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# Using intersectional data to inform the recruitment of visible minorities in the Canadian Armed Forces

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Presented to: The Many Faces of Diversity Workshop

November 4, 2020



# Outline

## Background

- Limitations of past studies examining visible minority recruitment
- Intersectionality approach

## **Study 1:** Attraction factors and barriers to joining the Canadian Armed Forces (CAF) among prospective recruits

- The role of many identity factors are considered simultaneously

## **Study 2:** Recruitment experience among applicants

- Results are disaggregated by gender and visible minority status

## Discussion and conclusion



## Background

- A number of studies have attempted to shed light on the challenges associated with recruiting visible minorities, including:

3 studies with youth and influencers of different visible minority communities  
(Browne, 2018)

Focus group study with CAF visible minority members  
(Wright and Fonséca, 2016)

Various studies that compared survey responses of Caucasians and visible minorities

- Canadian population studies (Eanscliffe, 2018; 2019; 2020)
- CAF Prospect Survey (Otis, 2019)
- CAF Recruiting Survey (Otis, 2019)



## Background

- Yet, previous research mostly took an “additive” approach in which a number of variables are considered separately and in a binary fashion (Caucasians vs. visible minorities; men vs. women)
- Rarely has the connection and the interaction between visible minority status and other identify factors been examined
- Importance of examining more than one identity concept is underscored in many research frameworks/domains:
  - Gender Based Analysis Plus (GBA+)
  - Health equity research
  - Education inequality research
  - Business and management studies



## Intersectionality approach

- Attempt to move away from treating all members of a single social group as the same and assuming they share the same experiences, views, and priorities
- Examine what is experienced at the intersection of two or more social identities





# Intersectionality approach

- Gap between theory and methods
  - Majority of intersectionality research is done using qualitative methods
  - Quantitative approaches:
    - Regression models with main effects and multiplicative interaction terms
    - Regression models stratified by variables of interest
    - Detailed classification of the variable of interest (visible minority status) and other identity variables to create numerous categories



## Study 1: Aim

- To examine perceived advantages of a CAF career and barriers to joining among prospective recruits
  - Attraction and barrier factors were examined by visible minority status
  - Multiple logistic regression analysis
    - Performed on key factors to examine whether differences by visible minority status would still hold while controlling for gender, highest educational level attained, employment status, and interaction between gender and visible minority status



