

FIRST-YEAR MEDICAL STUDENTS ATTRACTED BY PRIMARY HEALTH CARE PRESENT SPECIFIC PERSONAL CHARACTERISTICS

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Background

In Switzerland, like in many EU countries, an insufficient proportion of students are choosing primary health care (PHC) as a career, and worries are expressed about shortage of these physicians in the near future. It would be useful to identify the personal characteristics of students motivated or not to pursue a PHC career, in order to develop strategies targeted to promote this specialty.

Research question

Do first-year medical students motivated by or intending to specialize in PHC present specific personal characteristics?

Summary of work

Population:

350 first-year medical students (229 women, 121 men) at the Geneva Medical school (from a 6-year curriculum)

Statistical analyses

- Level of motivation for PHC
 - ✓ Descriptive: motivation for PHC (low, medium, high) stratified by gender
 - ✓ Correlations with personal characteristics
 - ✓ Linear regression analysis using personal characteristics which correlated significantly
- PHC career intention
 - ✓ Descriptive: career intentions stratified by gender
 - ✓ ANOVA and MANOVA of career intentions by personal characteristics

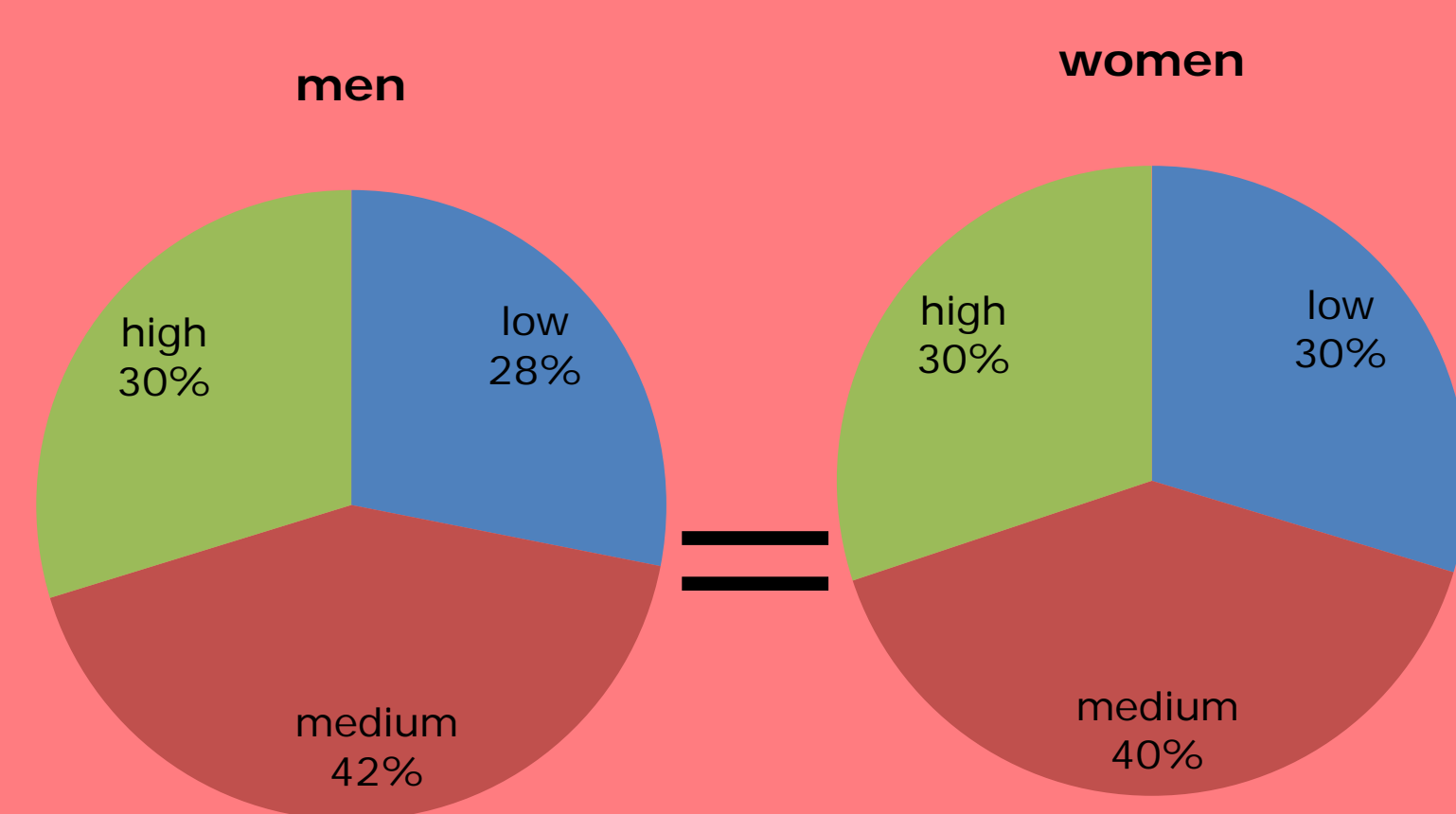
Methods (Self-reported questionnaires):

