

Aeschlimann, B., Neumann, J., & Trede, I. (2021). Transition into tertiary education after vet and the role of the work area – a longitudinal study on gender segregation in the field of social care. In C. Nägele, B.E. Stalder, & M. Weich (Eds.), *Pathways in Vocational Education and Training and Lifelong Learning. Proceedings of the 4th Crossing Boundaries Conference in Vocational Education and Training, Muttenz and Bern online, 8. – 9. April* (pp. 16–23). European Research Network on Vocational Education and Training, VETNET, University of Applied Sciences and Arts Northwestern Switzerland and Bern University of Teacher Education. <https://doi.org/10.5281/zenodo.4604489>

Transition into Tertiary Education After VET and the Role of the Work Area – a Longitudinal Study on Gender Segregation in the Field of Social Care

Aeschlimann, Belinda

belinda.aeschlimann@ehb.swiss, Swiss Federal Institute for Vocational Education and Training, Switzerland

Neumann, Jörg

joerg.neumann@ehb.swiss, Swiss Federal Institute for Vocational Education and Training, Switzerland

Trede, Ines

ines.trede@ehb.swiss, Swiss Federal Institute for Vocational Education and Training, Switzerland

Abstract

Vocational education and training play a key role in the Swiss educational system. One of the most frequently chosen apprenticeships is Certified Social Care Worker (CSCW). After certification, these graduates have the option of working in the profession, attending tertiary vocational education, or changing to a profession outside the social sector. Studies on the choice of study at upper secondary and university tertiary level point to gender-typical choice behaviour. So far, little research has been done on whether and how gender-typical choices are perpetuated when entering a profession or attending vocational tertiary education. This study aims to close this gap and, using the example of the social sector, examines the role that gender plays in career and educational decisions after graduation as CSCW. Since the social sector is considered a women's domain but includes various areas of work that are occupied to different degrees by women and men, it is of particular interest whether the career and educational decisions of former CSCW apprentices are also influenced by the area of work in which they were trained. The analyses are based on data from a longitudinal study. The results show a significant influence of gender and the chosen work area on the CSCWs career and educational pathway. The findings are discussed in the context of individual and institutional characteristics in the social sector.

Keywords

longitudinal career study, social care, vocational choice, gender, tertiary education

1 Context

Vocational training plays a key role in the Swiss educational system. After completing compulsory school, two-thirds of young people choose initial vocational education and training



(VET) at the upper secondary level (SKBF, 2018). Graduates are then free to enter the labour market directly or to pursue higher vocational qualifications at the tertiary level.

As in most OECD countries, initial vocational training is strongly segregated according to gender in Switzerland (OECD, 2017). Women are underrepresented in Science, Technology, Engineering, and Mathematics, and men are underrepresented in Education, Health and Welfare fields (WEF, 2017). This horizontal gender segregation has been stable for decades. While studies on the transition to upper secondary and university tertiary levels clearly show gender-typical vocational and study choices, the influence of gender on entry into professional colleges (tertiary level B) has not yet been researched in depth (Kriesi & Imdorf, 2019). Although existing research often distinguishes between different tertiary educational pathways (e.g., university and professional college), it rarely analyses specific occupational fields with their respective educational systems (Nägele et al., 2018; Schmid & Gonon, 2016).

In this study, we aim to fill this gap and focus on one of the most frequently chosen basic VET occupations: ‘Certified Social Care Worker’ (CSCW). In Switzerland, this occupation is particularly popular among young women. The respective apprenticeship can be completed in three different work areas. The most popular is childcare, followed by disabled care and elderly care. After certification, CSCWs can either work in the work area they were trained in, change work area, pursue tertiary vocational education in social care at a professional college of higher education, or – if they have a federal vocational baccalaureate degree – enter a university for applied sciences. Understanding what causes their decisions and whether gender inequalities play a role will be of great significance for the future of the tense skilled labour situation in the social sector (IWSB, 2016).