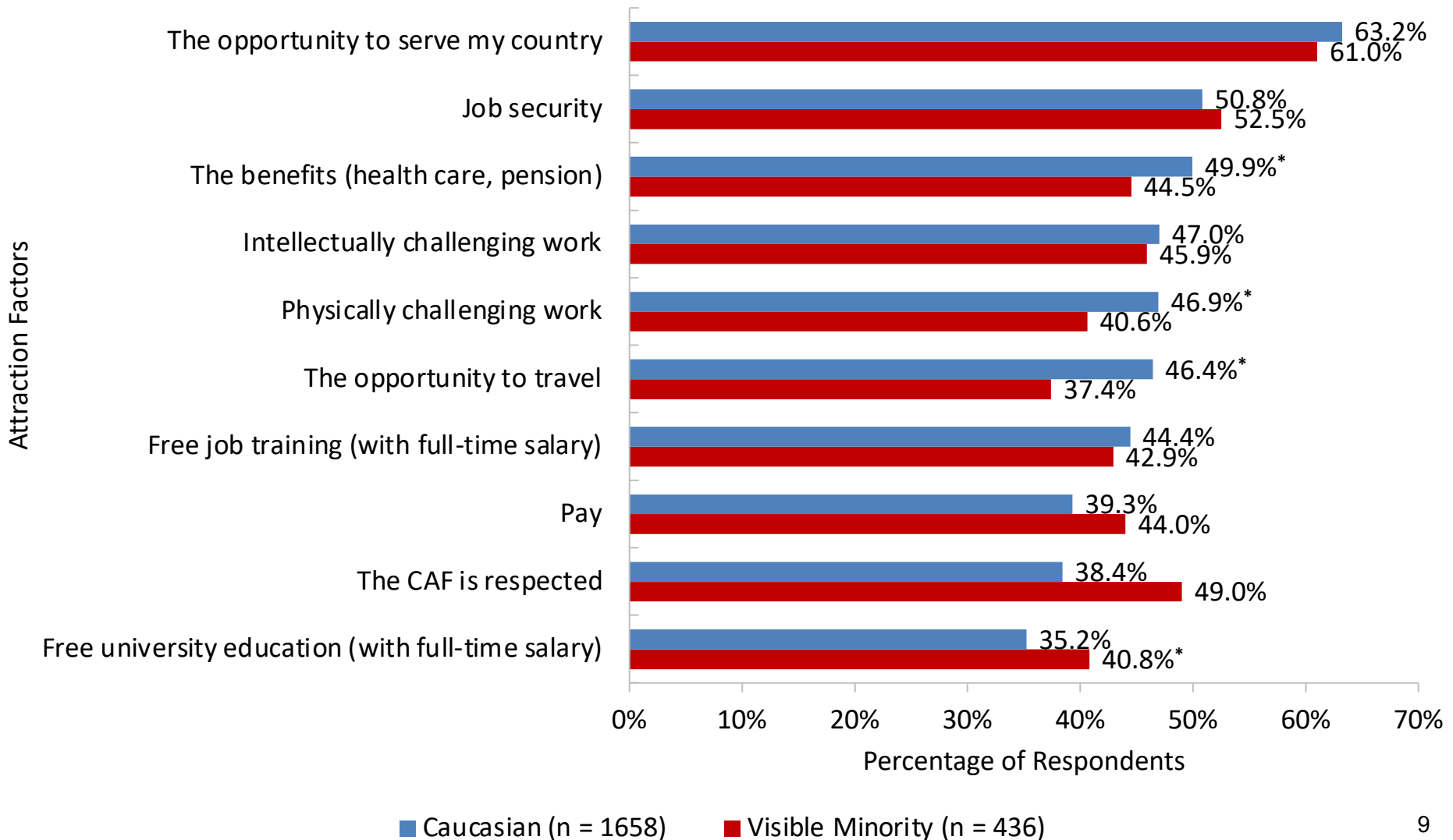
## Study 1: Method

- CAF Prospect Survey data collected between 26 April and 24 August 2018
  - A pop-up survey administered randomly to visitors of the CAF recruiting website
- Analysis focused on 2,385 participants who indicated they were visiting the website because they were interested in a CAF career but not sure whether they would join
  - 34.0% of respondents were women
  - 20.8% self-identified as members of a visible minority group





# Study 1: Attraction factors by visible minority status





# Study 1: Logistic regression results for benefits

- Visible minority status was not a significant predictor of reporting benefit
- Women were more likely than men to mention benefits as an advantage of a CAF career

Predictor Variable	$\beta$	SE	Wald Statistic	Odds Ratio	Lower CI	Upper CI
Visible minority versus Caucasians	-0.14	0.15	0.94	0.87	0.65	1.16
Women versus men	0.33	0.11	8.95**	1.39	1.12	1.71
Education						
High school graduate			1.17			
College graduate	0.14	0.14	1.05	1.15	0.88	1.50
Undergraduate degree or more	-0.02	0.14	0.02	0.98	0.75	1.28
Employment status						
Working full-time			0.50			
Working part-time	0.10	0.15	0.45	1.11	0.82	1.50
Unemployed	0.02	0.13	0.03	1.02	0.79	1.33
Student	0.00	0.12	0.00	1.00	0.80	1.25
Visible minority x gender	-0.24	0.25	0.95	0.78	0.49	1.27

Note: \*  $p < 0.05$ , \*\*  $p < 0.01$ ; SE = Standard Error; CI = confidence interval.



