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Supplementary Material (Online) Socialism, Identity and the Well-Being of Unemployed Women

Tom Günther, Jakob Conradi and Clemens Hetschko

	(1)
UE	-0.689^{***} (0.170)
$UE \times East$	$0.233 \\ (0.214)$
$UE \times D$	-0.262 (0.176)
UE \times East \times D	$\begin{array}{c} 0.050 \ (0.236) \end{array}$
UE \times Female	$0.139 \\ (0.227)$
UE \times East \times Female	$0.080 \\ (0.295)$
UE \times D \times Female	$0.213 \\ (0.244)$
UE × East × D × Female	-0.762^{**} (0.331)
$\frac{N}{R^2}$	$274,293 \\ 0.030$
Control variables Individual FE	\checkmark
Time FE Federal state FE	\checkmark

Table S.1: Fully interacted main specification

Sources: SOEPv37, Statistisches Bundesamt (2023), Statistik der Bundesagentur für Arbeit (2023)

Notes: *** p<0.01, ** p<0.05, * p<0.10. Robust standard errors clustered at the individual level. Estimation of our main specification (equation (2)) for the combined sample of women and men. All variables are interacted with a female dummy. The model includes the same control variables as our main specification.

Table S.2:	Robustness	checks ((female))
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(1)	(2)	(3)	(4)	(5)	(6)
Main spec.	Plant closures	Anticipate	State-time FE	Excl. 1991-92	Family
-0.550^{***}	-0.936^{***}	-0.608^{***}	-0.472^{***}	-0.419^{**}	-0.554^{**}
(0.151)	(0.249)	(0.180)	(0.152)	(0.164)	(0.156)
$\begin{array}{c} 0.314 \\ (0.204) \end{array}$	0.598^{*} (0.363)	$\begin{array}{c} 0.354 \\ (0.248) \end{array}$	$0.111 \\ (0.205)$	$0.030 \\ (0.219)$	$\begin{array}{c} 0.329 \\ (0.209) \end{array}$
-0.049	$0.454 \\ (0.295)$	-0.002	-0.113	-0.161	-0.051
(0.169)		(0.200)	(0.171)	(0.181)	(0.176)
-0.712^{***}	-1.285^{***}	-0.812^{***}	-0.527^{**}	-0.511^{**}	-0.695^{***}
(0.232)	(0.423)	(0.276)	(0.233)	(0.247)	(0.238)
132,211	123,135	128,232	132,211	126,112	122,065
0.010	0.010	0.010	0.025	0.014	0.016
×	×	× √	×	×	v v
√	√	√	\checkmark	√	√
√	√	√		√	√
×	¥	×		×	¥
	Main spec. -0.550*** (0.151) 0.314 (0.204) -0.049 (0.169) -0.712*** (0.232) 132,211	Main spec.Plant closures -0.550^{***} -0.936^{***} (0.151) (0.249) 0.314 0.598^* (0.204) (0.363) -0.049 0.454 (0.169) (0.295) -0.712^{***} -1.285^{***} (0.232) (0.423) $132,211$ $123,135$ 0.010 \checkmark	Main spec.Plant closuresAnticipate -0.550^{***} -0.36^{***} -0.608^{***} (0.151) (0.249) (0.180) 0.314 0.598^{*} 0.354 (0.204) (0.363) (0.248) -0.049 0.454 -0.002 (0.169) (0.295) (0.200) -0.712^{***} -1.285^{***} -0.812^{***} (0.322) (0.423) (0.276) $132,211$ $123,135$ $128,232$ 0.010 0.010 0.010 \checkmark \checkmark \checkmark	Main spec.Plant closuresAnticipateState-time FE -0.550^{***} -0.936^{***} -0.608^{***} -0.472^{***} (0.151) (0.249) (0.180) (0.152) 0.314 0.598^{**} 0.354 0.111 (0.204) (0.363) (0.248) (0.205) -0.049 0.454 -0.002 -0.113 (0.169) (0.295) (0.200) (0.171) -0.712^{***} -1.285^{***} -0.812^{***} -0.527^{**} (0.232) (0.423) (0.276) (0.233) $132,211$ $123,135$ $128,232$ $132,211$ 0.010 0.010 0.010 0.025 \checkmark	Main spec.Plant closuresAnticipateState-time FEExcl. 1991-92 -0.550^{***} -0.936^{***} -0.608^{***} -0.472^{***} -0.419^{**} (0.151) (0.249) (0.180) (0.152) (0.164) 0.314 0.598^{*} 0.354 0.111 0.030 (0.204) (0.363) (0.248) (0.205) (0.219) -0.049 0.454 -0.002 -0.113 -0.161 (0.169) (0.295) (0.200) (0.171) (0.181) -0.712^{***} -1.285^{***} -0.812^{***} -0.527^{**} -0.511^{**} (0.232) (0.423) (0.276) (0.233) (0.247) $132,211$ $123,135$ $128,232$ $132,211$ $126,112$ 0.010 0.010 0.010 0.025 0.014 \checkmark