| Measures | Tools | Personal characteristics |
|--------------------|--|---|
| Empathy | Jefferson Scale of Empathy Empathy quotient | Representation Capacity |
| Personality | Big Five | Nevrosism Extraversion Openness Agreeableness Conscientiousness |
| Coping | Coping Inventory for Stressful Situations | Task Emotion avoidance |
| Motivation | Self-developed multiple choice items (10) | Extrinsic (4 items) Intrinsic (3 items) Care (3 items) |
| Outcome | Indicators of PHC interest | |
| Motivation for PHC | Analogic scale (1 to 6) | Continuous scale Low (1-2) Medium (3-4) High (5-6) |
| Career intentions | 13 choices combined in 3 categories | PHC Non-PHC Undecided |

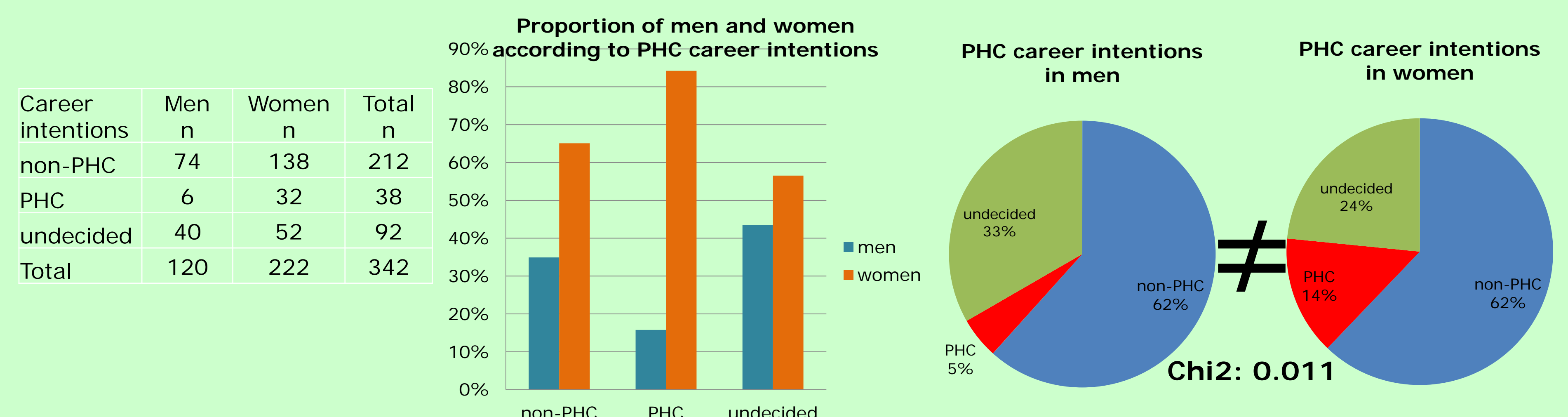
Summary of results

1. Motivation for PHC

| Level of motivation | Men n | Women n | Total n |
|---------------------|-------|---------|---------|
| low | 34 | 68 | 102 |
| medium | 51 | 92 | 143 |
| high | 36 | 69 | 105 |
| Total | 121 | 229 | 350 |



