

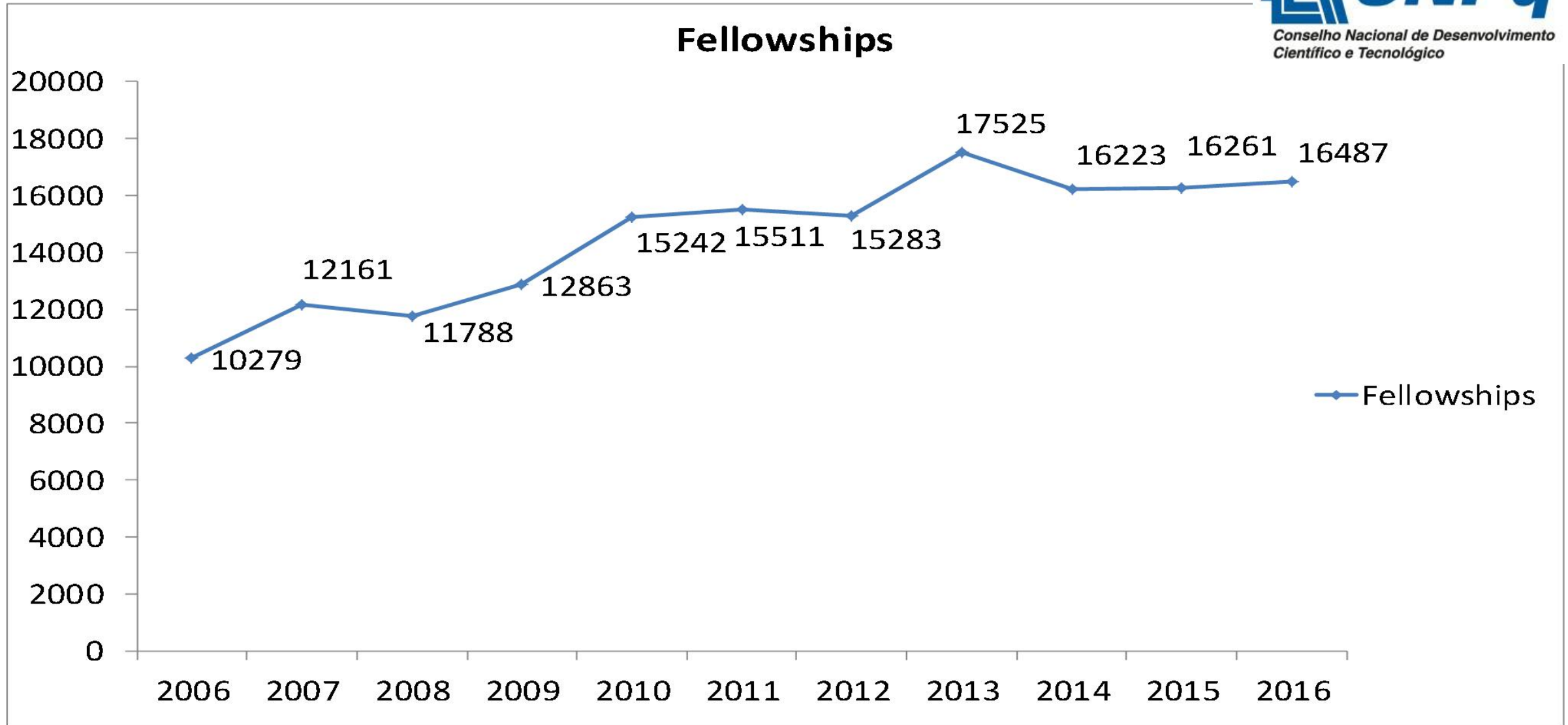
Impact evaluation of CNPq Productivity Fellowship on Academic Productivity (2011-2016)

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Figure 1 – Active CNPq Productivity Fellowships by year



Our research question

- Does the receipt of the CNPq Productivity fellowship impact the academic productivity of the researcher?
- The Fundamental Problem of Causal Inference: it is not possible to infer the potential outcomes for a single unit.
- Use of quasi-experimental research methods – regression adjustment – in order to avoid confounding.

