Table 1: 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 2: 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 27 May 2020 at 17:52:06.

Table 3: 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 1: Switching jobs

# (a) Position in 2001

(b) Position in 2017

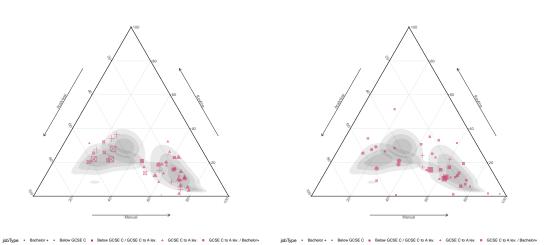
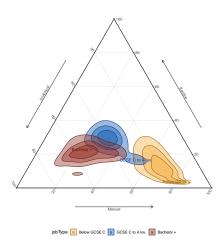
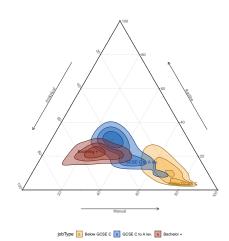


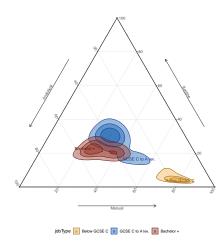
Figure 2: Exploring weighting schemes (density plots)

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



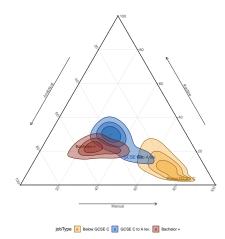
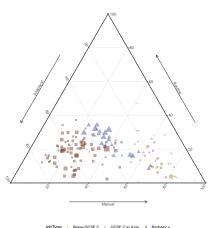
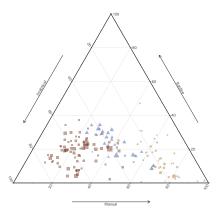


Figure 3: Exploring weighting schemes (scatterplots)

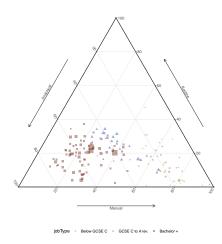
- (a) Observations in SES education-occupation-job type cell
- (b)  $\sqrt{d_1d_2} \times observations_{LFS}$





job type - Basin Code of - Good Old Prior. - Basinasi V

- inhType + Below GCSE C + GCSE C to A lev | | Bachelor +
- (c)  $\sqrt{d_1d_2} \times observations_{LFS} \times observations_{SES}$
- (d)  $\sqrt{d_1d_2} \times observations_{SES}$



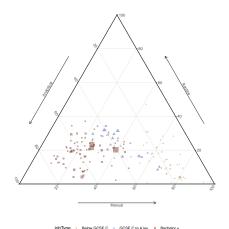
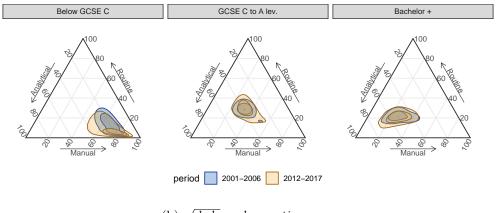
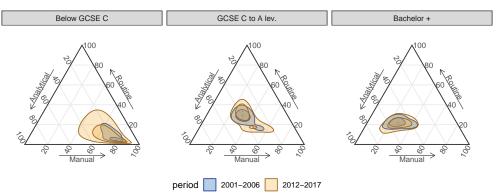


Figure 4: Exploring weighting: time change density plots

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



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



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

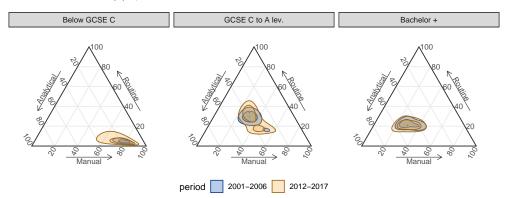
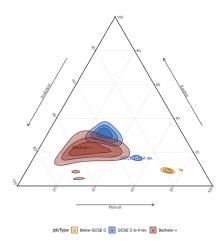
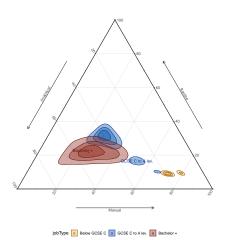


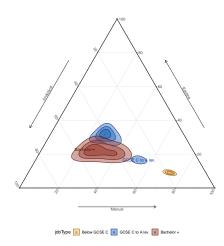
Figure 5: Limiting to jobs that stay in the same type (density plots)

