

Technological Change and Formal Further Education

Does automation risk influence aspirations and plans to pursue a new educational certificate?

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WZB

March 2, 2021

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- Reason: Firms as main providers of job-related training have little incentive to invest
- But what about individual further training?

Soziologe/Soziologin

Keine der typischen 5 Tätigkeiten in diesem Beruf könnte derzeit durch den Einsatz digitaler Technologien automatisiert werden. Die **Automatisierbarkeit in diesem Beruf ist somit niedrig (0 Prozent)**.

Trotzdem kann es sein, dass sich die Automatisierbarkeit in diesem Beruf im Laufe der Zeit ändert, denn Technologien entwickeln sich weiter und Tätigkeitsprofile können sich wandeln.

Mehr Details zu diesem Beruf finden Sie im [BERUFENET](#), dem Informationssystem der Bundesagentur für Arbeit.

Dieser Beruf gehört zur Berufsgruppe
Experten in der Soziologie:

Beschäftigte

Ende 2018: 2.855
Seit 2012 um 19,2 % gestiegen

Was bedeuten die Beschäftigtenzahlen?



Mittleres Monatsgehalt

Ende 2018: 4.658 € brutto
Seit 2012 um 13,4 % gestiegen

Was bedeuten die Zahlen zum mittleren Gehalt?



Bäcker/in

5 der 5 typischen Tätigkeiten in diesem Beruf könnte derzeit durch den Einsatz digitaler Technologien automatisiert werden. **Die Automatisierbarkeit in diesem Beruf ist somit hoch (100 Prozent).** ⓘ

Das heißt aber nicht, dass tatsächlich automatisiert wird und dass es den Beruf in Zukunft nicht mehr geben wird. Stattdessen können sich auch nur die Tätigkeitsprofile im Beruf ändern. Zudem kann menschliche Arbeit flexibler, wirtschaftlicher oder von besserer Qualität sein.

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Dieser Beruf gehört zur Berufsgruppe
Fachkräfte in der Back- und Konditoreiwarenherstellung:

Beschäftigte

Ende 2018: 75.634
Seit 2012 um 3,7 % gesunken

Was bedeuten die Beschäftigtenzahlen?



Mittleres Monatsgehalt

Ende 2018: 2.257 € brutto
Seit 2012 um 16,8 % gestiegen

Was bedeuten die Zahlen zum mittleren Gehalt?



Research Question

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Does the automation risk of the current job influence the wishes and plans to re-enter formal education?

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 - ▶ Cultural capital: It is part of their habitus

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- Separating the motives from structural constraints: educational **wishes** (idealistic aspirations) and actual educational **plans** (realistic aspirations)

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- ② The status conservation motive explains the influence of automation risk on wishes

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- ③ Plans to pursue formal further education are lower in occupations with high automation risk

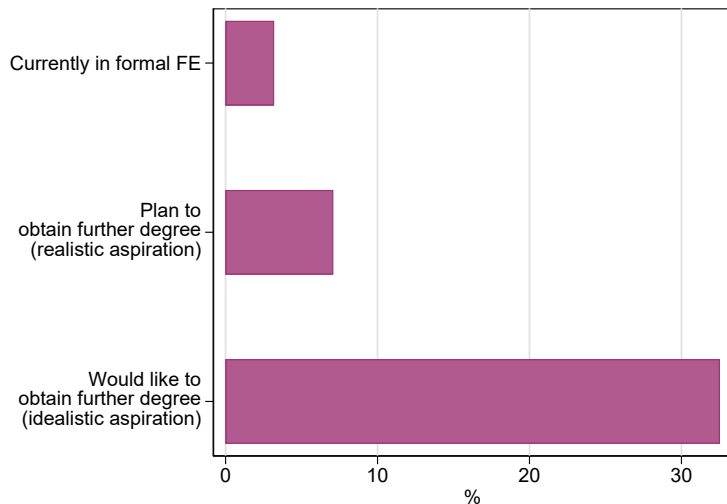
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Data