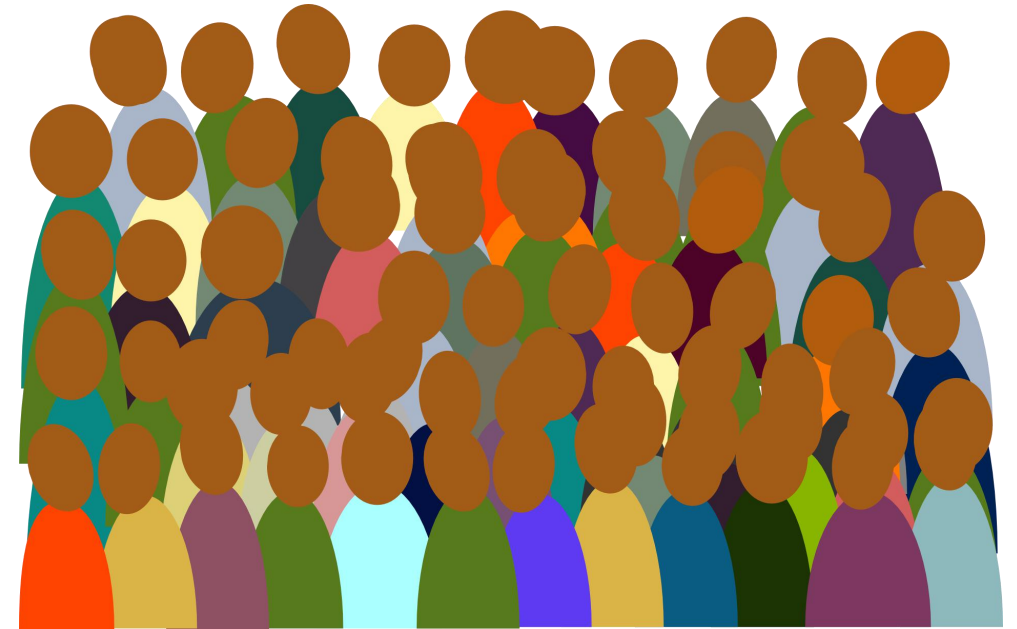
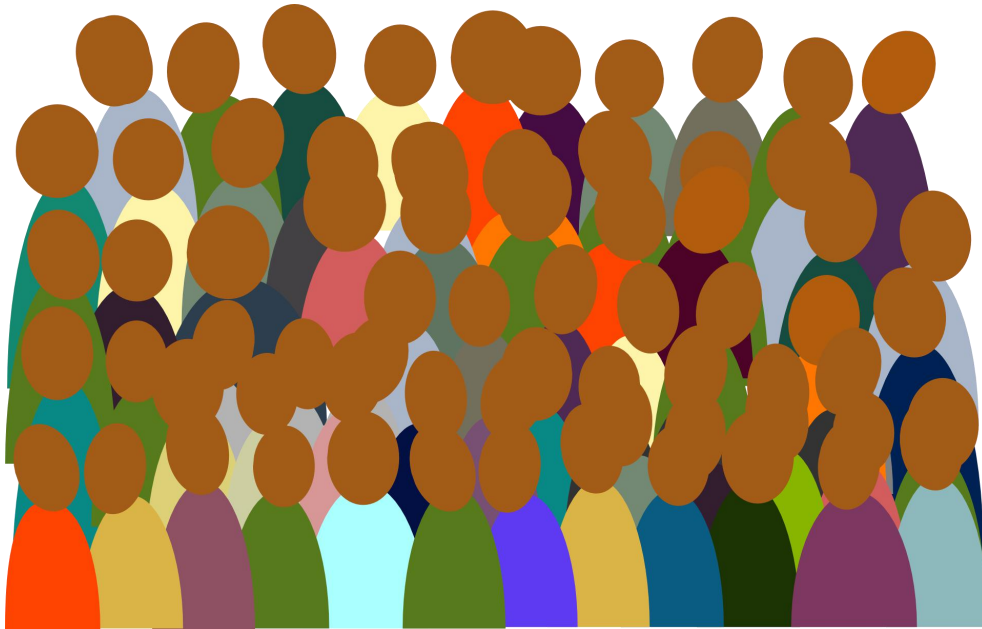
Research Question: Are the odds of a fellow researcher to publish at least one paper in academic journals higher than the odds of academics who hasn't received the fellowship, all things held constant?