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



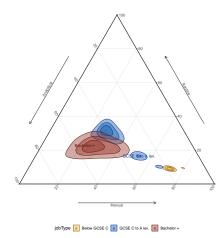
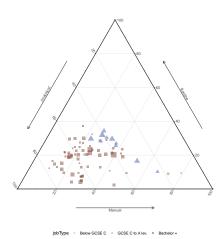
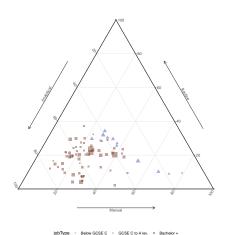


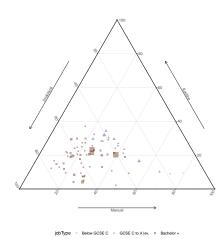
Figure 6: Limiting to jobs that stay in the same type (scatterplots)

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



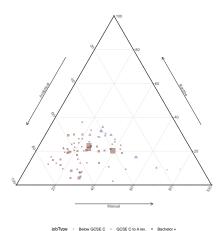
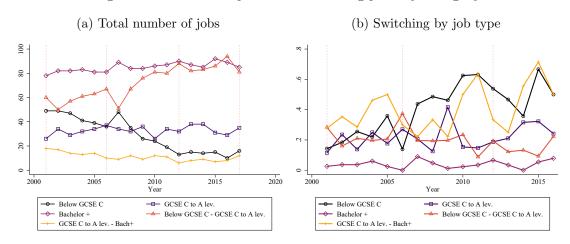


Figure 7: Number of jobs and switching jobs by category



### (c) Share switching in triangle graphs

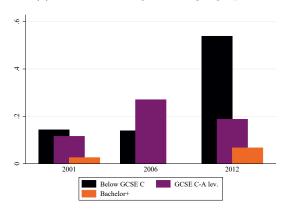


Table 4: Weight of switching vs non-switching jobs

	<b>Low</b> (1)	<b>Mid</b> (2)	High (3)	Low-Mid (4)	Mid-High (5)
$ \sqrt{distance}  \sqrt{distance} * observations_{LFS} $		0.944 0.187		$0.871 \\ 0.285$	0.815 $0.345$

Figure 8: Number of job-level switches by job type, 2001-2017

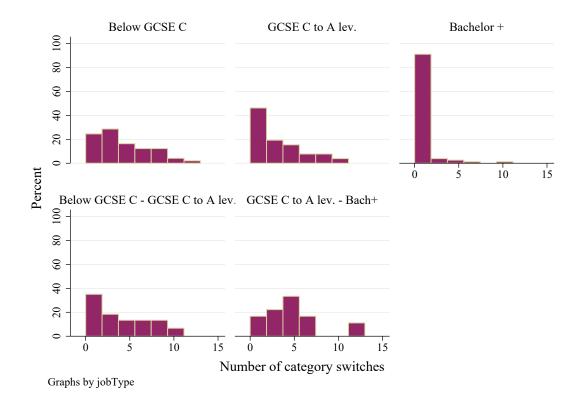


Table 5: Relative skill use in border jobs across education groups (simple average indexes)

	Analytical	Manual	Routine
	(1)	(2)	(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 $R^2$ 9	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 6: 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 7: Relative skill use in border jobs across education groups (simple average indexes)

Base level: Below GCSE C	Analytical (1)	Manual (2)	Routine (3)
Below GCSE C / GCSE C-A lev. border			
GCSE C-A levels	0.042***	-0.005	0.066***
Bachelor+	(0.007) $0.063***$ $(0.010)$	(0.008) -0.054*** (0.012)	(0.018) $0.027$ $(0.025)$
Overall $R^2$	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** (0.017)	-0.096*** (0.026)	-0.096* (0.048)
Bachelor+	0.103*** (0.017)	-0.162*** (0.025)	-0.120* (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**
D. 1.1.	(0.014)	(0.013)	(0.030)
Bachelor+	0.078** $(0.029)$	-0.023 $(0.028)$	0.120 $(0.064)$
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
GODD C-11 ICVCIS	(0.009)	(0.012)	(0.022)
Bachelor+	0.054***	-0.099***	-0.108***
	(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	0.026*	-0.049*	-0.078*
D 1.1 .	(0.012)	(0.020)	(0.033)
Bachelor+	0.067*** (0.011)	-0.122*** (0.019)	-0.167*** (0.032)
Overall $\mathbb{R}^2$	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 8: 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***	0.027
	(0.009)	(0.012)	(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 $R^2$	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 $R^2$	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***	-0.108***
	(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	0.025*	-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

