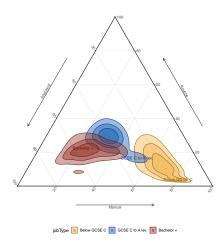
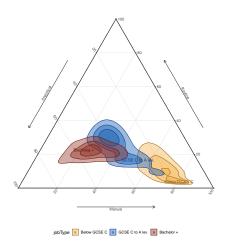
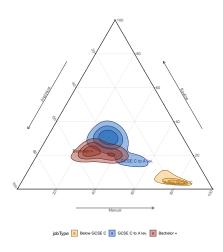
Figure 1: Exploring weighting schemes (density plots)

- (a) Observations in SES education-occupation-job type cell
- (b) $\sqrt{d_1d_2} \times observations_{LFS}$





- (c) $\sqrt{d_1d_2} \times observations_{LFS} \times observations_{SES}$
- (d) $\sqrt{d_1d_2} \times observations_{SES}$



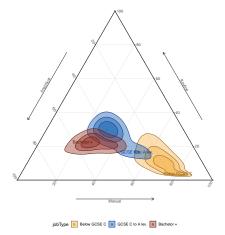
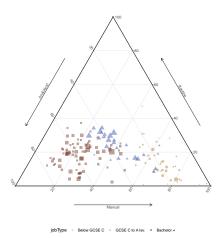
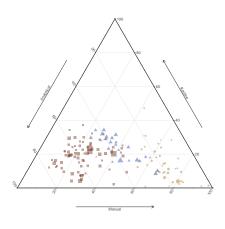


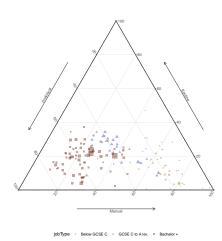
Figure 2: Exploring weighting schemes (scatterplots)

- (a) Observations in SES education-occupation-job type cell
- (b) $\sqrt{d_1d_2} \times observations_{LFS}$





- (c) $\sqrt{d_1d_2} \times observations_{LFS} \times observations_{SES}$
- (d) $\sqrt{d_1d_2} \times observations_{SES}$



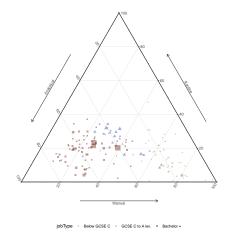
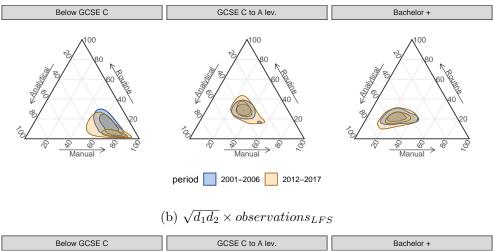
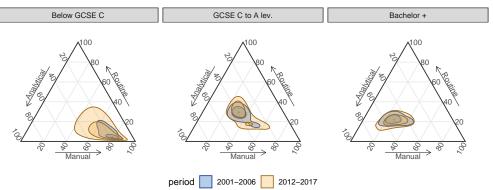


Figure 3: Exploring weighting: time change density plots

(a) Observations in SES education-occupation-job type cell





(c) $\sqrt{d_1d_2} \times observations_{LFS} \times observations_{SES}$

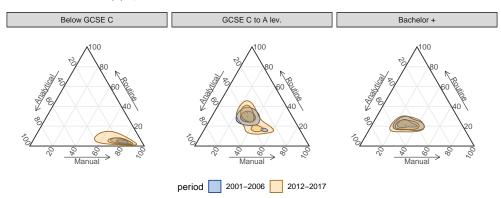
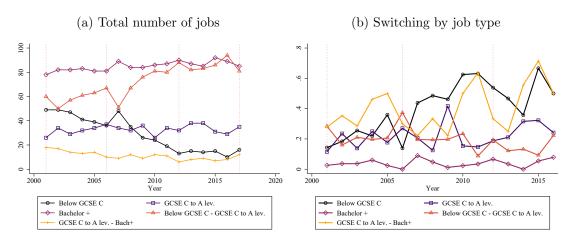


