A cross-country comparison of gender differences in job-related training - The role of working hours and the household context

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The role of job-related learning and training activities as a possible driver of outcome inequalities with respect to pay (Munasinghe et al., 2008; Büchel & Pannenberg, 2004; Jürges & Schneider, 2004; Pischke, 2001; Kuckulenz & Zwick, 2003; Schömann & Becker, 1998), promotions (Pannenberg, 1997; 1995), and human capital formation (Ben-Porath, 1967; Becker, 1964) has been highly debated in the literature. From a macroeconomic point of view, continuing education is decisive in ageing societies in order to secure high worker productivity over a longer working life. Occupational and technical change further reinforce the necessity of lifelong learning. To avoid labour shortages it is therefore important to ensure equal access to job-related training to everyone, avoiding discrimination based on gender. In particular, a cumulative process such that otherwise advantaged individuals self-select into on-the-job training which results in an even higher divergence of income and career perspectives has to be avoided. Indeed, empirical evidence on training incidence suggests that differences among men and women persist although the evidence remains inconclusive as to who shows a higher participation rate. Against this background, the question arises whether there exists important group heterogeneity among men and women which is crucial in determining the participation incidence and intensity. Particularly, the household context has been shown to significantly influence labour market participation of women (Lauber et al., 2014; Boll, 2011; Anxo et al., 2007; Geyer & Steiner, 2007; Vogel, 2007; Jaumotte, 2003; Hersch & Stratton, 1994; Bielby & Bielby, 1989) and, hence, might play an important role for the participation in job-related training. However, so far there is little empirical research on the relationship between job-related training and the household context which is why the present paper aims to fill this gap.

Previous research suggests that for persons who take over more tasks in the household—hence, with a higher likelihood of holding part-time jobs and earning less than a respective partner—there are fewer incentives for their employers as well as individuals themselves to invest in job-related training. If part-time jobs can be observed more frequently among women, the job status may explain gender-specific variation in participation in job-related training. These relationships and potential explanations are found in human capital theory (Becker, 1964), bargaining models (Manser & Brown, 1980), 'doing gender' theories (West & Zimmerman, 1987), and discrimination theories (Becker, 1957). To investigate the importance of group heterogeneity among men and women—in terms of part-time jobs and the earnings position in the partnership—for training participation, we use information from the EU

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Labour Force Survey (EU LFS) for Germany, Italy, and the Netherlands. The three countries show distinct characteristics regarding their level of training participation but also regarding family-friendly work environments, allowing us to analyse the influence of the institutional environment. The earnings position distinguishes between employees who do not live with a partner in the same household (singles) and those who do and earn more than their partner (main earners), the same (equal earners), or less (secondary earners). We implement a step-wise estimation procedure for two samples: (a) men and women in full-time positions and (b) women in full- and part-time positions. On both samples we run Probit regressions with training incidence as dependent variable and use Tobit regressions for training intensity (course length) as a robustness check. First, we only include the central variables (sample (a): gender and earnings position, sample (b): working hours and earnings position) which are then interacted with each other in the second model. The third model includes three-way interactions with country and the fourth model covers several additional control variables.

As to the results of our study, Dutch workers train significantly more often than Germans and there are only negligible differences between Italians and Germans. Being full-time employed relates more strongly to training than being part-time employed for female workers in Germany and Italy. The earnings position does not affect workers in Italy or the Netherlands. As for Germany, training participation of male workers is not significantly influenced by their earnings position. However, full- and part-time female single workers in Germany train more often than female secondary earners. Looking at significant differences in course length, working part-time instead of full time corresponds with a decrease by 5.5 hours. Female single earners in part-time jobs train 5.6 hours more than female secondary earners in part-time positions; hence, both reduced working hours and a reduced contribution to the household's labour income are associated with less training. When looking at the complete female sample, children below 12 years of age significantly reduce mothers' training participation in Germany and the Netherlands but not in Italy. As soon as the sample is divided between part- and full-time female workers, we see that in Germany both groups are equally affected while in the Netherlands only mothers in part-time jobs show a significant negative relationship with training participation.

Our study adds to the literature in three aspects. First, it sheds light on the remaining variation in training engagement, beyond the set of covariates that is usually employed in the literature. As an original contribution, we test the power of the relative earnings position in the household combined with the working time in explaining in-group variance in training involvement after controlling for established individual and job-related characteristics. Second, the study explores how country fixed effects interact with the named two variables, potentially showing the robustness of the new differentiators. In addition, we test the country-specific role of children below 12 in the household for job-related training. Third, the study deals with the extensive and the intensive margin in the same methodological setting, supplementing the results from training participation with the findings for episode length.

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