This contribution will present institutional and individual explanations for the effects of gender on vocational and educational decisions after an apprenticeship in social care work. Specifically, we focus on two dimensions: First, the decision to remain in or change the area of work chosen during the upper secondary level (horizontal segregation, i.e., segregation by work area); and second, the decision to enter higher tertiary education (vertical segregation, i.e. segregation by educational level).

We examined these dimensions cross-sectionally in a previous study (Aeschlimann et al., 2019), where the two decision dimensions were captured by the apprentices’ intentions for their future work situation. In this follow-up study, we use longitudinal data that allows us to examine the effects of decision-making.

2 Theoretical background

Educational and occupational career decisions are influenced by individual and institutional factors. The institutional context provides the framework for individual decisions and sets structural constraints (Esser, 1999). In this light, we outline theoretical considerations from an institutional and individual perspective on the role gender plays in vocational and educational decisions after initial VET, namely for the horizontal dimension (whether to change work area) and the vertical dimension (whether to attend higher tertiary education), with regard to the social care field.

2.1 Horizontal gender segregation: the choice to retain or change work area

In Switzerland, the dual VET system, which requires young people to make career decisions at an early stage, is held responsible for the high degree of gender segregation in occupations (Imdorf et al., 2014). It can be assumed that the early link between VET and the subsequent occupation leads to the choice of occupation having a diminishing effect on career mobility (Trappe & Rosenfeld, 2004). However, this is not the case for all occupations. A study by Schwiter et al. (2014) showed that especially women in male-typical occupations benefit from

their atypical choice, while the choice of female-typical occupations is hardly worthwhile for either gender.

Due to the primarily caring nature of CSCWs' work, this job description is likely to be associated with female-stereotyped skills and attributes (e.g., caring, empathy, and communication skills) that are considered essential for success in this occupation (Charles & Bradley, 2009). In contrast, male-typed skills, and attributes, such as physical strength and more intellectual and analytical performance (Buchmann & Kriesi, 2012), tend to be associated with typical "male fields" (Trede & Kriesi, 2016).

Additionally, it is worth looking at the gender ratio within an occupation. Although women choose the profession CSCW far more often, a gender hierarchy within the profession can be identified. For example, most management positions are held by men (59%; Müller et al., 2017). This gender hierarchy within the profession and within the work areas possibly determines not only the care workers' own self-image and preferences, but also their own aspirations towards higher education (Li et al., 1998).

In this respect, we expect that female CSCWs will tend to continue working after graduation, while male CSCWs will move into niche activities with male connotations and out of direct care work. Moreover, there is a clear difference in the gender ratio between the two work areas of disabled care and childcare (the proportion of men in disabled care is 30%, in childcare 8 %; Aeschlimann et al., 2019). This suggests that there is horizontal gender segregation between the areas of work, in that female CSCWs trained in childcare stay in this field, while their male colleagues leave. In the training field of care for the disabled, the tendencies of female and male CSCWs are likely to be reversed.

Hypothesis 1: Those who work in a gender-conforming area of work remain in the same area after completing their apprenticeship. In contrast, those who do not have a higher probability of switching (from the current area) to a gender-conforming area.

2.2 Vertical gender segregation: Attending higher education

Vertical segregation comprises hierarchical differences in wages and status between male- and female-dominated occupations (Charles, 2005). Despite the above-average participation of women in higher education in Switzerland (Becker, 2013), men still enter the labor market with steeper careers in prestigious professions and fields of work. Several studies demonstrate this mechanism for the transition from initial VET to the tertiary level in the health care sector, where men more often pursue careers in more prestigious higher education professions than women, who tend to choose the non-academic tertiary level and prefer nursing activities (Kriesi & Trede, 2014).

In addition, another explanation for this mechanism can be found in human capital cost-benefit considerations. Lower expectations with regard to returns on education due to anticipated career interruptions and lower workloads, in conjunction with gender-specific socialization influences, can be a reason why women forego higher education or choose study fields that are associated with lower investment costs (Achatz, 2018).

Applied to the educational career options in the social sector, this could mean that male CSCWs attend tertiary level programs more often than female CSCWs and within the tertiary level prefer a more investment-intensive track such as a university of applied sciences instead of a shorter and more easily accessible track such as a professional college:

Hypothesis 2: Women have a lower probability to enter tertiary education, but when they do, they end up in tracks with lower investment (e.g., professional colleges), as opposed to men who are more likely to enter universities of applied sciences.