Figure 4: Number of jobs and switching jobs by category



(c) Share switching in triangle graphs

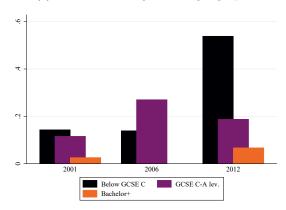


Table 1: Weight of switching vs non-switching jobs

	Low (1)	Mid (2)	High (3)	Low-Mid (4)	Mid-High (5)
$ \sqrt{distance} \sqrt{distance} * observations_{LFS} $		0.941 0.187		$0.871 \\ 0.285$	0.815 0.345

Figure 5: Number of job-level switches by job type, 2001-2017

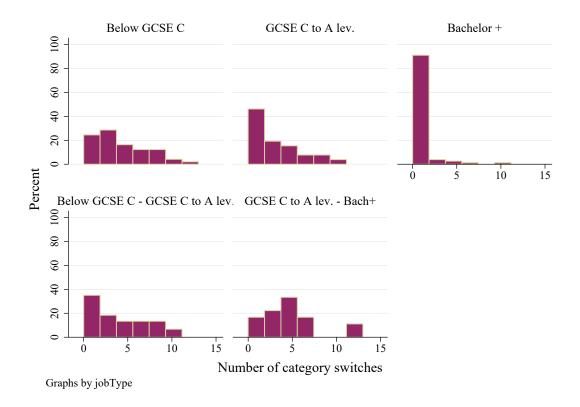


Table 2: Jobs with fixed job classification

Job type	Count	Avg. observations
Below GCSE C	2	533
GCSE C to A lev.	10	2223
Bachelor +	71	666
Below GCSE C - GCSE C to A lev.	17	1014
Total	100	878

Note: the table shows the number of occupations that did not change their job classification during 2001-2017. Observations correspond to the average number of observations in the job type-occupation cells over the period 2001-2017. Table generated on 30 May 2020 at 12:34:15.

Table 3: Transition of switching jobs

		Job type in 2017			
Job type in 2001	Mid	High	Low-Mid	Mid-High	Total
Low	0	0	9	0	9
Mid	0	0	1	1	2
Low-Mid	1	0	0	0	1
Mid-High	0	3	0	0	3
Total	1	3	10	1	15

Note: I switching job is an occupation that satisfies two conditions: (i) it changes category only once during 2001-2017, (ii) this change doesn't happen between 2001-2002 or 2016-2017. Table generated on 31 May 2020 at 13:46:45.

Table 4: List of switching jobs

Occupation	Observations
1121 prod. works & maintenance	2342
3541 sales representatives, ma	2660
3561 public service associates	1272
4111 civil service officers an	1964
5312 bricklayers, masons, roof	4842
6111 nursing aux, amb staff, d	1953
6231 housekprs and related occ	311
6232 caretakers	392
8117 mtl mkng & treating procs	107
8211 heavy goods vehicle drive	1905
8213 bus and coach drivers	683
8214 taxi, cab drivers and cha	1081
9121 labrers build & woodworki	950
9223 kitchen and catering assi	1960
9235 refuse and salvage occupa	201

Figure 6: Switching jobs

(a) Position in 2001

(b) Position in 2017

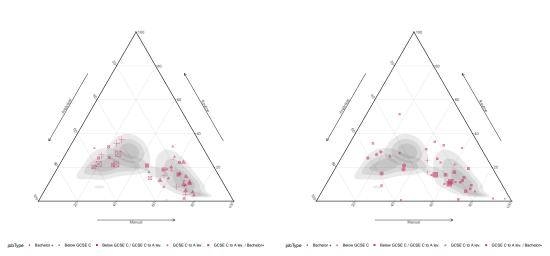


Table 5: Observations by occupation type

Job classification	Observations in SES
Low	98
Mid	1974
High	4192
Low-high	1548
Low to Low-Mid	571
Mid to Low-Mid	400
Mid to Mid-High	134
Low-Mid to Mid	154
Mid-High to High	576
Total	9647

Table 6: Average skill requirements by occupation type

Job classification	Analytical	Manual	Routine
Low	0.42	0.68	0.41
Mid	0.62	0.41	0.68
High	0.75	0.37	0.59
Low-high	0.53	0.63	0.59
Low to Low-Mid	0.45	0.67	0.38
Mid to Low-Mid	0.59	0.85	0.41
Mid to Mid-High	0.66	0.23	0.75
Low-Mid to Mid	0.59	0.70	0.71
Mid-High to High	0.72	0.32	0.62
Total	0.66	0.46	0.59

Note: the table shows average skill requirements over the whole 2001-2017 period. Table generated on 31 May 2020 at 15:05:18.