# Study 1: Logistic regression results for paid university

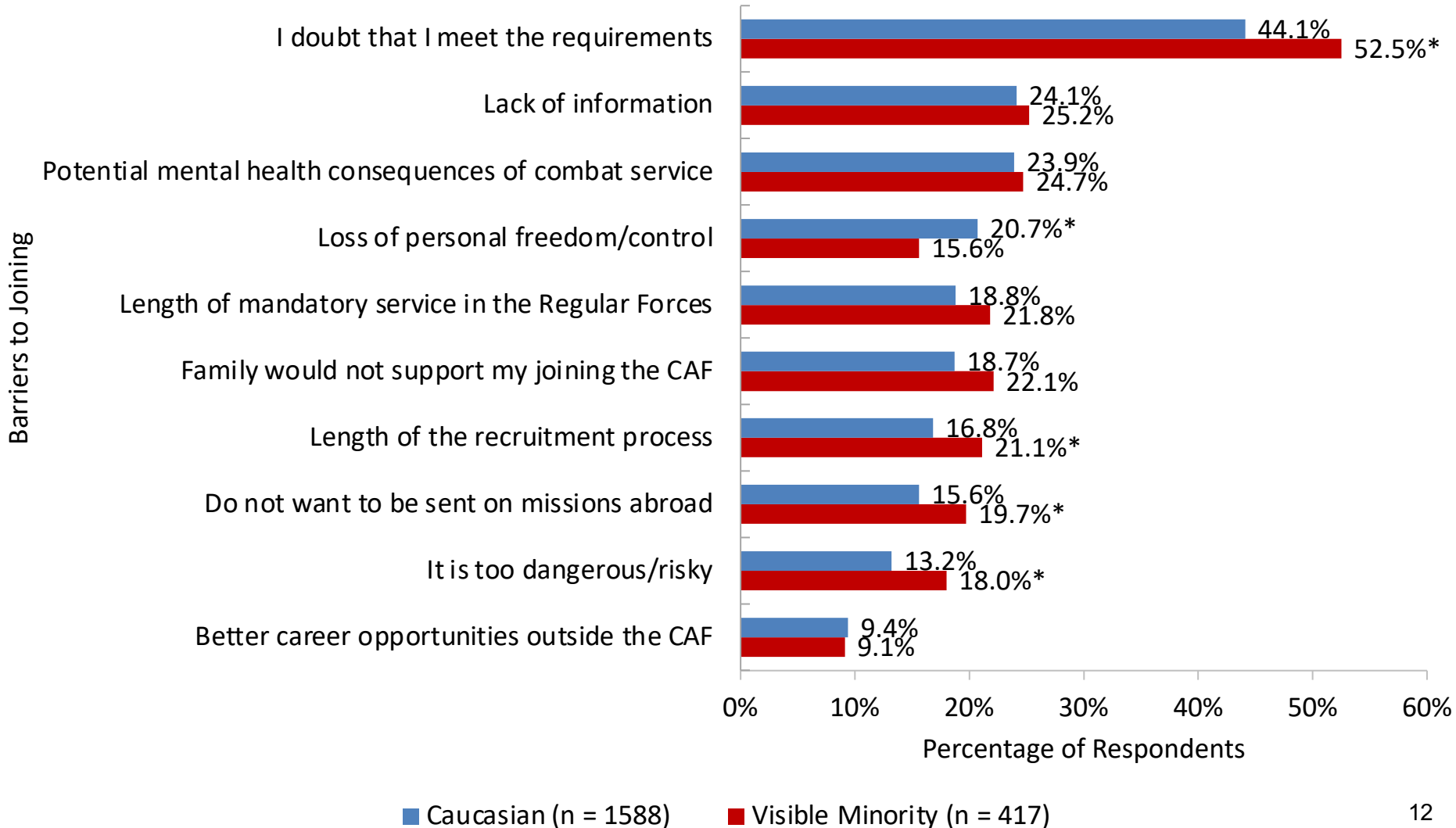
- Visible minorities, women, and students were more likely to report paid university as an advantage of a CAF career, while university graduates were less likely to report this as an advantage

Predictor Variable	$\beta$	SE	Wald Statistic	Odds Ratio	Lower CI	Upper CI
Visible minority versus Caucasians	0.30	0.15	3.90*	1.35	1.00	1.82
Women versus men	0.66	0.10	34.18**	1.92	1.55	2.40
Education						
High school graduate			10.88**			
College graduate	-0.13	0.14	0.81	0.88	0.67	1.16
Undergraduate degree or more	-0.49	0.15	10.78**	0.61	0.46	0.82
Employment status						
Working full-time			15.49**			
Working part-time	-0.12	0.16	0.56	0.89	0.64	1.22
Unemployed	0.03	0.14	0.05	1.03	0.78	1.36
Student	0.41	0.12	11.54**	1.50	1.19	1.89
Visible minority x gender	0.09	0.25	0.13	1.10	0.67	1.79

Note: \*  $p < 0.05$ , \*\*  $p < 0.01$ ; SE = Standard Error; CI = confidence interval.



