

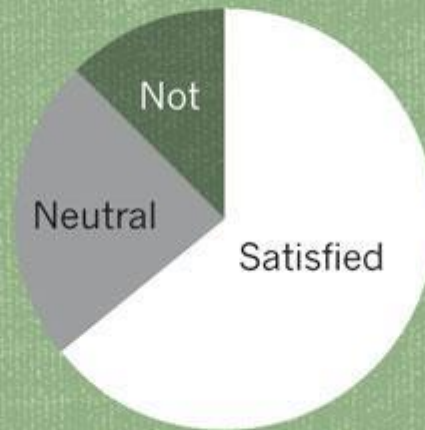
La formació de doctors a Europa

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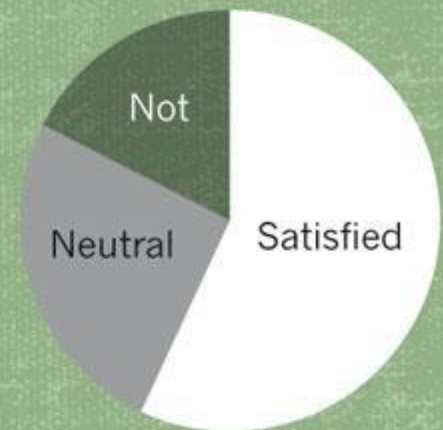
What's a PhD worth?

People with a PhD aren't much happier...

Number satisfied with their
job 6–10 years after
achieving their highest
qualification.



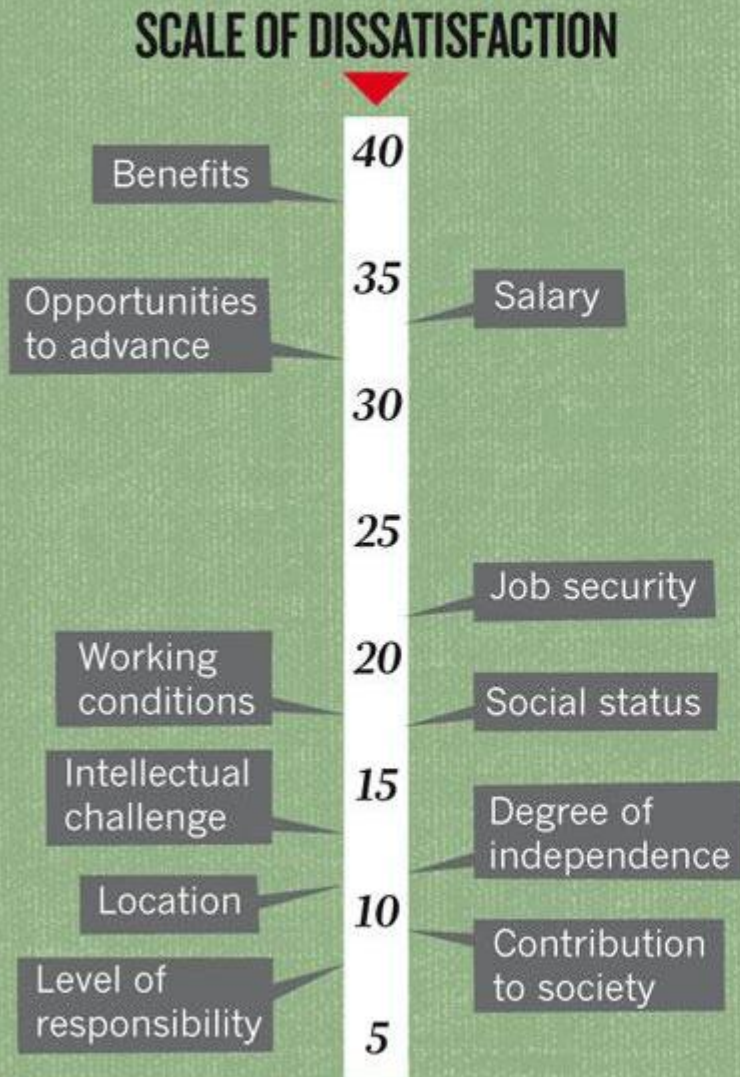
WITH A PHD



WITHOUT A PHD

Cyranoski et al. 20 April
2011 | *Nature* **472**, 276-
279 (2011)

...they gripe about benefits,
but like the intellectual challenge...



Percentage of doctorate holders dissatisfied with employment situation, by reason

Cyranoski et al. 20 April 2011 | *Nature* **472**, 276-279 (2011)

EUA COUNCIL FOR DOCTORAL EDUCATION



“La missió del Consell de educació Doctoral (EUA-CDE) és la de contribuir al desenvolupament, progrés i millora de la educació doctoral i la formació en recerca a Europa.”

Gran diversitat en el format dels programes de doctorat

Declaració de Salzburg



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- **Achieving critical mass:** Doctoral programmes should seek to achieve critical mass and should draw on different types of innovative practice being introduced in universities across Europe, bearing in mind that different solutions may be appropriate to different contexts and in particular across larger and smaller European countries. These range from graduate schools in major universities to international, national and regional collaboration between universities.



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- **Duration:** doctoral programmes should operate within an appropriate time duration (three to four years full-time as a rule).



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- **Increasing mobility:** Doctoral programmes should seek to offer geographical as well as interdisciplinary and intersectoral mobility and international collaboration within an integrated framework of cooperation between universities and other partners.



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EU Investment Plan (Juncker's plan)

- Member states want large chunks of the European Union's new €315 billion investment fund to be directed to **education**, and alongside conventional infrastructure projects, such as more energy efficient buildings, are bidding for computers for schools, **expansion of R&D facilities and support for student loans**.
- According to European Commission sources, the largest single proposal, €24 billion for school computers, was made by France. Italy has asked for €8.8 billion for school buildings and **Spain wants €1.5 billion for university student loans**.

EU Investment Plan

(Juncker's plan) **21 billion -> €315 bn**



- €21 bn: €8bn que surten d'altres programes
 - €3.3 bn Connecting Europe Facility
 - €2.7 billions sortiran del programa Horitzó 2020 (inicialment €4) -> approx. 20% pressupost (2015-2017)
 - €2 bn Budget margin

(to get the 1:15 multiplier effect it should be risky projects; higher returns than the originally planned)

H2020

- Dues víctimes segures (el dubte és en quin %):
 - ERC (un projecte ERC té 6 membres en promig, dels quals 3-4 són investigadors doctorals, en breu arribarem al projecte 5.000: 15.000-20.000 investigadors predoctorals finançats en 8 anys)
 - Marie Skłodowska-Curie (ITN, COFUND, RISE...), periode 2007-2013:
 - ITN&IDP: 9.000 investigadors predoctorals
 - EID&IAPP (indústria): 2,000
 - IRSES (curta durada): 7,000

Formació de doctors: dilemes

- Dilema: educació versus recerca
- Dilema: recerca (acadèmica) versus professió
- Dilema: qualitat professorat recerca vs docència

The rise of doctorates

Major expansion of higher education has boosted PhD output in many countries, shown here as average annual growth of doctoral degrees across all disciplines, 1998–2006.