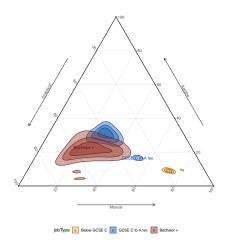
Table 7: Average skill requirents for switching jobs

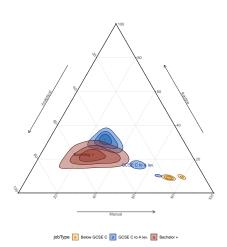
Job classification	Analytical	Manual	Routine
Low to Low-Mid			
Before change	0.444***	0.665***	0.331***
	(0.011)	(0.012)	(0.026)
After change	0.464***	0.670***	0.445***
	(0.013)	(0.015)	(0.032)
Observations	571	571	571
Mid to Low-Mid			
Before change	0.547***	0.821***	0.273***
	(0.020)	(0.016)	(0.045)
After change	0.599***	0.857***	0.452***
	(0.009)	(0.009)	(0.029)
Observations	400	400	400
Mid to Mid-High			
Before change	0.656***	0.234***	0.773***
	(0.016)	(0.019)	(0.039)
After change	0.700***	0.179***	0.600***
	(0.030)	(0.043)	(0.127)
Observations	134	134	134
Low-Mid to Mid			
Before change	0.557***	0.706***	0.644***
	(0.022)	(0.022)	(0.051)
After change	0.644***	0.699***	0.813***
	(0.022)	(0.029)	(0.049)
Observations	154	154	154
Mid-High to High			
Before change	0.715***	0.309***	0.621***
	(0.010)	(0.015)	(0.029)
After change	0.725***	0.325***	0.622***
	(0.009)	(0.016)	(0.028)
Observations	576	576	576

Figure 7: Limiting to jobs that stay in the same type (density plots)

(a) Observations in SES education-occupation-job type cell

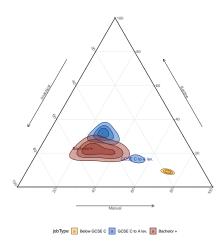
(b) $\sqrt{d_1d_2} \times observations_{LFS}$





(c) $\sqrt{d_1d_2} \times observations_{LFS} \times observations_{SES}$

(d) $\sqrt{d_1d_2} \times observations_{SES}$



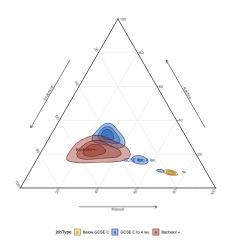
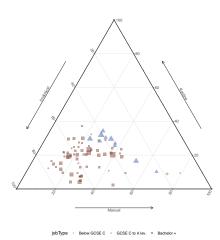
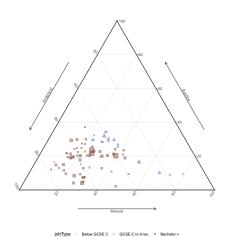


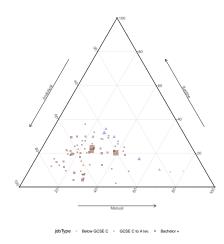
Figure 8: Limiting to jobs that stay in the same type (scatterplots)

- (a) Observations in SES education-occupation-job type cell
- (b) $\sqrt{d_1d_2} \times observations_{LFS}$





- (c) $\sqrt{d_1d_2} \times observations_{LFS} \times observations_{SES}$
- (d) $\sqrt{d_1d_2} \times observations_{SES}$



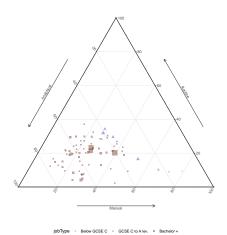


Table 8: Relative skill use in border jobs across education groups (simple average indexes)