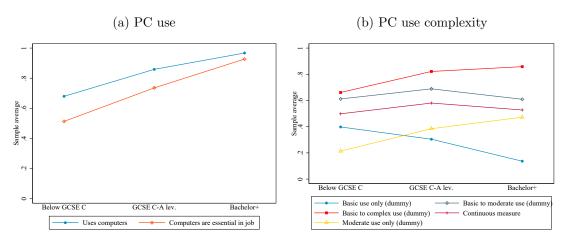
Note: all skill indexes range between 0 and 1. Regressions use individual-level data. Robust standard errors in parenthesis. I use dummy of basic to moderate PC use complexity as measure of routineness. I pool data from all years. Regressions include occupation fixed-effects. Effect sizes are computed 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 9: Relative skill use across education groups (simple average indexes)

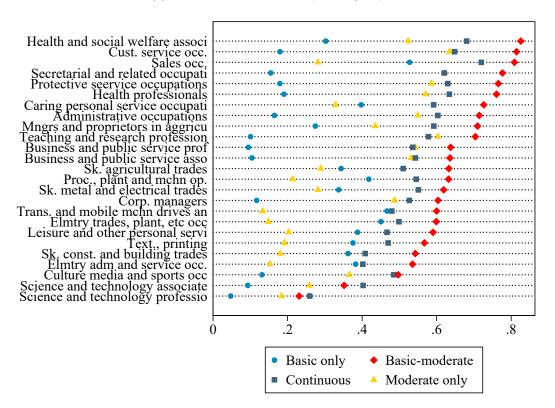
	Analytical (1)	Manual (2)	Routine (3)
GCSE C-A levels	0.034*** (0.005)	-0.018** (0.006)	0.043*** (0.011)
Effect size	0.293	-0.090	0.254
Bachelor+	0.072*** (0.005)	-0.081*** (0.007)	-0.039** (0.013)
${\it Effect \ size}$	0.618	-0.409	-0.227
Overall $R^2$ Observations	$0.35 \\ 14,592$	0.44 $14,592$	0.13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

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



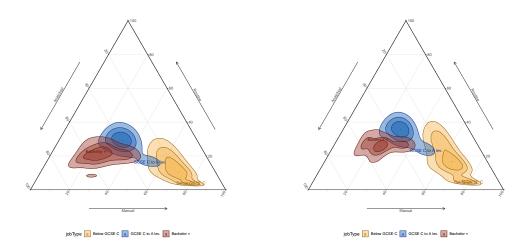
(c) PC use in different occupation groups



**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



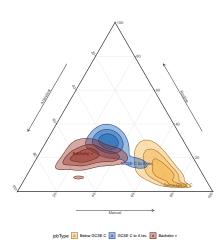
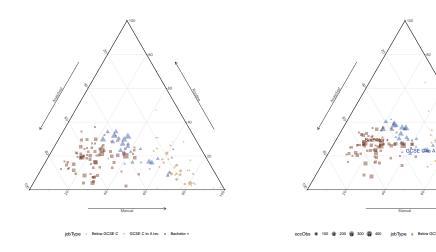


Figure 11: Comparison of routine measures (scatterplots)

## (b) Routine PC continuous



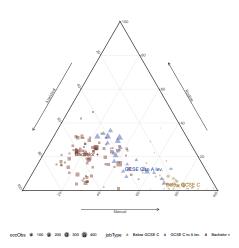
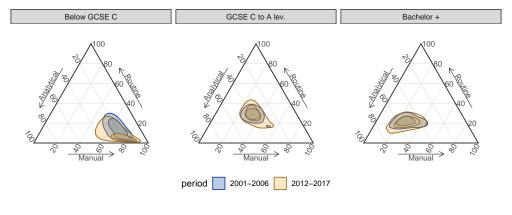
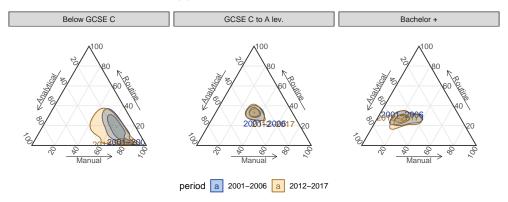


Figure 12: Change across time - comparison of routine measures  $\,$ 



### (b) Routine PC continuous



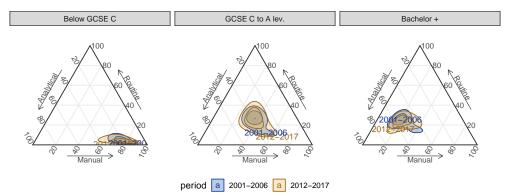
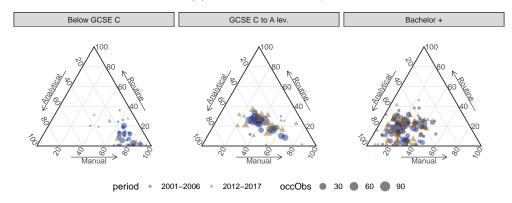
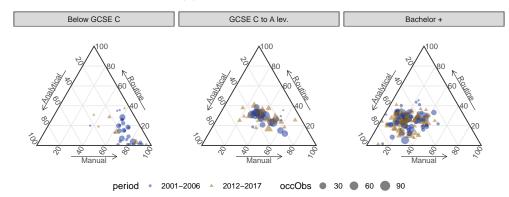