DEFINING THE POPULATION OF INTEREST

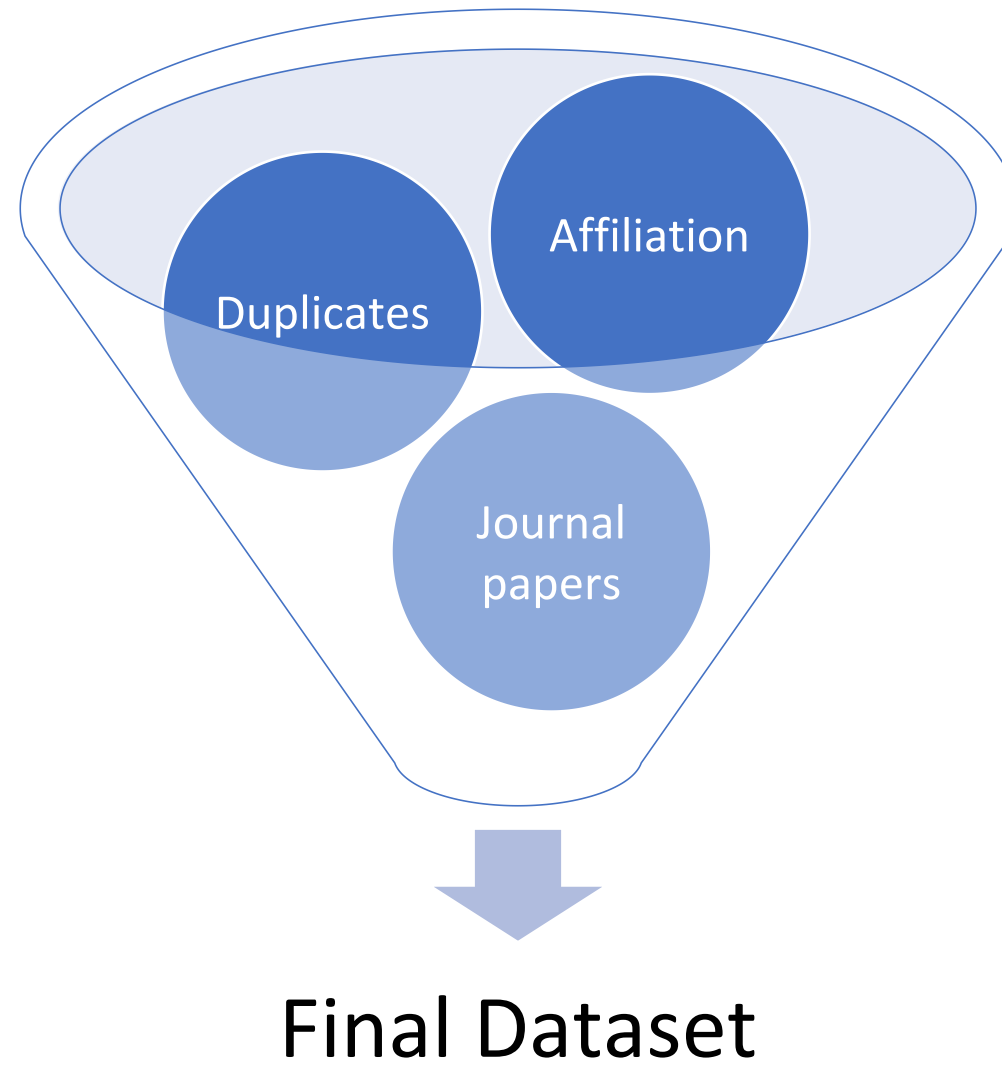
85,288 fellows in the period 2011-2016

345,227 non-fellows

It is important to compare researchers with the same traits!