	Analytical (1)	Manual (2)	Routine (3)
Below GCSE C / GCSE C-A lev. border			
GCSE C-A levels	0.042***	-0.007	0.066***
	(0.007)	(0.008)	(0.018)
Effect size	0.367	-0.035	0.387
Overall R^2	0.17	0.30	0.10
Observations	3,100.00	3,100.00	3,100.00
GCSE C to A lev. / Bachelor+ border			
Bachelor+	0.053***	-0.065**	* -0.021
	(0.009)	(0.016)	(0.031)
Effect size	0.454	-0.329	-0.122
Overall R^2	0.11	0.22	0.06
Observations	961.00	961.00	961.00

Note: all skill indexes range between 0 and 1. Regressions use individual-level data. Robust standard errors in parenthesis. Coefficients represent the difference relative the lower education level. I use dummy of basic to moderate PC use complexity as measure of routineness. I pool data from all years. Regressions include occupation fixed-effects. Effect sizes are computed as the regression coefficient divided by the standard deviation in the occupation-level skill indexes. Table generated on 20 May 2020 at 19:22:12.

Table 9: Relative skill use in border jobs across education groups (index with standardized variables)

	Analytical (1)	Manual (2)	Routine (3)
Below GCSE C / GCSE C-A lev. border			
GCSE C-A levels	0.042***	-0.008	0.066***
	(0.007)	(0.008)	(0.018)
Effect size	0.374	-0.040	0.387
Overall R^2	0.17	0.29	0.10
Observations	3,100.00	3,100.00	3,100.00
GCSE C to A lev. / Bachelor+ border			
Bachelor+	0.050***	-0.065**	* -0.021
	(0.009)	(0.016)	(0.031)
Effect size	0.443	-0.327	-0.122
Overall R^2	0.10	0.22	0.06
Observations	961.00	961.00	961.00

Note: all skill indexes range between 0 and 1. Regressions use individual-level data. Robust standard errors in parenthesis. Coefficents represent the difference relative the lower education level. I use dummy of basic to moderate PC use complexity as measure of routineness. I pool data from all years. Regressions include occupation fixed-effects. Effect sizes are computed as the regression coefficient divided by the standard deviation in the occupation-level skill indexes. Table generated on 20 May 2020 at 19:22:12.

Table 10: Relative skill use in border jobs across education groups (simple average indexes)

	Analytical	Manual	Routine
Base level: Below GCSE C	(1)	(2)	(3)
Below GCSE C / GCSE C-A lev. border			
GCSE C-A levels	0.042***	-0.005	0.066***
	(0.007)	(0.008)	(0.018)
Bachelor+	0.063***	-0.054***	0.027
	(0.010)	(0.012)	(0.025)
Overall \mathbb{R}^2	0.19	0.29	0.09
Observations	3,669	3,669	3,669
GCSE C to A lev. / Bachelor+ border			
GCSE C-A levels	0.050**	-0.096***	-0.096*
	(0.017)	(0.026)	(0.048)
Bachelor+	0.103***	-0.162***	-0.120*
	(0.017)	(0.025)	(0.048)
Overall R^2	0.11	0.26	0.05
Observations	1,076	1,076	1,076
Below GCSE C jobs			
GCSE C-A levels	0.022	0.011	0.081**
	(0.014)	(0.013)	(0.030)
Bachelor+	0.078**	-0.023	0.120
	(0.029)	(0.028)	(0.064)
Overall R^2	0.17	0.17	0.19
Observations	1,108	1,108	1,108
GCSE C-A lev. jobs			
GCSE C-A levels	0.020*	-0.050***	-0.007
	(0.009)	(0.012)	(0.022)
Bachelor+	0.054***	-0.099***	-0.108***
	(0.010)	(0.013)	(0.025)
Overall R^2	0.11	0.40	0.06
Observations	3,695	3,695	3,695
Bachelor+ jobs			
GCSE C-A levels	0.026*	-0.049*	-0.078*
	(0.012)	(0.020)	(0.033)
Bachelor+	0.067***	-0.122***	-0.167***
	(0.011)	(0.019)	(0.032)
Overall R^2	0.15	0.32	0.22
Observations	5,043	5,043	5,043

Note: all skill indexes range between 0 and 1. Regressions use individual-level data. Robust standard errors in parenthesis. I use dummy of basic to moderate PC use complexity as measure of routineness. I pool data from all years. Regressions include occupation fixed-effects. Effect sizes are computed as the regression coefficient divided by the standard deviation in the occupation-level skill indexes. Table generated on 20 May 2020 at 19:22:15.

