



German Centre for Higher Education Research
and Science Studies ■

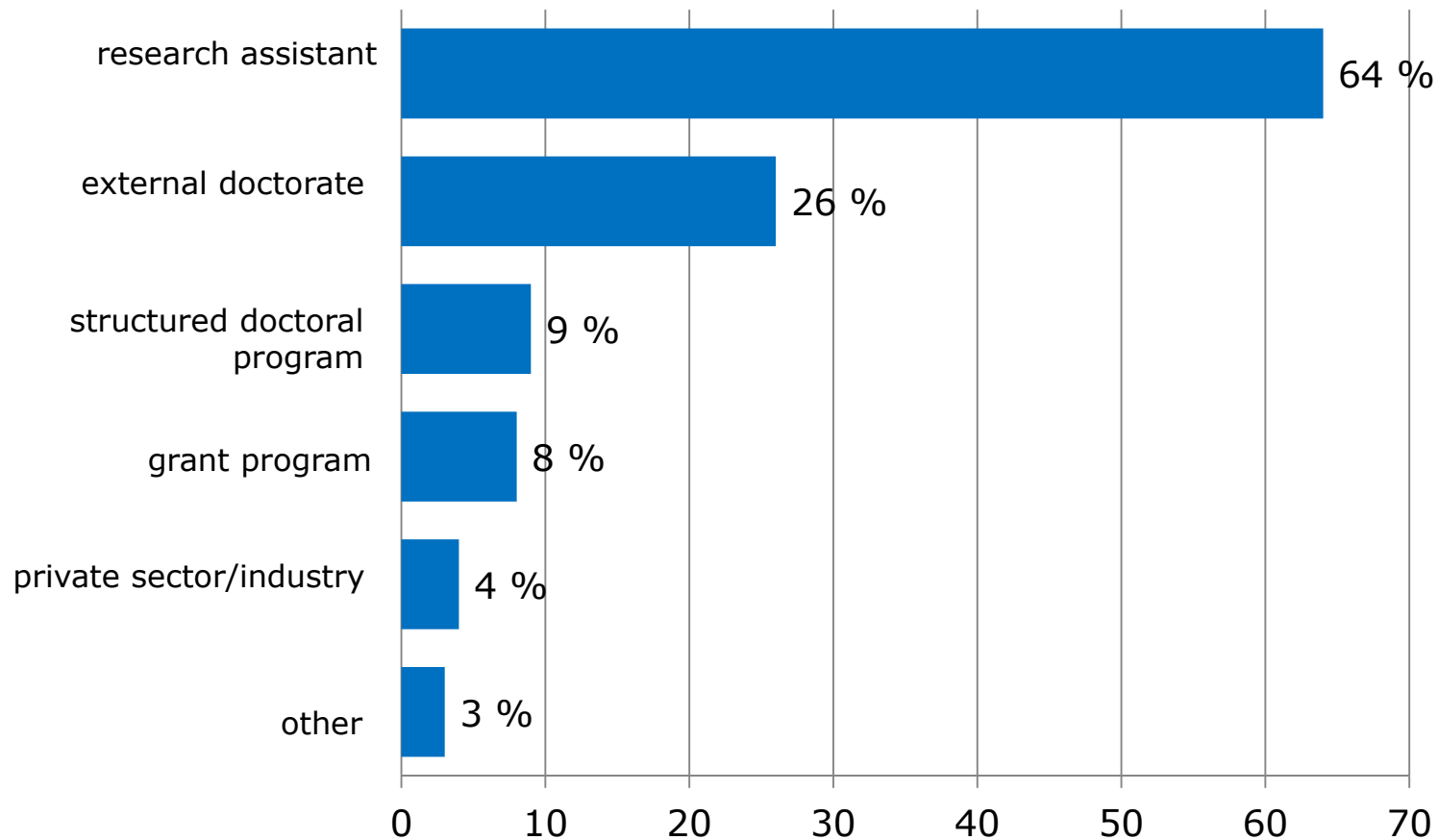
How do gender and educational background of university graduates influence the transition to individual and structured doctorates?

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Expansion of structured doctoral programs

Different ways of obtaining a PhD in Germany



DZHW Graduate Survey 2005.2; N=3.443;
multiple responses possible

Expansion of structured doctoral programs

A main objective of higher education policy:

Reduction of social selectivity in the transition into doctoral studies

Formal recruitment of doctoral candidates assures that...