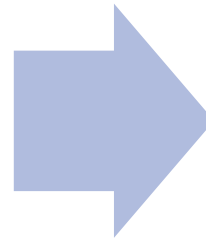


Data cleaning



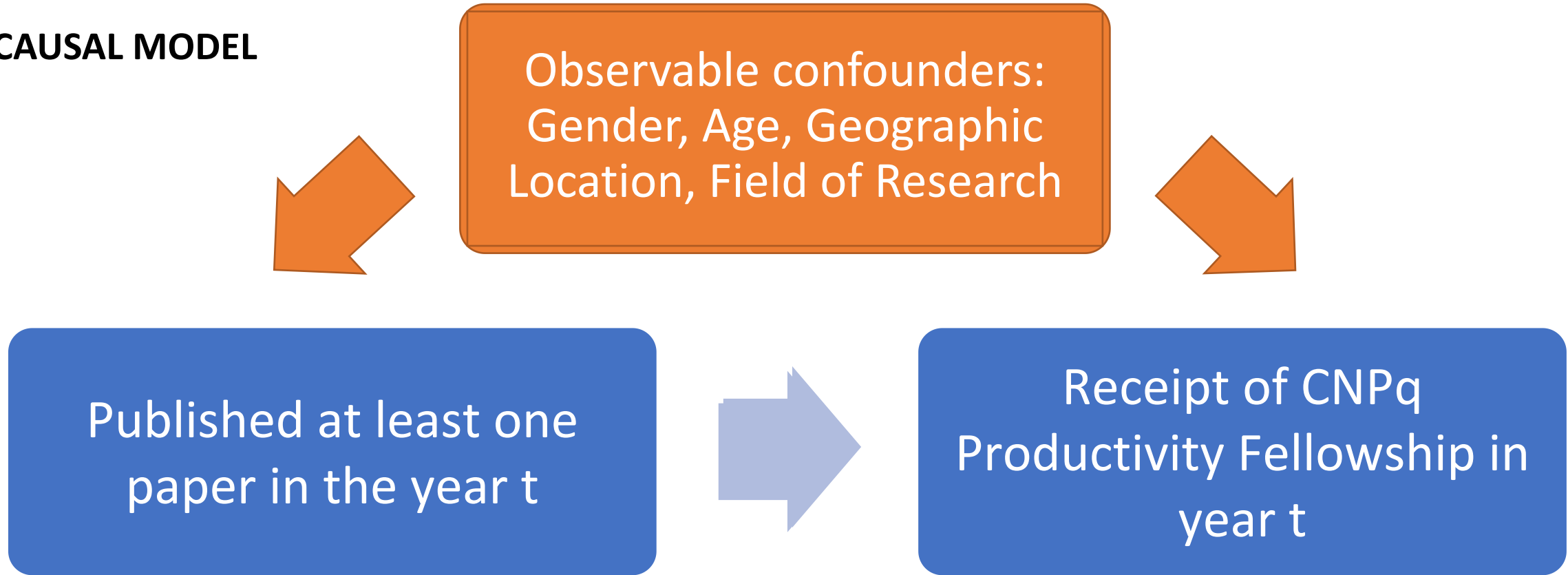
CAUSAL MODEL

Published at least one
paper in the year t

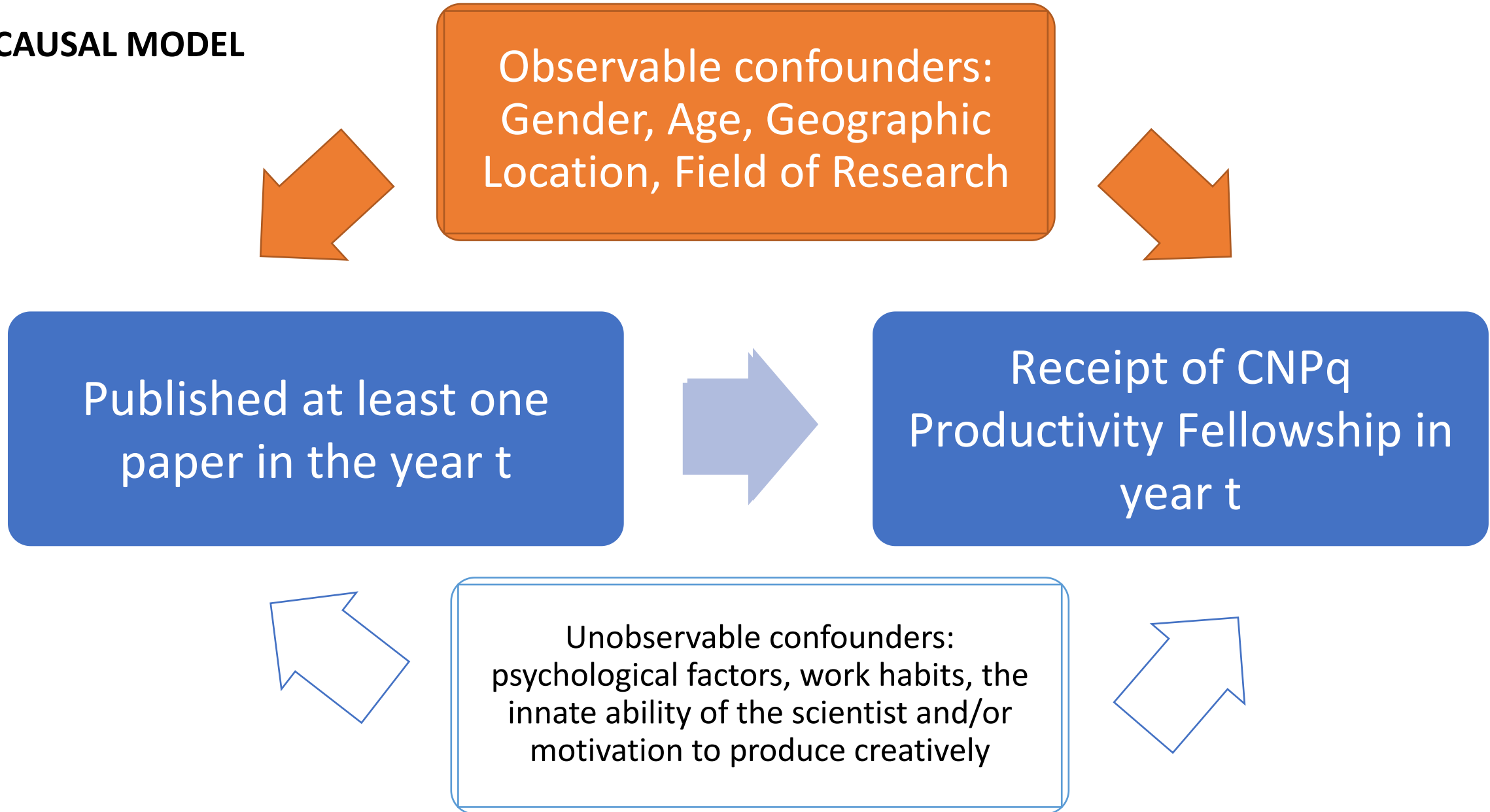


Receipt of CNPq
Productivity Fellowship in
year t

CAUSAL MODEL



CAUSAL MODEL



PRELIMINARY RESULTS

- For the sake of brevity, we report the odds-ratio estimate of the complete logistic regression model – with the full set of covariates (sex, age, region and field of research).
- The results demonstrate the positive impact of the program: controlling for the observable factors, CNPq Productivity fellows have the odds of publishing in a academic journal in a given year 1.5 times higher than a non-fellow. All results were significant at a 1% level.



THE SIGN AND STATISTICAL SIGNIFICANCE OF COVARIATE VARIABLES

- As expected by current literature in Brazil, the odds of publishing a journal article in the year are higher:
 - For male researchers: gender issue
 - For senior researchers (older than 55 years): reflects seniority and prestige.
 - For researchers in the Southeast region: region concentrates most of infrastructure for researchers, universities, labs, etc.



Concluding remarks



- This study presented an impact evaluation of CNPq Productivity Fellowship.
- Using a quasi-experimental research design, it shows that the policy has a positive impact in the probability of researcher to publish in a given year, controlling for potential confounding variables.
- Next developments of research: incorporate a dose-effect: for current fellows, the time in the fellowship increases the number of publications?
- Results may shed light to disparities in the policy: gender issues and location are associated with an increased likelihood of participating in the policy.



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Thank you!

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