Table 11: Relative skill use in border jobs across education groups (index with standardized variables)

Base level: Below GCSE C	Analytical (1)	Manual (2)	Routine (3)
Below GCSE C / GCSE C-A lev. border			
GCSE C-A levels	0.041***	-0.006	0.066***
	(0.007)	(0.008)	(0.018)
Bachelor+	0.061***	-0.055***	
	(0.009)	(0.012)	$\frac{(0.025)}{}$
Overall R^2	0.19	0.28	0.09
Observations	3,669	3,669	3,669
$GCSE\ C\ to\ A\ lev.\ /\ Bachelor+\ border$			
GCSE C-A levels	0.049**	-0.096***	-0.096*
	(0.016)	(0.026)	(0.048)
Bachelor+	0.099***	-0.162***	-0.120*
	(0.016)	(0.025)	(0.048)
Overall \mathbb{R}^2	0.11	0.26	0.05
Observations	1,076	1,076	1,076
Below GCSE C jobs			
GCSE C-A levels	0.022	0.011	0.081**
	(0.014)	(0.013)	(0.030)
Bachelor+	0.077**	-0.023	0.120
	(0.028)	(0.028)	(0.064)
Overall \mathbb{R}^2	0.16	0.17	0.19
Observations	1,108	1,108	1,108
GCSE C-A lev. jobs			
GCSE C-A levels	0.019*	-0.051***	-0.007
	(0.009)	(0.012)	(0.022)
Bachelor+	0.051***	-0.099***	
	(0.010)	(0.013)	(0.025)
Overall \mathbb{R}^2	0.11	0.40	0.06
Observations	3,695	3,695	3,695
Bachelor+ jobs			
GCSE C-A levels	0.025*	-0.050*	-0.078*
	(0.011)	(0.020)	(0.033)
Bachelor+	0.064***	-0.123***	-0.167***
	(0.011)	(0.019)	(0.032)
Overall R^2	0.15	0.32	0.22
Observations	5,043	5,043	5,043

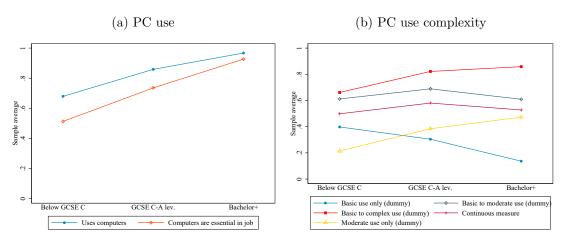
Note: all skill indexes range between 0 and 1. Regressions use individual-level data. Robust standard errors in parenthesis. I use dummy of basic to moderate PC use complexity as measure of routineness. I pool data from all years. Regressions include occupation fixed-effects. Effect sizes are computed as the regression coefficient divided by the standard deviation in the occupation-level skill indexes. Table generated on 20 May 2020 at 19:22:15.

Table 12: Relative skill use across education groups (simple average indexes)

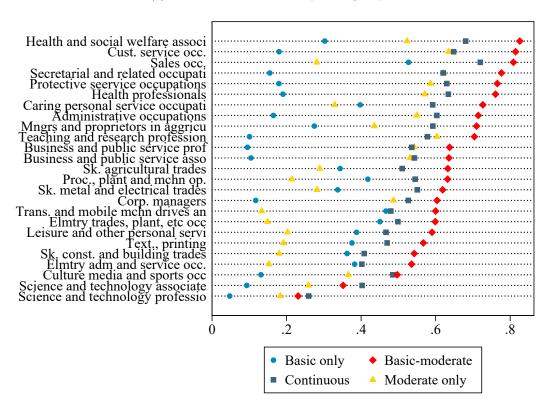
	Analytical (1)	Manual (2)	Routine (3)
GCSE C-A levels	0.034*** (0.005)	-0.018** (0.006)	0.043*** (0.011)
Effect size	0.293	-0.090	0.254
Bachelor+	0.072*** (0.005)	-0.081*** (0.007)	-0.039** (0.013)
Effect size	0.618	-0.409	-0.227
Overall R^2 Observations	$0.35 \\ 14,592$	$0.44 \\ 14,592$	0.13 $14,592$

Note: all skill indexes range between 0 and 1. Regressions use individual-level data. Robust standard errors in parenthesis. Coefficents represent the difference relative the lower education level. I use dummy of basic to moderate PC use complexity as measure of routineness. I pool data from all years. Regressions include occupation fixed-effects. Effect sizes are computed as the regression coefficient divided by the standard deviation in the occupation-level skill indexes. Table generated on 27 May 2020 at 20:10:35.