Figure 13: Change across time - comparison of routine measures (scatterplots)



#### (b) Routine PC continuous



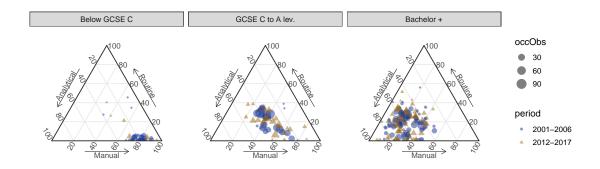
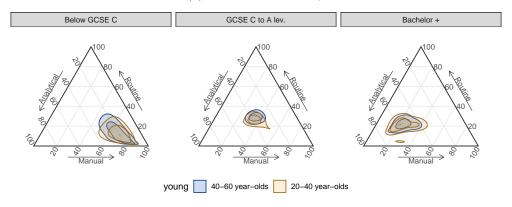
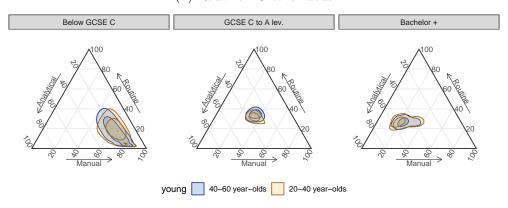


Figure 14: Young versus old workers



### (b) Routine PC continuous



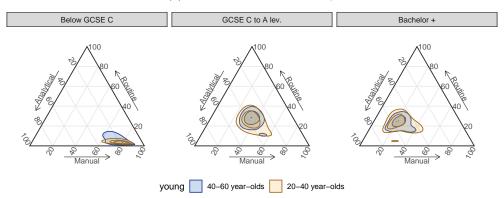
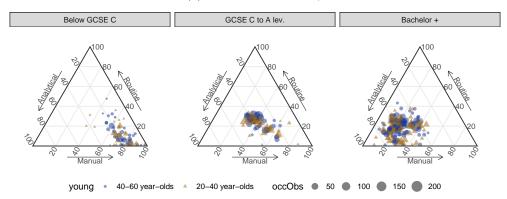
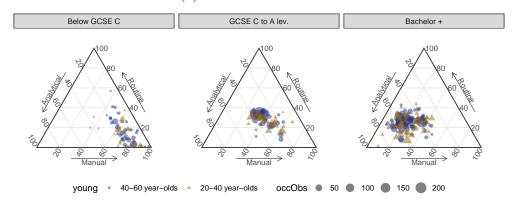


Figure 15: Young versus old workers



#### (b) Routine PC continuous



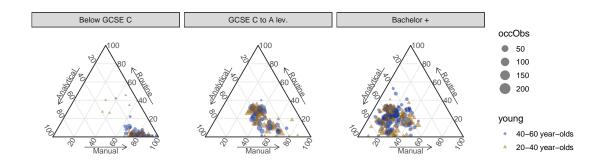
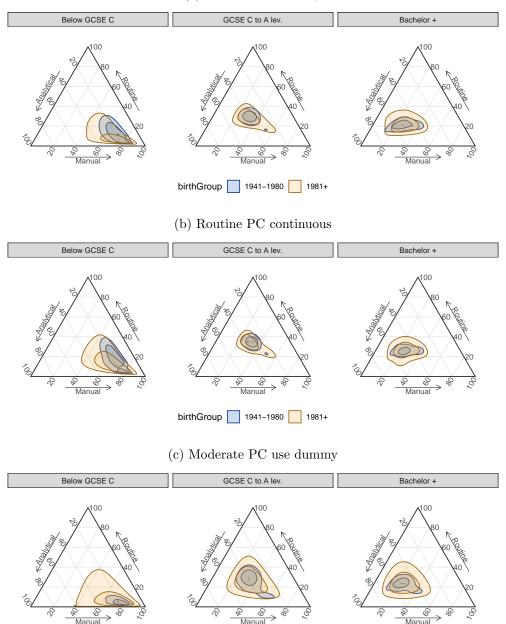
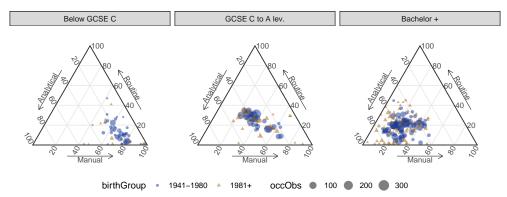


Figure 16: Skill use by birth cohort



birthGroup 1941–1980 1981+

Figure 17: Skill use by birth cohort



### (b) Routine PC continuous

