# What Students Think About Fairness in Family Medicine(FM) Residency Selection.

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## INTRODUCTION

- There is no published literature on the degree to which students in Canada perceive the FM residency selection process to be fair.
- Fairness in selection can be assessed based on sets of procedural justice (process experience) and distributive justice (outcome experience) rules.
- Procedural fairness is most associated with the perceived "job relatedness" of selection process.
- Distributive justice is most associated with equity(alignment of match outcomes with expectations) and equality(equal access).

## **OBJECTIVES**

- The goal of this study is to examine how Canadian medical graduates (CMGs) perceive the level of fairness of the 1st round of the CaRMS match in relation to their application for FM residency training.
- The study addresses:
- Alignment and transparency
- Job-relatedness
- Overall fairness

## **METHODS**

- Study period 2020-2024
- Anonymous, online survey distributed by representatives of national medical student organizations (CFMS, FMEQ and CFPC SOMS)
- Target: all final year CMGs who applied to FM in 1<sup>st</sup> round of 2020 CaRMS match plus PGY1 FM Residents who matched in 2019.
- Responses based on all FM programs applied to:
- Process clarity and transparency.
- Aware when being assessed on selection criteria.
- Overall fairness.
- Predictive capacity, job-relatedness and fairness of Situational Judgement Test (SJT; FMProC & CASPer®), Multiple Mini-Interviews (MMIs), Traditional Interviews (TIs) and Virtual Interviews (2021/2022).
- Narrative comments.
- Match outcomes.

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### CONCLUSIONS

The majority (82%) of Canadian medical students who applied for FM Residency Training in the 1st round of the CaRMS cycles in 2019, 2020, 2021 and 2022, believed that the overall selection processes for FM residency programs were fair.

The perception of overall fairness in FM selection significantly increased between the 2019-2020 and 2021-2022 cycles, with the introduction of virtual interviews/processes (p=2.68 x10<sup>-8</sup>; Fisher's exact test).

The majority of students found that the selection criteria were clear (81%) and were aware when they were being assessed on these criteria (68%).

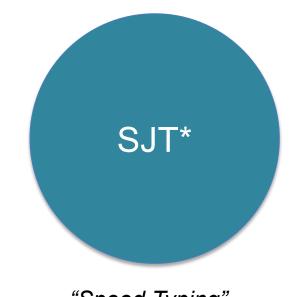
Most students reported that MMIs and traditional interviews were fair, jobrelated and had reasonable predictive capacity for future performance. In contrast, students felt the Situational Judgement Test (SJT) they completed was significantly less fair, less job-related, and lacked predictive validity (pvalues <0.001; One-way permutation test of symmetry).

A significantly higher percentage of students (53% vs. 32%) found FMProC; a new family medicine-focused SJT introduced in 2022, to be related to the job of a Canadian Physician compared to CASPer® (p=0.049; One-way permutation test of symmetry).

## RESULTS-NARRATIVE COMMENTS(SAMPLE)

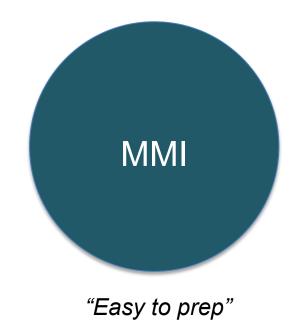


"Secretive process" "Black box" "Gaming system" "Unclear why not offered an interview "Some programs used the same questions across all dates-this is

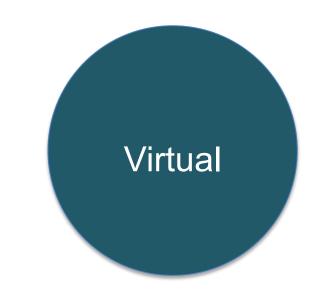


"Speed Typing "Unclear purpose/lack of credibility" "Price gouge" "Searching for psychopathy" "Scoring system is not explicitly

\*SJT responses must be viewed only in relation to CASPer®



"Relevant to FM" "Best way to assess individual" "Not very specific for FM"



"Very low hassle compared to in-person" "Live interviews were fair; pre-recorded interviews were not personable" "Asynchronous interview was awkward and felt disconnected" "Virtual helped standardize the process which is likely to increase fairness"

## LIMITATIONS

- The response rates were lower than expected for all 4 cohorts, even though the distribution of the survey each time seemed to be adequate.
- The design of the survey was challenging it was not possible to ask candidates about their experience of each individual program's selection process.
- All respondents who completed an SJT in 2019, 2020 and 2021, completed only CASPer®, so the responses for these years must be viewed in relation to this SJT only.

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## RESULTS **2019 Cohort** Figure 1. Percentage of "For Most/For All Programs" Responses N=160 (13% response rate,14 programs)) 2020 Cohort Figure 2. Percentage of "For Most/For All Programs" Responses. N=173(10% response rate, 12 schools)) 2021 Cohort ■SJT (CASPer) ■MMI ■Traditional ■Virtual Interviews ■Overall Process **Predictive Capasity** Job Relatedness Fairness Figure 3: Percentage of "For Most/For All Programs" Responses for MMIs, Traditional Interviews, Virtual Interviews and for Overall Fairness and "Agree/Strongly Agree" Responses for SJTs (CASPer® Only). N=239 (14% response rate, 14 schools) 2022 Cohort ■SJT (FMProC) ■SJT (CASPer) ■MMI ■ Traditional ■ Virtual Interviews

**Predictive Capasity** 

Figure 4: Percentage of "For Most/For All Programs" Responses for MMIs, Traditional

Responses for SJTs (FMProC and CASPer®). N=196 (9% response rate, 14 schools)

Aspects of the Selection Process

Interviews, Virtual Interviews and for Overall Fairness and "Agree/Strongly Agree"

Job Relatedness