Figure 9: PC use complexitity across different occupation groups



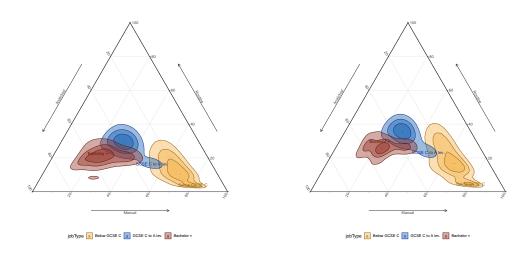
(c) PC use in different occupation groups



Note: basic use involves routine procedures such as printing and invoicing. Moderate use involves use of email and word processing and/or spreadsheets. Complex use involves use for statistical analysis. Table generated on 11 May 2020 at 10:34:54.

Figure 10: Comparison of routine measures

(b) Routine PC continuous



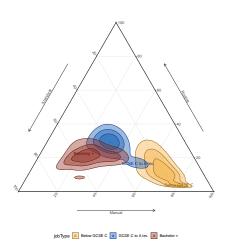
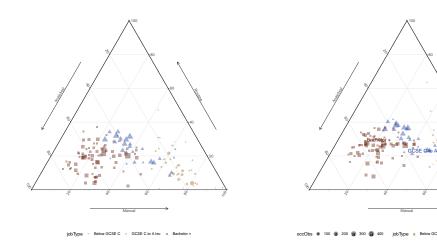


Figure 11: Comparison of routine measures (scatterplots)

(b) Routine PC continuous



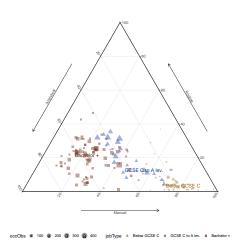
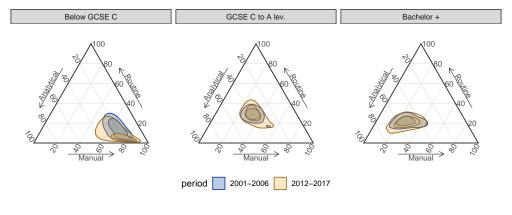
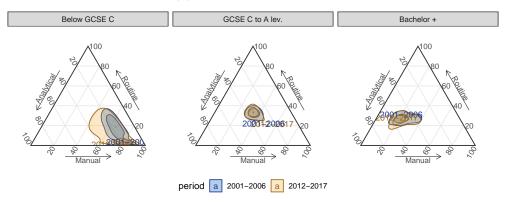


Figure 12: Change across time - comparison of routine measures $\,$



(b) Routine PC continuous



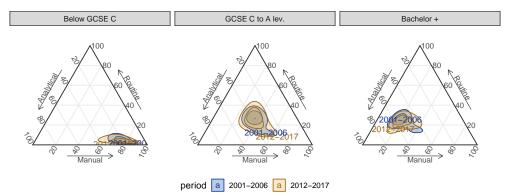
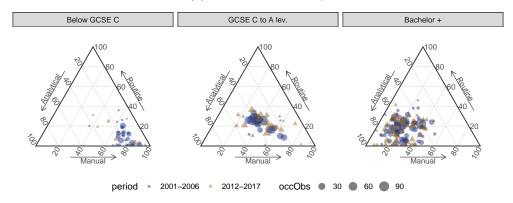
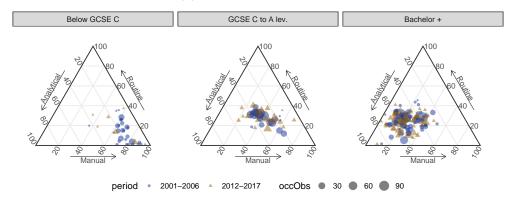


Figure 13: Change across time - comparison of routine measures (scatterplots)