3 Approach

3.1 Sample

We based our analyses on a longitudinal survey on CSCWs in Switzerland. The full cohort of the CSCW apprentices was surveyed in 2016 in vocational schools at the beginning of their final year of training. The data include their anticipated educational or occupational pathways, variables related to their work experience and motivation, as well as variables such as social background, age, and language region. In this first wave, a high response rate of 83% was reached ($n = 2,160$). The second wave was conducted in the first half of 2019, one and a half years after the completion of the apprenticeship training, with a response rate of 51% ($n = 1,092$).

The longitudinal data allowed us to observe the transition into the labour market, tertiary education, or other alternative paths within one and a half years after the completion of apprenticeship training. We restrict the samples to individuals who were trained in the two largest work areas of either childcare or disabled care. After accounting for missing values, the restricted sample consists of 1,519 respondents for the first wave (T1). In the second wave, the same target group is represented by 907 individuals (T2).

3.2 Measures

The key measure for this study is the occupation 1.5 years after the completion of their apprenticeship. The information about career intention was collected in the first wave in 2016 (T1) and in the second wave (T2) we ascertained their current occupation. Back then, we created two dependent variables, describing the prospective horizontal and the presumable vertical mobility (Aeschlimann et al. 2019), which can be now also used for the T2-analysis.

The *first dependent variable* had three categories pertaining to horizontal mobility: (a) remaining in the occupation and the work area they were trained in, (b) remaining in the occupation with change to another work area, for instance from childcare to disabled care, and (c) “other”, which included continuing education and leaving the occupational field.

The *second dependent variable* focused mainly on vertical mobility: (a) remaining in the occupation, (b) pursuing tertiary education at a professional college of higher education in the social care field, (c) pursuing tertiary education at a university of applied sciences in social care, (d) other, including for example leaving the occupational field.

The *independent variable* is our target group of female and male (former) apprentices in childcare and disabled care. It combines gender and work area, resulting in four categories: (1) women childcare, (2) men childcare, (3) women disabled care, and (4) men disabled care.

Control variables. Our analyses are controlled for other influences that can have an impact on educational and occupational decisions in relation to gender (e.g., socio-economic status [SES], secondary school track, language region).

4 Findings

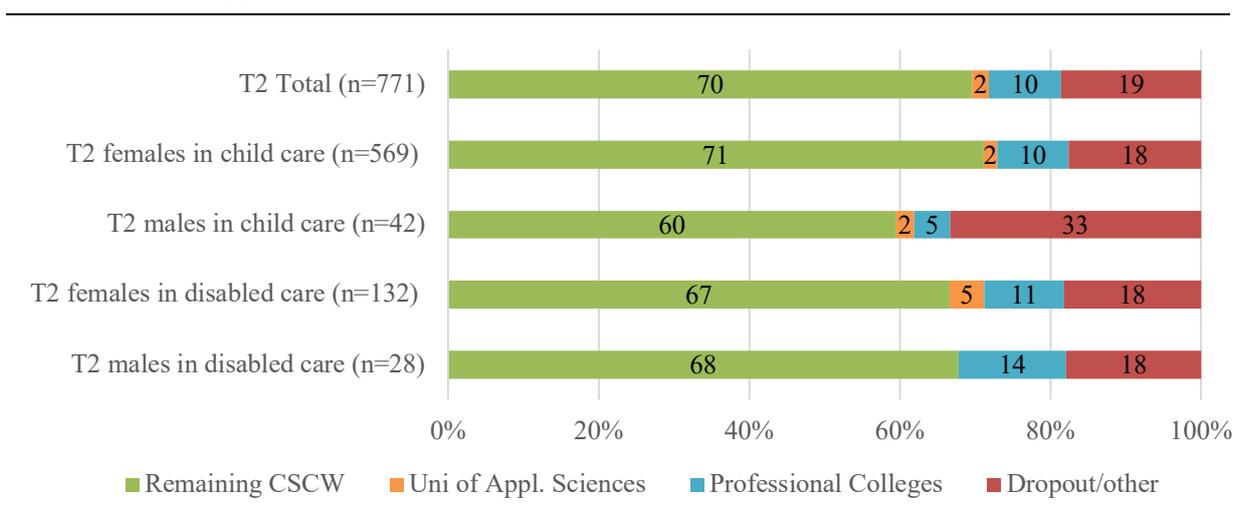
In the following, we describe the decision of CSCWs to remain in the same work area (*Hypothesis 1*) and the decision whether or not to pursue higher qualifications 1.5 years after completing apprenticeship (*Hypothesis 2*). We then present the results of regression analysis. The model compares the chance of attending tertiary vocational education in relation to remaining at upper secondary level.