Sources: SOEPv37, Statistisches Bundesamt (2023), Statistik der Bundesagentur für Arbeit (2023)

Notes: *** p<0.01, ** p<0.05, * p<0.10. Robust standard errors clustered at the individual level. All models include the same control variables as our main specification (see Tables 1, A1, and A2). Column (1) displays our main results from Table 1. In column (5) we additionally control for the average equivalised real household income of the following three years. In column (6), we additionally control for having a partner in the household, the labour force status of the partner (employed, unemployed, out of the labour force), high educational attainment of the partner according to the ISCED classification (ref.: below ISCED 5), the number of children below age 12 in the household, and the age of the youngest child in the household.

Table S.3:	Robustness	checks ((male)
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	(1) Main spec.	(2) Plant closures	(3) Anticipate	(4) State-time FE	(5) Excl. 1991-92	(6) Family
UE	-0.689^{***} (0.170)	-1.256^{***} (0.344)	-0.854^{***} (0.181)	-0.609^{***} (0.169)	-0.622^{***} (0.183)	-0.661^{**} ; (0.169)
UE \times East	$\begin{array}{c} 0.233 \\ (0.214) \end{array}$	$0.216 \\ (0.448)$	$\begin{array}{c} 0.275 \\ (0.239) \end{array}$	$0.045 \\ (0.211)$	-0.031 (0.226)	$\begin{array}{c} 0.210 \\ (0.214) \end{array}$
$UE \times D$	-0.262 (0.176)	$\begin{array}{c} 0.273 \\ (0.356) \end{array}$	-0.121 (0.190)	-0.330^{*} (0.175)	-0.314^{*} (0.190)	-0.265 (0.176)
UE \times East \times D	$\begin{array}{c} 0.050 \\ (0.236) \end{array}$	$0.069 \\ (0.491)$	-0.028 (0.262)	$0.211 \\ (0.234)$	0.293 (0.249)	$\begin{array}{c} 0.048 \\ (0.238) \end{array}$
N D ²	142,082	130,791	137,616	142,082	133,936	134,910
R ² Control variables	0.020 ✓	0.010 ✓	0.020	0.031	0.018 ✓	0.024
Additional family variables Individual FE	× √	×	× √	×	× √	\checkmark
Time FE Federal state FE	\checkmark	\checkmark	\checkmark	√ √	\checkmark	\checkmark
State-Time FE	×	×	×	\checkmark	×	×

Sources: SOEPv37, Statistisches Bundesamt (2023), Statistik der Bundesagentur für Arbeit (2023)

Notes: *** p<0.01, ** p<0.05, * p<0.10. Robust standard errors clustered at the individual level. All models include the same control variables as our main specification (see Tables 1, A1, and A2). Column (1) displays our main results from Table 1. In column (5) we additionally control for the average equivalised real household income of the following three years. In column (6), we additionally control for having a partner in the household, the labour force status of the partner (employed, unemployed, out of the labour force), high educational attainment of the partner according to the ISCED classification (ref.: below ISCED 5), the number of children below age 12 in the household, and the age of the youngest child in the household.

Table S.4: Migration checks (female)

	(1)	(2)	(3)	(4)
	Main spec.	Not born $45-61$	(3) School region	No mig. background
UE	-0.550***	-0.598***	-0.554***	-0.538***
	(0.151)	(0.156)	(0.151)	(0.154)
$UE \times East$	0.314	0.330	0.311	0.305
	(0.204)	(0.205)	(0.203)	(0.206)
$UE \times D$	-0.049	0.096	-0.047	-0.063
	(0.169)	(0.186)	(0.169)	(0.174)
$\mathrm{UE} \times \mathrm{East} \times \mathrm{D}$	-0.712***	-0.805***	-0.705***	-0.700***
	(0.232)	(0.258)	(0.232)	(0.235)
Ν	132,211	87,516	130,330	126,284
\mathbb{R}^2	0.010	0.011	0.015	0.015
Control variables	\checkmark	\checkmark	\checkmark	\checkmark
Individual FE	\checkmark	\checkmark	\checkmark	\checkmark
Time FE	\checkmark	\checkmark	\checkmark	\checkmark
Federal state FE	\checkmark	\checkmark	\checkmark	\checkmark

Sources: SOEPv37, Statistisches Bundesamt (2023), Statistik der Bundesagentur für Arbeit (2023) Notes: *** p<0.01, ** p<0.05, * p<0.10. Robust standard errors clustered at the individual level. All models include the same control variables as our main specification (see Tables 1, A1, and A2). Column (1) displays our main results from Table 1. In column (2) we exclude all individuals born between 1945 and 1961. In column (3) we exclude all individuals that attended school in East (West) Germany and lived in West (East) Germany in 1989 and that attented school in East Germany and West Germany. In column (4) we exclude all individuals with any migration background.