(b) Routine PC continuous



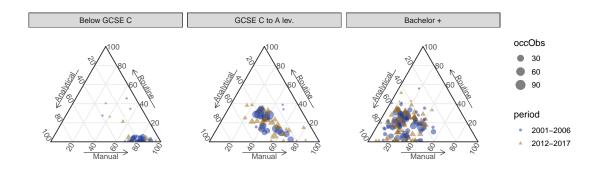
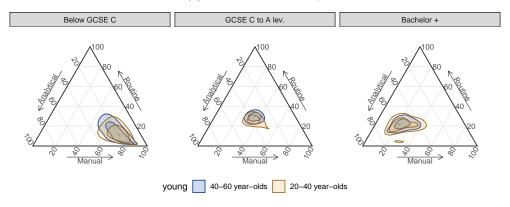
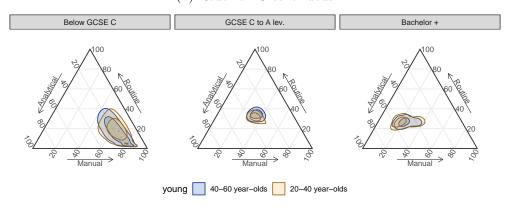


Figure 14: Young versus old workers



(b) Routine PC continuous



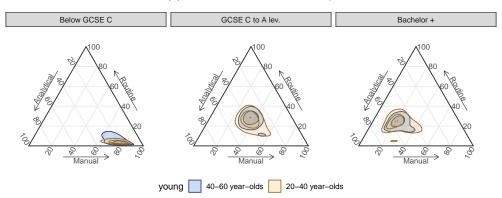
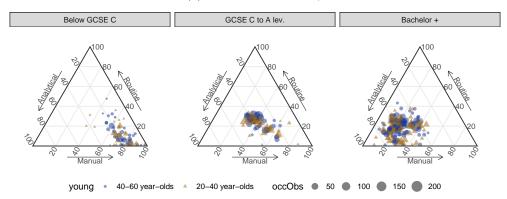
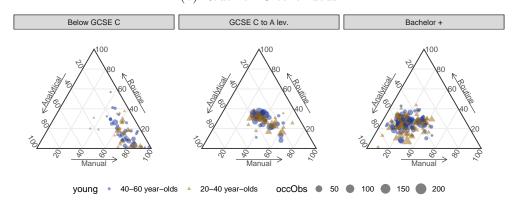


Figure 15: Young versus old workers



(b) Routine PC continuous



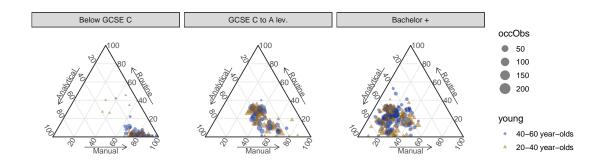
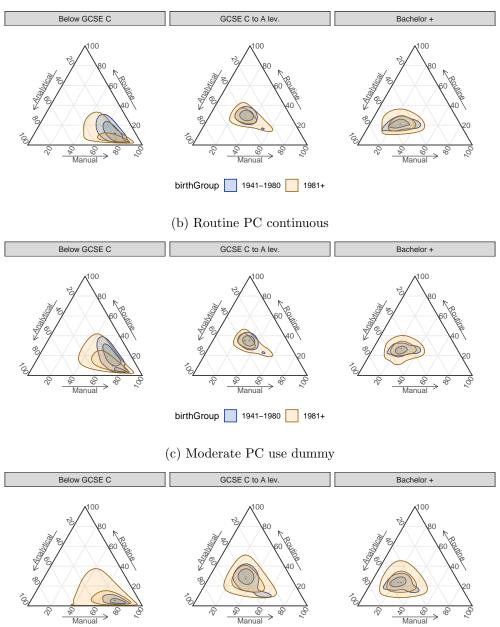
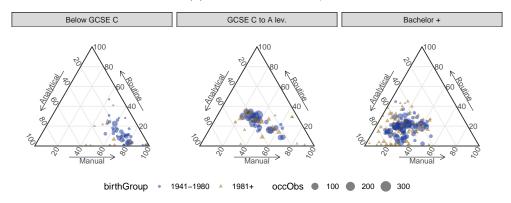


Figure 16: Skill use by birth cohort



birthGroup 1941–1980 1981+

Figure 17: Skill use by birth cohort



(b) Routine PC continuous