4.1 What career pathway did the former CSCW apprentices taken 1.5 years after graduation?

Descriptive results show that in total 70 percent of the former apprentices work at present as CSCWs, and 12 percent are currently in education, either at a university of applied sciences or a professional college (see Figure 1). The remaining 19 percent dropped out of the social care field. There is one rather obvious difference between men and women in childcare: one-third of the former dropped out of social care, significantly more compared to only 18% of the latter ($p=0.07$)¹.

Figure 1

Former CSCW apprentices' current employment situation at T2



Note. Horizontal dimension: Working as CSCW and continuing or changing work area.

The vast majority of the 536 individuals working as a CSCW (70%, see Figure 1) work in the same work area as their apprenticeship (91%); only 7% changed the area of care. The remaining 2% work as child minder or in a comparable job. Although work area changes do not appear often during the observed period, we can identify remarkable differences between the four target groups: women in childcare are the least mobile with only 3.5% changing the work area, significantly less often than women in disabled care (20%). Interestingly, most of these latter women moved into childcare. Only a marginal share of men changed their work area, regardless of the area they were trained in.

Vertical dimension: Attending tertiary vocational education

Overall, 12% of CSCWs attend tertiary vocational education 1.5 years after completing their apprenticeship (see Figure 1). However, CSCWs choose an education program in a professional college (10%) far more often than at a university of applied sciences (2%). Former CSCW apprentices in disabled care attend higher education more frequently than those in childcare. Men in disabled care only attend professional colleges, whereas their female colleagues also go to universities of applied sciences. It is remarkable that only about 7% of males in childcare

¹ Note that for the variable current occupation, we document 136 missing values, which represents 15% of the cohort T2. For men in childcare there are significantly more missing values than women in childcare (28% vs. 14%; $p=0.03$).

attend higher vocational education, which is roughly half relative to those in disabled care and the lowest rate among all four groups. But these differences are not statistically significant

4.2 Does gender and the initially chosen area of work increase the probability of attending tertiary vocational education 1.5 years after completion of the CSCW training?

We ran a multinomial logistic regression on the chances to either work as CSCW, continue education at tertiary level, or drop out. We combined the two options of attending a professional college or university of applied sciences (see Figure 1) due to case numbers. Preliminary multivariate results in line with the descriptive results in the Figure 1 show that the probability of attending tertiary vocational education is higher for women and men in disabled care and lower for men in childcare compared to women in childcare. Furthermore, the probabilities are higher for apprentices with a higher SES or if they enrolled in a higher school track before their apprenticeship or if they are from the Italian- or French-speaking part of Switzerland.

The risk of dropping out of the social sector is much higher for males in childcare in comparison to their female counterparts, but not for males and females in disabled care. Former apprentices from the French-speaking part are less likely to drop out than those from the German-speaking part.

5 Conclusion

This contribution analysed the role of gender in education and career decisions in the social sector. We investigated the extent to which gender and the initial work area influence the decision of CSCW learners to remain in the same area of work 1.5 years after completing their apprenticeship or to attend tertiary vocational education. According to previous studies, educational decisions are potentially shaped by gender (Achatz, 2018; Trede & Kriesi, 2016). So far, it has not been investigated whether and how gendered decisions occur in the field of social work in relation to higher tertiary vocational education.

Overall, the results support the assumption that young women and men in childcare and disabled care have different probabilities of remaining in their initial area of work or entering tertiary vocational education.