- ... only the most successful and talented graduates get the opportunity to start a doctorate
- ... gender and educational background effects will decrease

„Die Promotion sollte nur den besten Absolventen der vorgelagerten Studiengänge oder solchen Absolventen, die außerhalb universitärer Forschungseinrichtungen exzellente Leistungen erbracht haben, offen stehen.“
(Wissenschaftsrat 2002: S. 45)

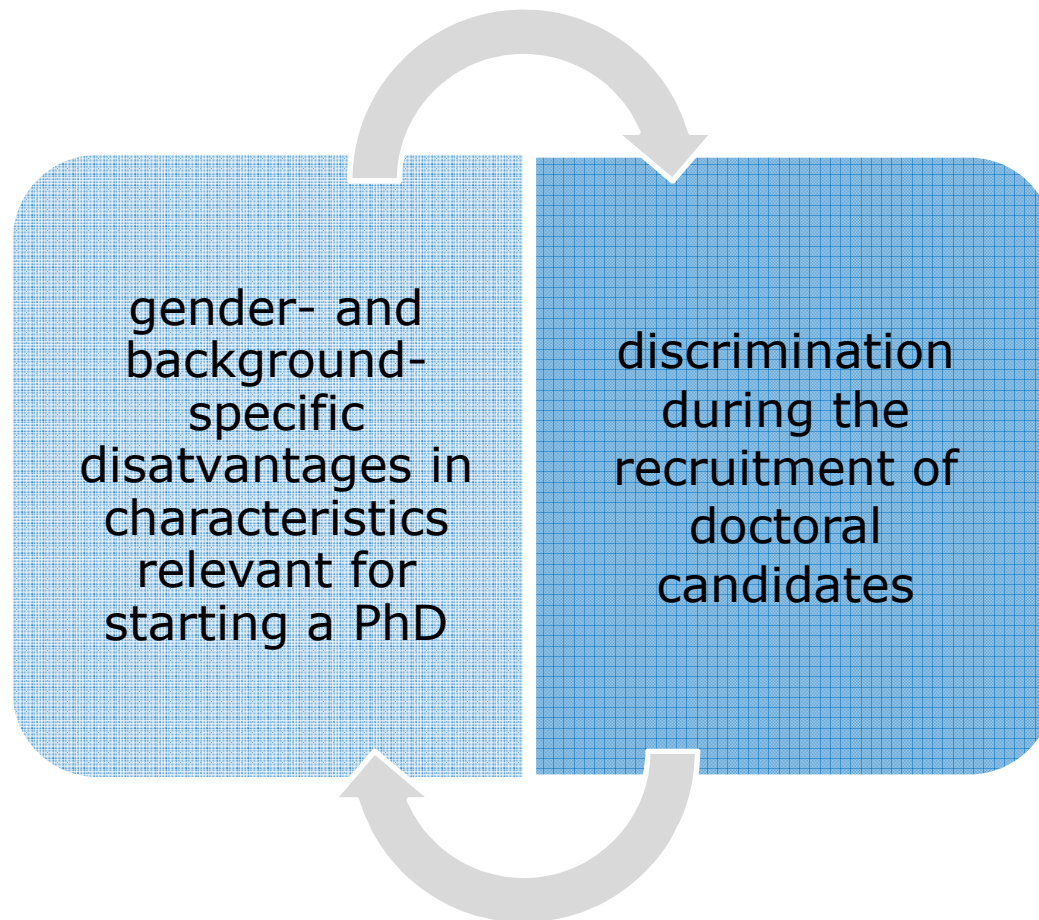
„Um unbewusste Geschlechtsdiskriminierung und homosoziale Kooptation zu vermeiden, sollten Rekrutierungsverfahren transparent und formalisiert verlaufen.“
(Wissenschaftsrat 2007: S. 28)

research questions

1. Are the effects of gender and educational background on entering a structured doctoral program lower than those on starting an individual doctorate?

2. What are the underlying mechanisms that may account for gender and educational background differences in beginning individual and structured doctorates?

development of social inequality in the transition into doctoral studies



recruitment practices

➤ discrimination processes

social homophily (Kanter 1993), homosocial cooptation (Hartmann 2002; Beaufays 2003), statistical discrimination (Arrow 1973; Phelps 1972)

➤ selection procedures vary between individual and structured doctorates

- mainly informal recruiting practices in individual doctorates (Beaufays 2012; Berning & Falk 2006; Bochow & Joas 1989)
- mainly formal recruiting practices in structured doctoral programs (Hauss & Kaulisch 2011; Kirschbaum et al. 2006; Korff & Roman 2013)