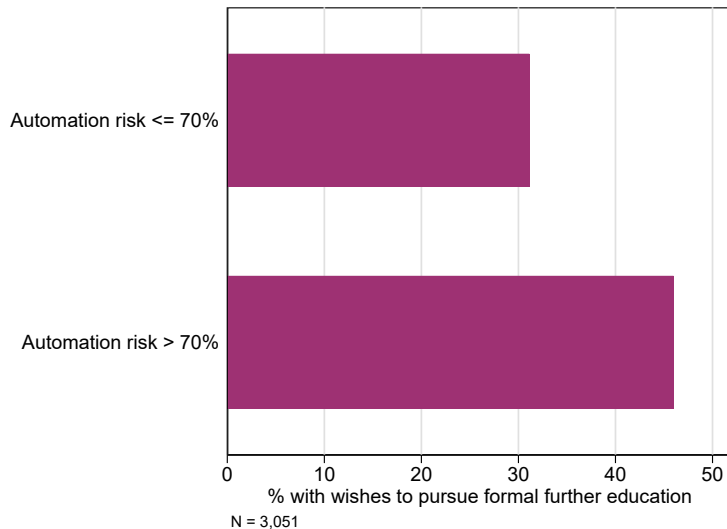
- National Educational Panel Study (NEPS) Starting cohort 6 (“Adults”)
- Wave 8 (2015)
- Sample:
 - ▶ Employed age 30 - 55
 - ▶ Not in formal education
 - ▶ $N = 3,051$
- Automation risk: Data on routine tasks in 2013 from the IAB (Dengler and Matthes 2018)

Wishes and Plans for Formal Further Education

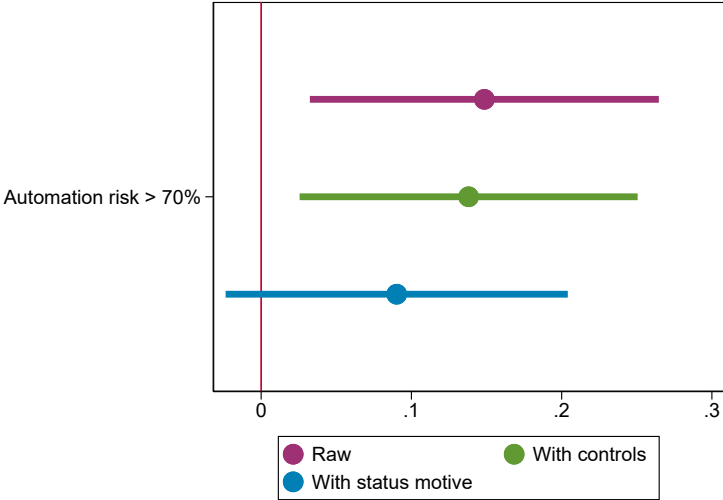


Source current participation: Kruppe and Baumann (2019:49)

Wishes by Automation Risk



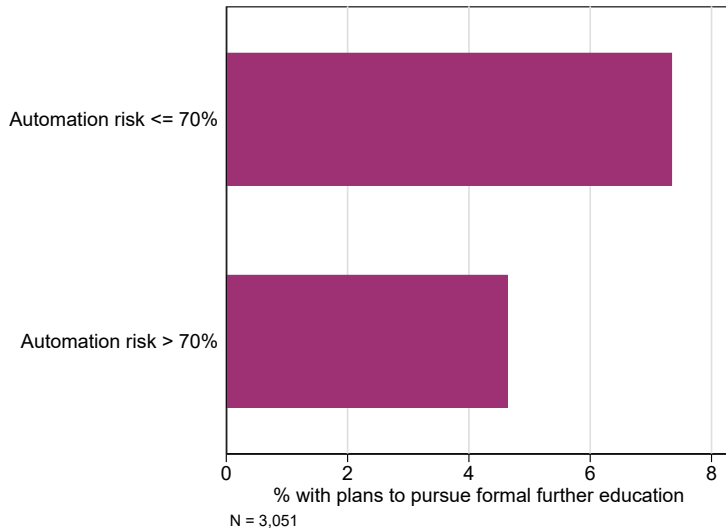
Regressions Wishes for Formal Further Education