First, the descriptive results on horizontal mobility confirm Hypothesis 1 at least partially. Women in childcare most often remain in their area of work, while every fifth women from disabled care moves to the more “gender-confirming” area of childcare 1.5 years later. This is not the case for men. Only a marginal share of men in both work areas changed work area. Similar tendencies could have been observed in the previous study (Aeschlimann et al, 2019). While women’s choice in childcare is largely confirmed 1.5 years later, a partial shift of women from the field of disabled care to the gender-conform work area of childcare was identified. Men have the tendency to leave the social sector altogether instead of changing the area of work. In view of the increasing demand for skilled workers in the social sector (BSS, 2011; IWSB, 2016), special attention must be paid to this phenomenon in the future.

Second, the descriptive and preliminary multivariate results on vertical mobility could not confirm Hypothesis 2. In general, men are not more likely to choose tertiary vocational education in comparison to women. However, an already well-known fact from the previous study is confirmed again: Mobility in the work area of childcare seems to be most limited, both in terms of changing work area and in terms of further tertiary education.

However, it is important to note that the observed time horizon of 1.5 years is still too short to draw far-reaching conclusions for the social care field, especially in regard to the only 12% attending higher vocational education, as longitudinal data on career paths show that entry into higher education can still happen at a later point in time. Nation-wide, the share of graduates of a three-year apprenticeship who pursue another educational program increases over time, from 16% one and a half years after graduation up to 20% three and a half years after completion of

the apprenticeship (BFS, 2018). Thus, the future will show whether a development will take place in this regard.