A 1: lower effects in structured doctorates

- signs of informal recruiting practices in structured doctoral programs (Enders & Kottmann 2009; Hauss & Kaulisch 2011; Korff & Roman 2013)
- formal selection procedures also allow space for discrimination (interviews, assessment-center)

A 2: similar effects in individual and structured doctorates

gender- & background-specific disadvantages

- gender- and background-specific disadvantages in characteristics relevant for starting a PhD
 - subject choices (Bourdieu/Passeron 1971; Georg 2005; Reimer/Pollack 2010; Lörz 2012; Jaksztat 2014)
 - academic and school performance (Boudon 1974; Bargel/Röhl 2006; Jaksztat 2014)
 - student assistantship (Bargel/Röhl 2006; Jaksztat 2014; Regelmann 2009; Schneickert 2009)
 - apprenticeship (Spangenberg et al. 2011)
 - parenthood (Brandt 2012)

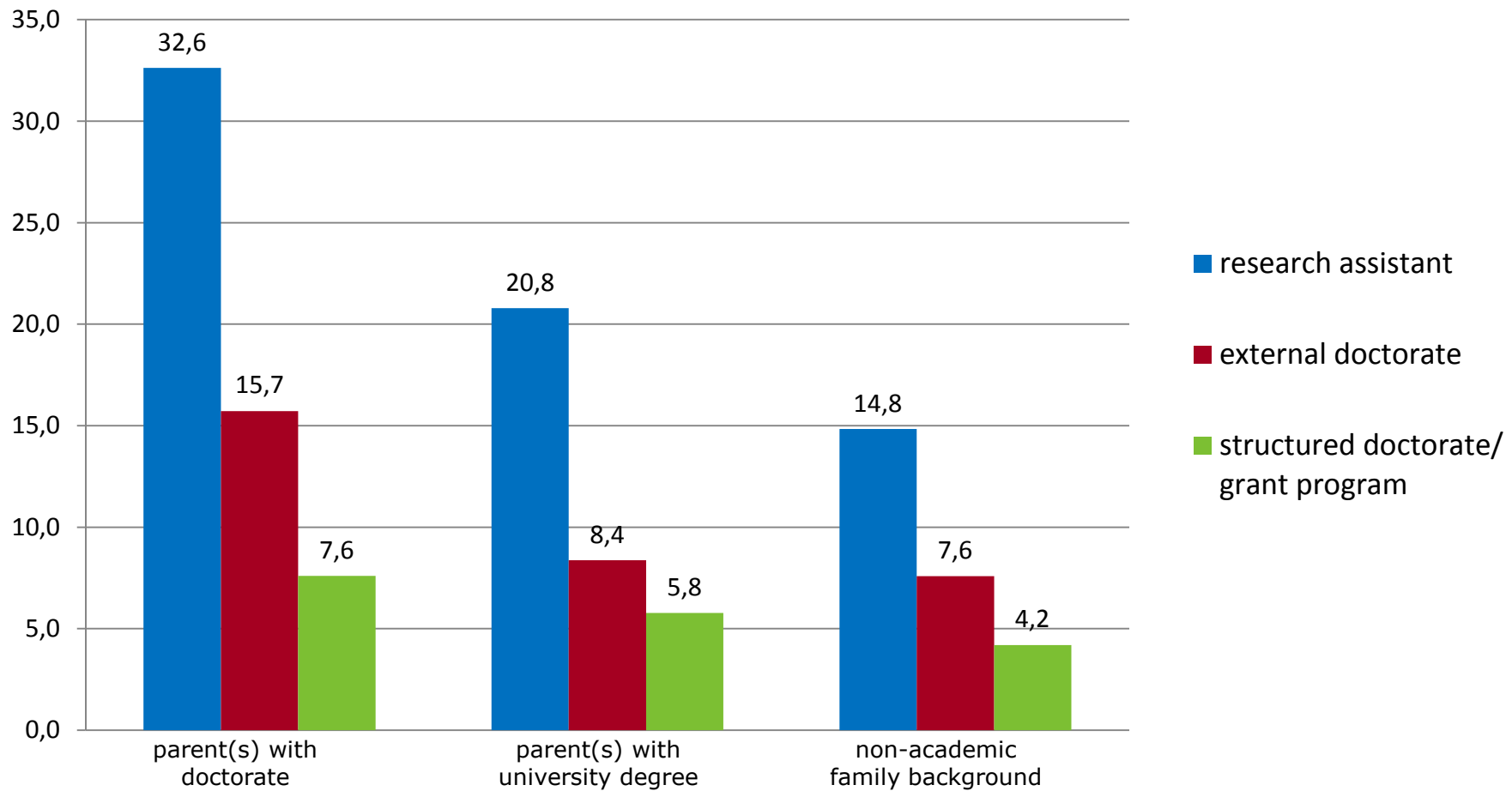
A 3: Within research assistant positions student assistantships are the major explanatory factor for gender and background differences