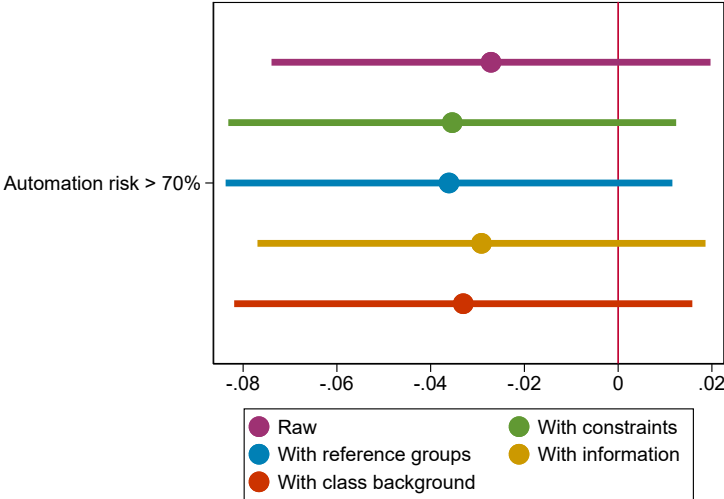
N = 3,051

Linear Probability Model
Controls: Age, Gender, Education

Plans by Automation Risk



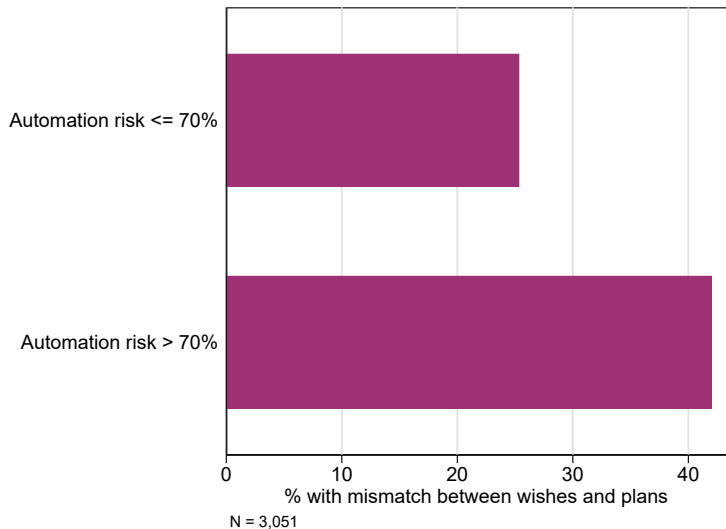
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Mismatch by Automation Risk



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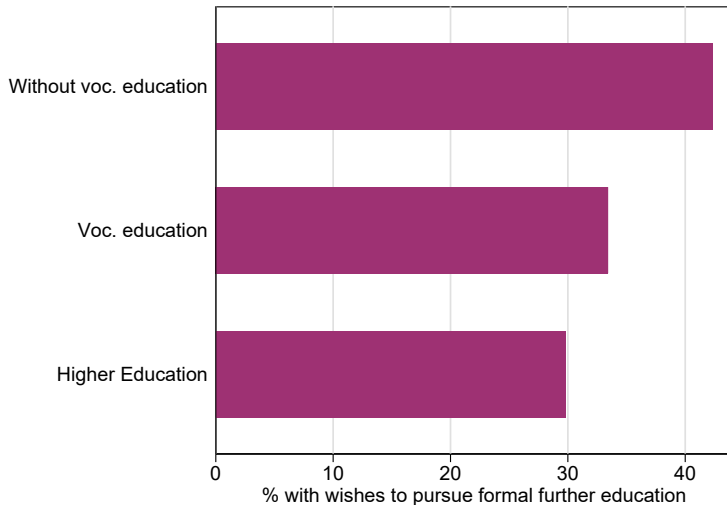
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- Lack of participation is not due to lack of motivation but rather due to barriers

Control Variables Plans

- Constraints:
 - ▶ Log eq. household income
 - ▶ Small children in the household
 - ▶ Subjective barrier: time
 - ▶ Subjective barrier: money
 - ▶ Risk aversion
 - ▶ Subjective success probability
- Reference groups: “It is important for most of my colleagues to learn something new”
- Information: “How well do you feel informed about additional certificates?”
- Class Background: EGP

Wishes by Education



Quelle: NEPS SC6 SUF8.0.0, own calculations