# Study 1: Barriers to join by visible minority status





# Study 1: Logistic regression results for doubts about meeting the requirements

- Visible minorities, women, and unemployed respondents were more likely to report doubts about not meeting the requirements, while university graduates were less likely to report this as a barrier

Predictor Variable	$\beta$	SE	Wald Statistic	Odds Ratio	Lower CI	Upper CI
Visible minority versus Caucasians	0.35	0.15	5.46*	1.42	1.06	1.91
Women versus men	0.59	0.11	24.05**	1.73	1.39	2.16
Education						
High school graduate			10.55**			
College graduate	-0.06	0.14	0.16	0.69	0.72	1.24
Undergraduate degree or more	-0.46	0.14	10.50**	0.63	0.48	0.83
Employment status						
Working full-time			12.13**			
Working part-time	0.02	0.16	0.02	1.02	0.75	1.40
Unemployed	0.32	0.14	5.43*	1.38	1.05	1.80
Student	-0.20	0.12	2.73	0.82	0.65	1.04
Visible minority x gender	0.20	0.26	0.61	1.22	0.74	2.01

Note: \*  $p < 0.05$ , \*\*  $p < 0.01$ ; SE = Standard Error; CI = confidence interval.



# Study 1: Logistic regression results for a CAF career is too dangerous

- Women and university graduates were more likely to report that a CAF career is too dangerous, but visible minority status failed to account for unique variance over that explained by gender and educational levels

Predictor Variable	$\beta$	SE	Wald Statistic	Odds Ratio	Lower CI	Upper CI
Visible minority versus Caucasians	0.12	0.24	0.25	1.13	0.71	1.79
Women versus men	0.83	0.16	28.30**	2.29	1.69	3.10
Education						
High school graduate			5.21			
College graduate	0.21	0.20	1.09	1.23	0.83	1.82
Undergraduate degree or more	0.41	0.18	4.92*	1.51	1.05	2.16
Employment status						
Working full-time			4.06			
Working part-time	-0.05	0.23	0.05	0.95	0.61	1.48
Unemployed	-0.30	0.22	1.89	0.74	0.49	1.14
Student	0.16	0.17	0.86	1.17	0.84	1.62
Visible minority x gender	0.31	0.33	0.89	1.36	0.72	2.58

Note: \*  $p < 0.05$ , \*\*  $p < 0.01$ ; SE = Standard Error; CI = confidence interval.



## Study 2

- **Aim:** To examine whether the perceptions of the various steps of the recruitment process (e.g., application, cognitive test, medical exam, interview, and interactions with recruiters) varied at the intersection of ethnicity and gender
- **Survey:** Administered to 918 Regular Officer Training Plan (ROTP) applicants between 10 April 2017 and 20 May 2017; of the sample, 22.7% of respondents were women, and 21.4% self-identified as members of a visible minority group
- **Analyses:** Frequencies of responses were presented separately for Caucasian men, Caucasian women, visible minority men, and visible minority women

(Otis, Scoppio, Yan, Hogenkamp, & Chiasson, in preparation)



## Study 2: Results

*The results were remarkably consistent for Caucasian men, Caucasian women, visible minority men, and visible minority women*