A 4: In external doctorates differences are mainly caused by subject choices

A 5: In structured doctorates and grant programs differences mostly occur due to performance differences

educational background differences

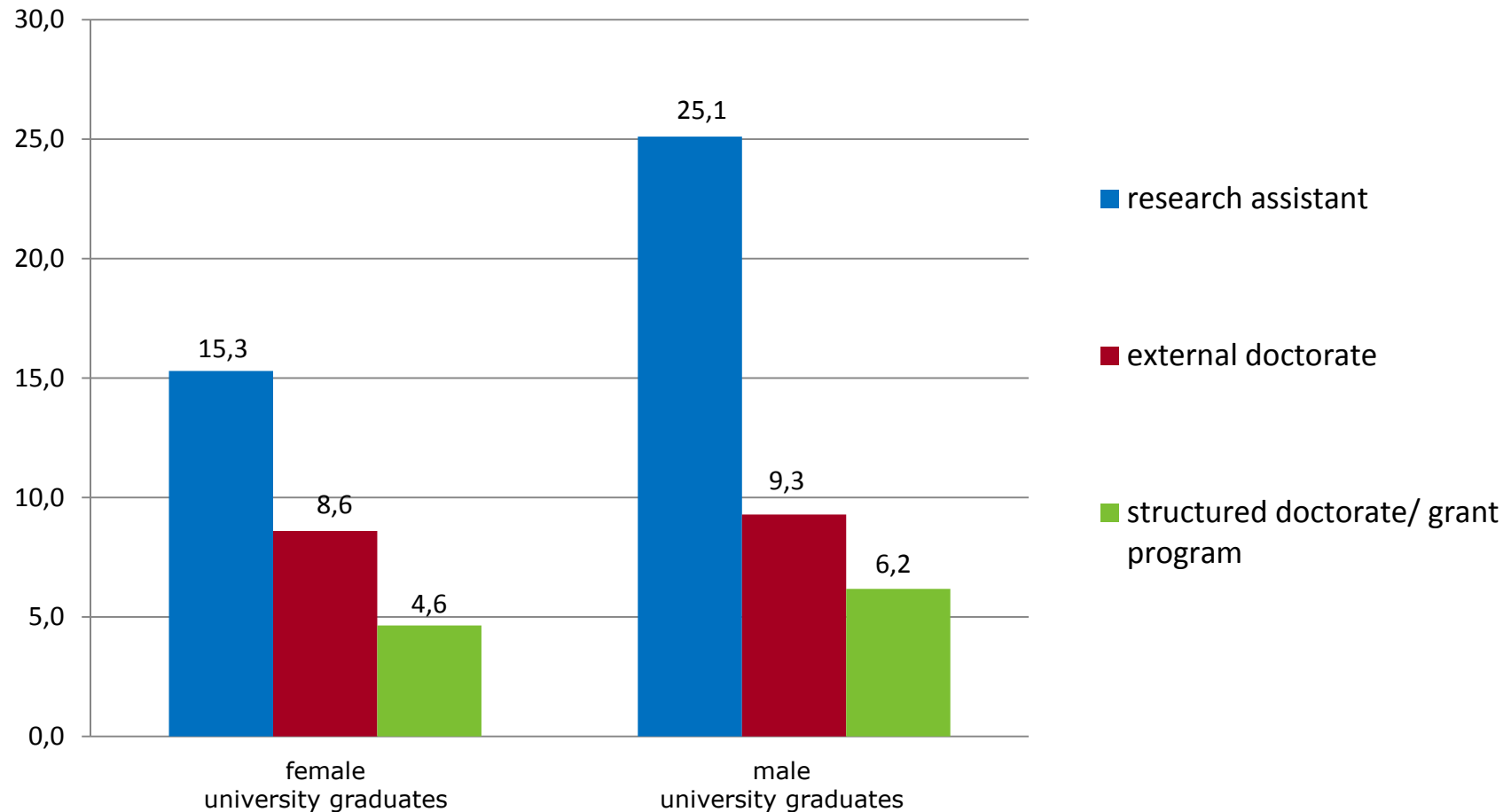
transitional quotas to individual and structured doctorates