References

- Achatz, J. (2018). Geschlechtersegregation im Arbeitsmarkt. In M. Abraham & Th. Hinz (Eds.), *Arbeitsmarktsoziologie* (pp. 389-435). Springer.
- Aeschlimann, B., Trede, I., Müller, M., & Neumann, J. (2019). Die Bedeutung des Geschlechts beim Übergang in die berufliche Tertiärbildung im Sozialbereich. In E. Makarova (Ed.), *Gendersensible Berufsorientierung und Berufswahl. Beiträge aus Forschung und Praxis* (pp. 68-87). hep.
- Becker, R. (2013). Editorial: Bildungsungleichheit und Gerechtigkeit in der Schweiz. *Schweizerische Zeitschrift für Bildungswissenschaften*, 35, 405-413.
- BFS. (2018). *Übergänge nach Abschluss der Sekundarstufe II und Integration in den Arbeitsmarkt. Längsschnit-
tanalysen im Bildungsbereich, Ausgabe 2018*. Bundesamt für Statistik.
- BFS. (2020). *Statistik der beruflichen Grundbildung 2019*. <https://www.bfs.admin.ch/bfs/de/home/statistiken/bildung-wissenschaft/personen-ausbildung/sekundarstufe-II/berufliche-grundbildung-lehrverhaelt-nisse.assetdetail.12307128.html>
- Buchmann, M., & Kriesi, I. (2012). Geschlechtstypische Berufswahl: Begabungszuschreibungen, Aspirationen und Institutionen. *Kölner Zeitschrift für Soziologie und Sozialpsychologie*, 52, 256-280.
- Charles, M. (2005). *Entwicklung der beruflichen Segregation nach Geschlecht und Staatsangehörigkeit in der Schweiz, 1970-2000*. BFS.
- Charles, M., & Bradley, K. (2009). Indulging our gendered selves? Sex segregation by field of study in 44 countries. *American Journal of Sociology*, 114, 924-976.
- Dubach, Ph., Legler, V., Morger, M., & Stutz, H. (2017). *Frauen und Männer an Schweizer Hochschulen: Indikatoren zur Chancengleichheit in Studium und wissenschaftlicher Laufbahn*. BASS.
- Esser, H. (1999). *Soziologie. Spezielle Grundlagen. Band 1: Situationslogik und Handeln*. Campus.
- Frey, M., Braun, N., & Waeber, P. (2011). *Fachkräftesituation im Sozialbereich. Auswertungen anhand des Indikatorensystems Fachkräftemangel. Schlussbericht*. SAVOIRSOCIAL.
- Imdorf, C., Sacchi, S., Wohlgemuth, K., Cortesi, S., & Schoch, A. (2014). How cantonal education systems in Switzerland promote gender-typical school-to-work transitions. *Swiss Journal of Sociology*, 40(2), 175-196.
- IWSB - Institut für Wirtschaftsstudien Basel. (2016). *Fachkräfte- und Bildungsbedarf für soziale Berufe ausgewählten Arbeitsfeldern des Sozialbereichs*. SAVOIRSOCIAL.
- Kriesi, I. & Imdorf, C. (2019). Gender segregation in education. In R. Becker (Ed.), *Research handbook of sociology of education*. Edward Elgar Publishing.
- Kriesi, I., & Trede, I. (2014). *Monitoring eidgenössischer Berufsprüfungen, höherer Fachprüfungen und ihrer Vorbereitungskurse. Mandat des Staatssekretariats für Bildung, Forschung und Innovation (SBFI)*. EHB.
- Li, J. H., Buchmann, M., König, M., & Sacchi, S. (1998). Patterns of mobility for women in female-dominated occupations: An event-history analysis of two birth cohorts of Swiss women. *European Sociological Review*, 14(1), 49-67.
- Müller, M., Trede, I., Neumann, J., & Kriesi, I. (2017). *Arbeitnehmende im Sozialbereich. Bericht im Auftrag von SAVOIRSOCIAL*. SAVOIRSOCIAL.
- Nägele, C., Neuenschwander, M. P., & Rodcharoen, P. (2018). Higher education in Switzerland: Predictors of becoming engaged in higher vocational or academic education – the role of workplace factors. *International Journal for Research in Vocational Education and Training*, 5(4), 264–284.
- OECD (2017). *The pursuit of gender equality: An uphill battle*. OECD.
- Schmid, E., & Gonon, P. (2016). Übergang in eine Tertiärbildung nach einer beruflichen Grundbildung in der Schweiz. In: K. Scharenberg, S. Hupka-Brunner, M. M. Bergman, & Th. Meyer (Eds.). *Transitionen im Jugend- und jungen Erwachsenenalter: Ergebnisse der Schweizer Längsschnittstudie TREE*. 9, 208-230.
- Schwiter, K., Hupka-Brunner, S., Wehner, N., Huber, E., Kanji, S., Maihofer, A., & Bergman, M. (2014). Warum sind Pflegefachmänner und Elektrikerinnen nach wie vor selten? Geschlechtersegregation in Ausbildungs- und Berufsverläufen junger Erwachsener in der Schweiz. *Swiss Journal of Sociology*, 40(3), 401-428.
- SKBF. (2018). *Bildungsbericht Schweiz 2018*. Schweizerische Koordinationsstelle für Bildungsforschung.
- Trappe, H., & Rosenfeld, R. A. (2004). Occupational Sex Segregation and Family Formation in the former East and West Germany. *Work and Occupations*, 31(2), 155–192.
- Trede, I., & Kriesi, I. (2016). Übergang in die höhere Berufsbildung im Gesundheitsbereich: Die Rolle von Geschlecht und Migrationshintergrund. In I. Horwath, I. Kriesi, B. Liebig, & B. Riegraf (Eds.), *Gender und Migration in der tertiären Hochschulbildung* (pp. 102-122). Westfälisches Dampfboot.
- WEF. (2017). *The Global Gender Gap Report*. World Economic Forum.

Biographical notes

Dr **Belinda Aeschlimann** is a senior researcher at the Swiss Federal Institute for Vocational Education and Training (SFIVET). Her research interests focus on transitions and trajectories, social and gender disparities, as well as on teaching and learning within the VET system.

Jörg Neumann is a research collaborator at SFIVET. His research interests lie in quantitative methods, education statistics, education pathways, and apprenticeship contract terminations.

Prof. Dr **Ines Trede** is head of the Swiss Observatory for Vocational Education and Training at SFIVET. Her research focuses on pathways and transitions in the education system, labour force situations in health and social care, and the development of the VET system.