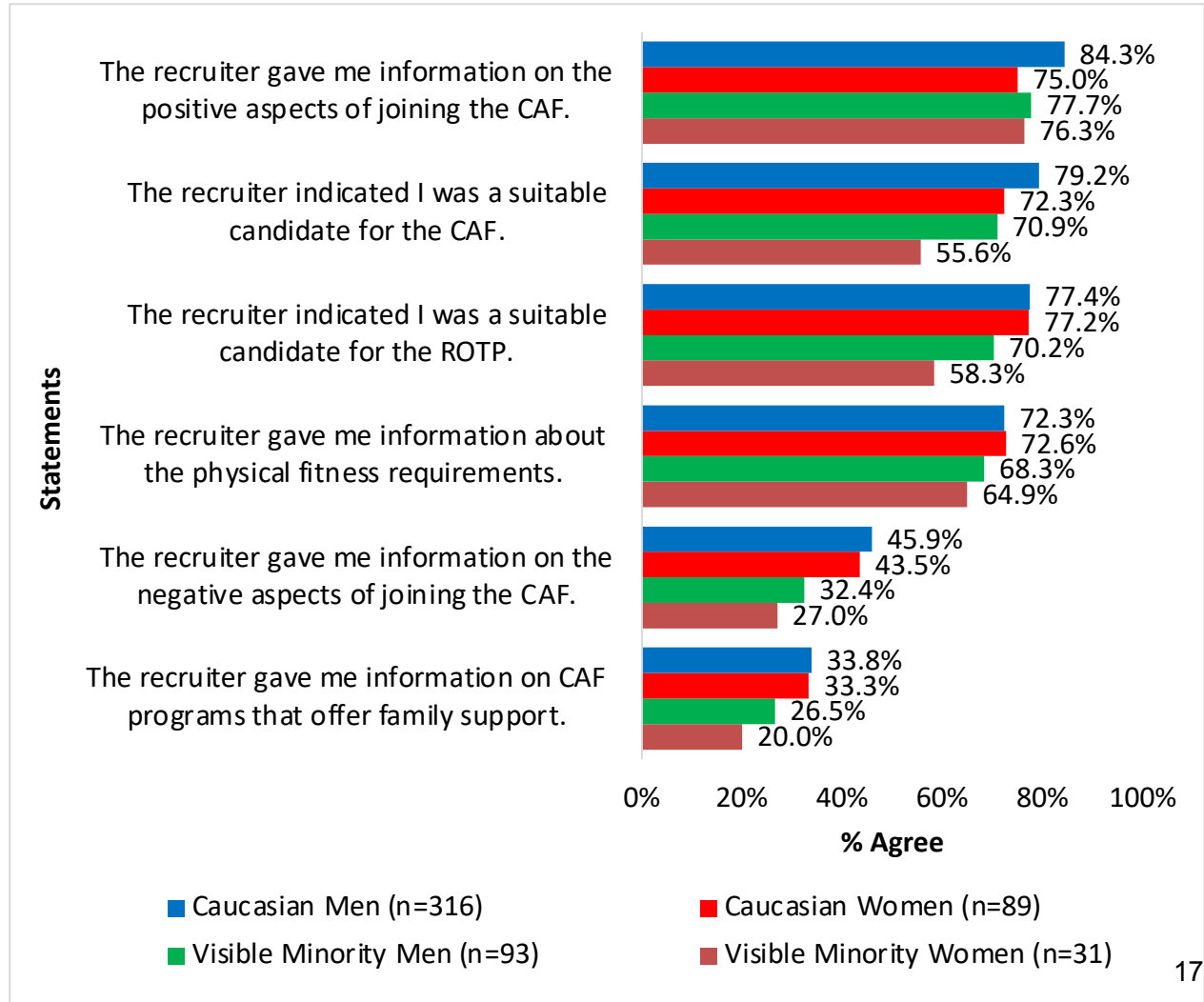
- Almost all applicants indicated that:
  - Each step of the recruitment process was a positive experience
  - The Canadian Forces Aptitude Test (CFAT) and the interview were not gender biased nor culturally biased
- Most applicants reported that:
  - They were treated with respect during the CFAT, the interview, and the medical exam
  - They were contacted by the recruiting centres within two weeks of submitting their online application, with women (69.1%) reporting more prompt contact than men (59.0%)





# Study 2: Differences observed for perceived information received from recruiters

- Visible minority women were the group least likely to feel that the recruiter conveyed to them that they were suitable for the CAF and the ROTP, compared to all other groups
- Visible minority women were generally the group least likely to feel they received information on physical fitness, negative aspects of joining, and family support





## Discussion

- Gender and visible minority intersection analysis produced more nuanced results
- Education levels and employment status have an impact on perceived advantages and deterrents of a CAF career
- Visible minority women's perceptions of the CAF, their experience in recruiting centres, and their assessments of information received might differ from other groups



## Discussion and conclusion

- From a methodological point of view:
  - Intersection analyses require careful planning of the size and characteristics of the sample
  - Significance of interaction terms depends on the size of the main effects
- Conclusion:
  - This presentation provides preliminary evidence that intersectionality has potential
  - It is recommended that researchers adopt an intersectional reflexivity mindset when designing and interpreting recruitment research



*Thank you!*