DZHW Graduate Survey 2005.2, weighted data; N=3443

gender differences

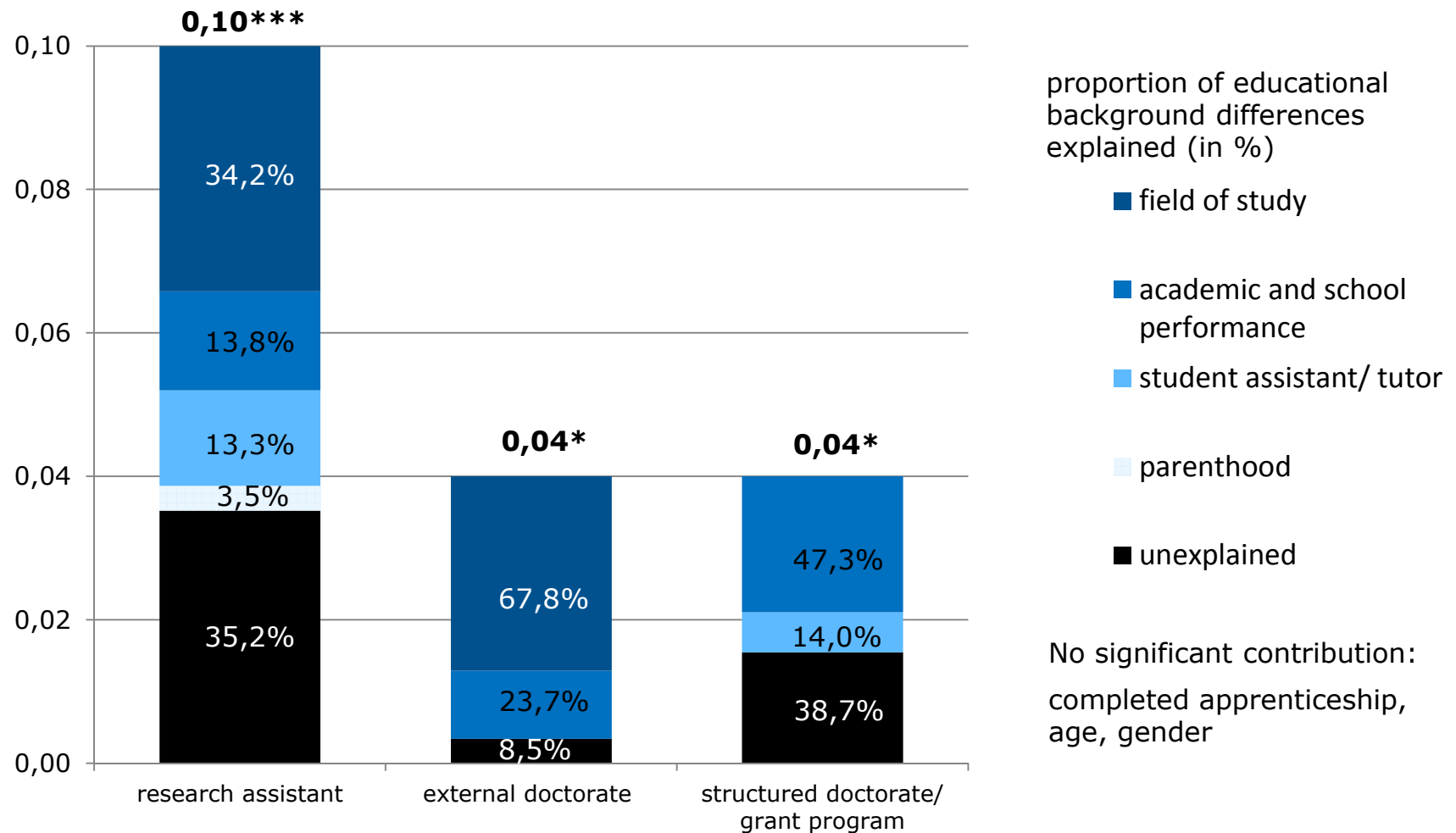
transitional quotas to individual and structured doctorates



