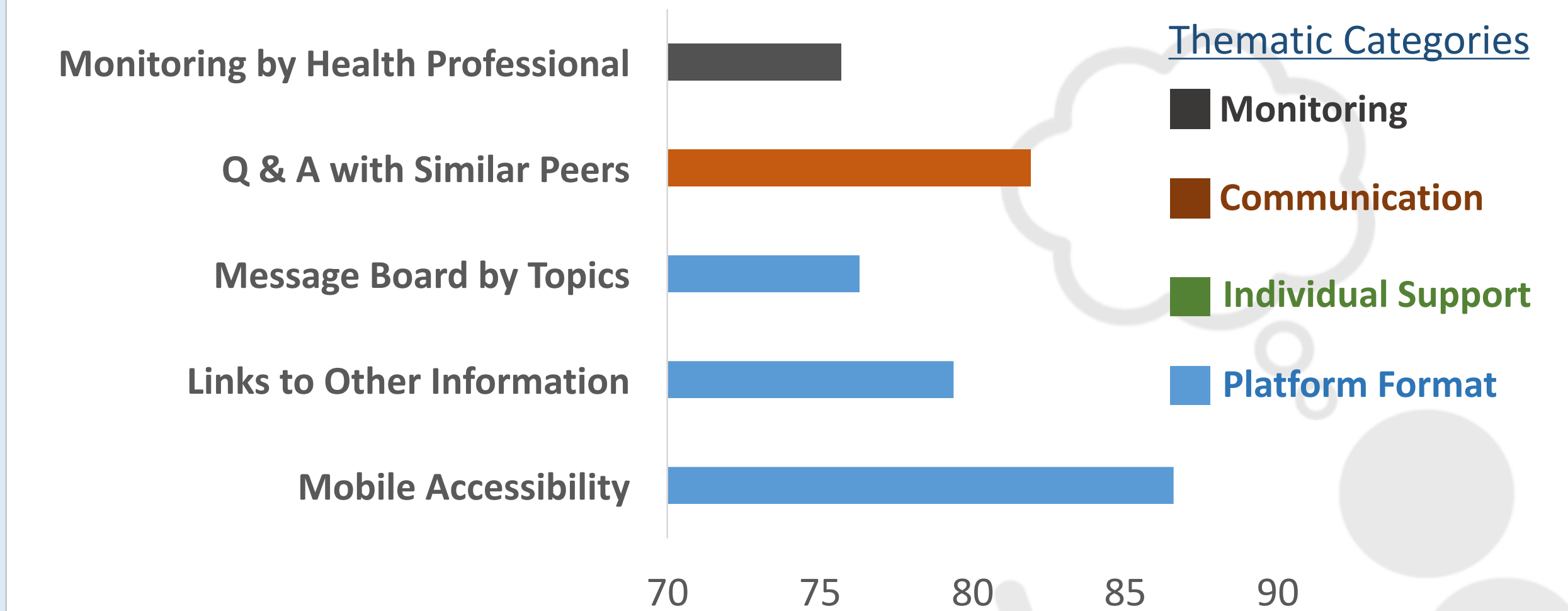


Figure 1. Proportion of participants endorsing the five highest rated features of an online peer support network.

### Associations with Preferences<sup>a</sup>

- No preferences were significantly related to sex of participant.
- Greater income was related to higher ratings for Mobile Accessibility ( $r = .12$ ).
- Non-white Ethnicity was related to higher ratings for Anonymous Posting ( $r = .14$ ), being Matched to a Peer Supporter ( $r = .12$ ), and being Monitored by a Health Professional ( $r = .12$ ).
- Higher PSS scores related to higher ratings for being Matched to a Peer Supporter ( $r = .12$ ) and having the ability to Connect to Meet Offline ( $r = .12$ ).
- Younger Age related to higher ratings for Private Messaging ( $r = .12$ ).

<sup>a</sup> $p < .01$

## CONCLUSION

- More than 4 out of 5 participants expressed interest in online peer support, highlighting a potential need for this type of intervention.
- Only perceived stress explained unique variance in interest in online peer support. As demographic and fertility characteristics (e.g., treatment duration, number of children) were unrelated to interest, online peer support may be of value to a range of fertility patients.
- Overall, participants highly valued an organized and monitored platform where questions can be posed to peers. Professional monitoring is therefore in line with patient preferences and may improve the reliability and safety of an online support network.
- Participants reporting more perceived stress and non-white ethnicity more strongly endorsed features of Individual Support. An online peer support intervention may provide minority patients and those with high stress opportunities for one-on-one and personalized support options.
- Information about online peer support needs and preferences is being used to inform the development of a forthcoming app. Incorporating information from key stakeholders may improve uptake and effectiveness of a psychosocial intervention.

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