2. PHC career intentions



| Personal characteristics predicting the level of motivation for PHC | | | | | |
|---|----------------------|--|------|---|-------------|
| PERSONAL CHARACTERISTICS | | Correlation with level of motivation for PHC | | Prediction of level of motivation for PHC | |
| | | p Pearson | Bêta | sig. | |
| Empathy | Representation | .184 | .002 | .106 | .119 |
| | Capacity | .136 | .017 | .009 | .895 |
| Personality | Nevrosism | .042 | .496 | | |
| | Extraversion | .066 | .284 | | |
| | Openness | .051 | .408 | | |
| | Agreeableness | .302 | .000 | .224 | .001 |
| Coping | Conscientiousness | .071 | .247 | | |
| | Task | -.008 | .890 | | |
| | Emotion | -.019 | .761 | | |
| Motivation | Avoidance | .078 | .200 | | |
| | Extrinsic | -.080 | .134 | | |
| | Intrinsic | .201 | .000 | .038 | .632 |
| | Care | .226 | .000 | .135 | .091 |

| Personal characteristics according to PHC career intentions | | | | | |
|---|-----------------------|--------------------|-------------|-------------------|-------------|
| PERSONAL CHARACTERISTICS | | PHC | non-PHC | undecided | p-ANOVA |
| Empathy | Representation | 116.3 ± 8.7 | 110.9 ± 9.1 | 110.3 ± 9.4 | .040 |
| | Capacity | 54.6 ± 6.9 | 48.4 ± 8.1 | 47.3 ± 8.3 | .003 |
| Personality | Nevrosism | 22.1 ± 9.4 | 21.6 ± 9.1 | 22.7 ± 7.2 | .727 |
| | Extraversion | 30.2 ± 4.8 | 29.2 ± 4.7 | 27.2 ± 5.6 | .012 |
| | Openness | 29.8 ± 7.2 | 28.9 ± 6.2 | 31.6 ± 5.5 | .012 |
| | Agreeableness | 30.6 ± 4.5 | 28.9 ± 5.3 | 28.8 ± 5.0 | .370 |
| Coping | Conscientiousness | 36.2 ± 7.1 | 33.5 ± 7.3 | 33.2 ± 6.4 | .260 |
| | Task | 63.2 ± 8.2 | 62.2 ± 8.6 | 61.4 ± 9.1 | .692 |
| | Emotion | 44.2 ± 9.5 | 44.2 ± 12.3 | 42.7 ± 9.4 | .685 |
| Motivation | Avoidance | 48.8 ± 8.1 | 44.3 ± 8.6 | 43.0 ± 9.1 | .047 |
| | Extrinsic | 3.3 ± 1.1 | 3.8 ± 0.8 | 3.9 ± 0.7 | .008 |
| | Intrinsic | 4.8 ± 0.9 | 4.6 ± 1.1 | 4.4 ± 1.0 | .334 |
| | Care | 5.7 ± 0.4 | 5.5 ± 0.8 | 5.3 ± 0.8 | .075 |
| | p-MANOVA | | | | .001 |

Conclusion and discussion

Among 350 first-year students:

- ✓ 70% claimed being highly or moderately motivated to be specialised as PHC doctors, and this was equivalent for men and women. However, only 5% (n=6) of men and 15% (n=32) of women intended to pursue a PHC career. Hence, among these 38 students, 85% were women.
- ✓ While agreeableness predicted the level of PHC motivation, empathy, avoidance coping and low extrinsic motivation characterised students intending to pursue a PHC career

Results at one medical school confirm that the proportion of first-year students interested by a PHC career is insufficient to meet the needs of the population (about 50% by year 2030 in Switzerland). Therefore encouragement strategies would be needed to increase the number of PHC specialists. Women who are spontaneously attracted by PHC should be supported to maintain this intention. On the other hand, men and undecided students could be targeted by promotion measures to motivate students to this career. Knowing better the profile of these students might help to adjust the strategies.

Take-home messages

Students motivated by a PHC career are characterized by agreeableness.

Students intending to specialize as PHC doctors are mainly female and empathetic students which are less motivated by extrinsic incentives.

Profile linked to high motivation for PHC differs from profile linked to intention to be specialized as PHC.

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