DZHW Graduate Survey 2005.2, weighted data; N=3443

underlying mechanisms

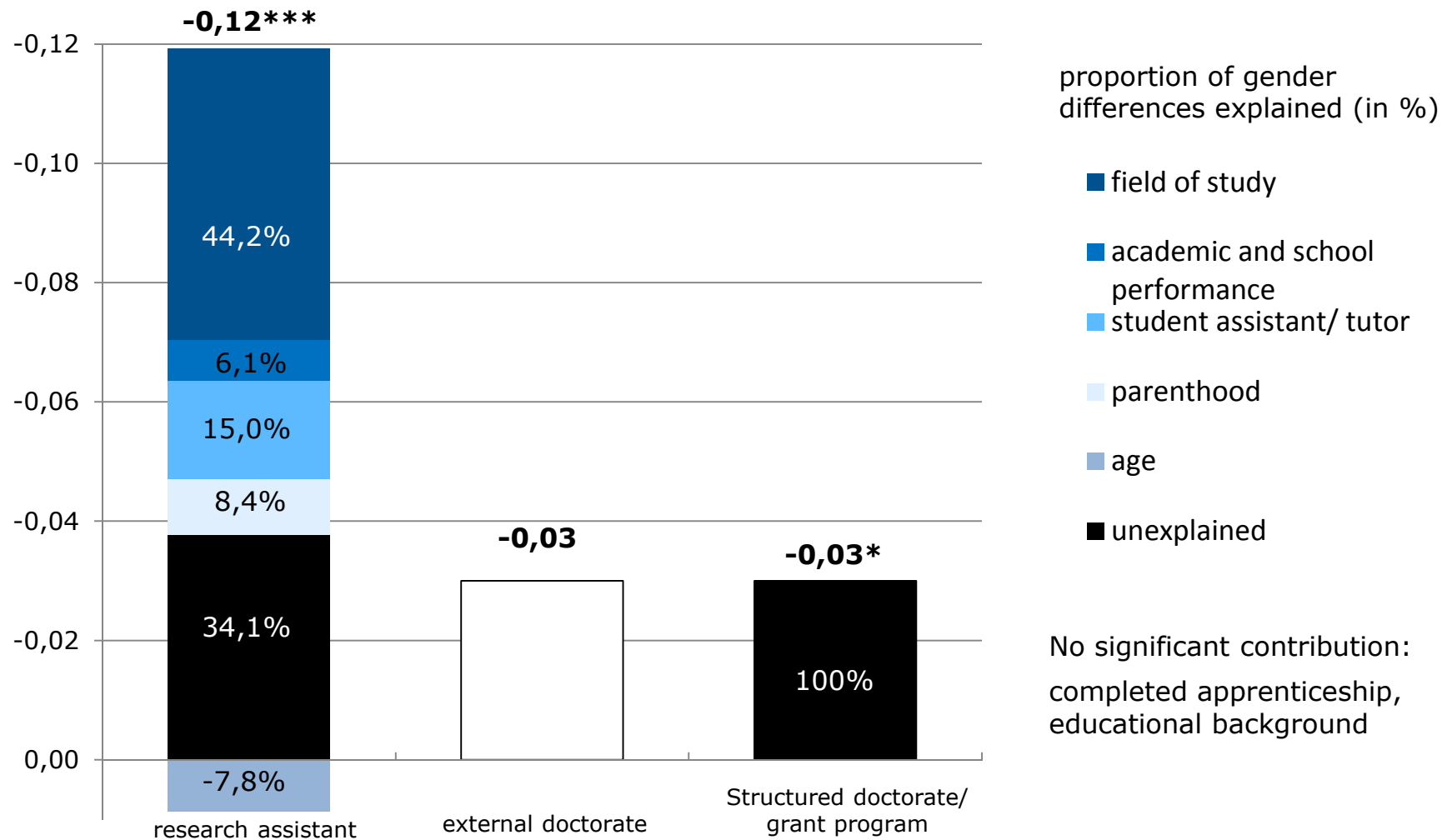
Fairlie (2003) decomposition of educational background differences



DZHW Graduate Survey 2005.2, weighted data; N=3443

underlying mechanisms

Fairlie (2003) decomposition of gender differences



DZHW Graduate Survey 2005.2, weighted data; N=3443

Conclusion

educational background and gender effects:

- ✓ The effects of gender and educational background on entering a structured doctoral program or grant program are mostly lower than those found on transition to individual doctorates

Underlying mechanisms:

- ✓ **Research assistance:** gender and educational background difference mainly occur due to subject choices; working experiences with student assistant jobs and performance differences also explain a big part of the effects
- ✓ **external doctorates:** differences by gender and educational background are largely caused by subject choices
- ✓ **structured doctorates and grant programs:** performance differences mainly account for educational background differences, but not for gender effects

Thank you for your
attention!

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