Table S.5: Migration checks (male)

	(1)	(2)	(3)	(4)
	Main spec.	Not born 45-61	School region	No mig. background
UE	-0.689***	-0.678***	-0.684***	-0.684***
	(0.170)	(0.173)	(0.171)	(0.171)
$UE \times East$	0.233	0.238	0.246	0.232
	(0.214)	(0.214)	(0.215)	(0.214)
$UE \times D$	-0.262	-0.267	-0.271	-0.283
	(0.176)	(0.185)	(0.177)	(0.178)
$UE \times East \times D$	0.050	0.076	0.064	0.065
	(0.236)	(0.255)	(0.238)	(0.238)
N	142,082	92,039	140,110	$135,\!879$
\mathbb{R}^2	0.020	0.016	0.020	0.020
Control variables	\checkmark	\checkmark	\checkmark	\checkmark
Individual FE	\checkmark	\checkmark	\checkmark	\checkmark
Time FE	\checkmark	\checkmark	\checkmark	\checkmark
Federal state FE	\checkmark	\checkmark	\checkmark	\checkmark

Sources: SOEPv37, Statistisches Bundesamt (2023), Statistik der Bundesagentur für Arbeit (2023) Notes: *** p<0.01, ** p<0.05, * p<0.10. Robust standard errors clustered at the individual level. All models include the same control variables as our main specification (see Tables 1, A1, and A2). Column (1) displays our main results from Table 1. In column (2) we exclude all individuals born between 1945 and 1961. In column (3) we exclude all individuals that attended school in East (West) Germany and lived in West (East) Germany in 1989 and that attended school in East Germany and West Germany. In column (4) we exclude all individuals with any migration background.

	Fema	le	Male	е
	(1) Main spec.	(2) Current	(3) Main spec.	(4) Current
UE	-0.550^{***} (0.151)	-0.605^{***} (0.143)	-0.689^{***} (0.170)	-0.726^{***} (0.162)
$UE \times East$	$0.314 \\ (0.204)$	0.389^{**} (0.196)	0.233 (0.214)	$0.298 \\ (0.209)$
$UE \times D$	-0.049 (0.169)	-0.018 (0.159)	-0.262 (0.176)	-0.198 (0.167)
UE \times East \times D	-0.712^{***} (0.232)	-0.759^{***} (0.226)	$0.050 \\ (0.236)$	-0.046 (0.231)
$\frac{N}{R^2}$	$132,211 \\ 0.010$	$137,014 \\ 0.010$	$142,082 \\ 0.020$	$149,074 \\ 0.020$
Controls Individual FE Time FE	\checkmark \checkmark	\checkmark	\checkmark	\checkmark
Federal state FE	\checkmark	\checkmark	\checkmark	\checkmark

Table S.6: Estimation with region of socialisation by current place of residence

Sources: SOEPv37, Statistisches Bundesamt (2023), Statistik der Bundesagentur für Arbeit (2023) Notes: *** p<0.01, ** p<0.05, * p<0.10. Robust standard errors clustered at the individual level. All models include the same control variables as our main specification (see Table 1 and Table A3). Column (1) displays our main results from Table 1. In columns (2) and (4) we use the current place of residence as an indicator for the region of socialisation while excluding all respondents who moved between East and West Germany after reunification.

	(1) Sig. $< 1\%$	(2) Sig. $< 5\%$	(3) Sig. $< 10\%$
One East	$0.000 \\ (0.015)$	0.000 (0.025)	$0.002 \\ (0.029)$
Two East	$0.004 \\ (0.015)$	0.061^{**} (0.024)	0.117^{***} (0.028)
Three East	0.106^{***} (0.016)	0.256^{***} (0.026)	0.331^{***} (0.031)
Four East	0.289^{***} (0.026)	0.600^{***} (0.044)	0.778^{***} (0.051)
All East	1.000^{***} (0.153)	1.000^{***} (0.253)	1.000^{***} (0.297)
Constant	$0.000 \\ (0.014)$	0.000 (0.022)	0.000 (0.026)
Observations	2002	2002	2002

Table S.7: Placebo test: Regional permutations (female)

Sources: SOEPv37, Statistisches Bundesamt (2023), Statistik der Bundesagentur für Arbeit (2023) Notes: *** p<0.01, ** p<0.05, * p<0.10. Standard errors in parentheses. Linear probability model regressing the number of East German federal states in the five-state region of our regional permutations (i.e., East Germany defined as artificial combinations of any five federal states) on an indicator variable for our main effect of interest (UE × East × D) being negative and statistically significant at the indicated significance level based on an estimation of equation (2). The coefficients reflect the increase of the probability to report such a result dependent on the number of actual East German federal states assigned to the five-state region compared to a situation where zero actual East German federal states are assigned to the artificial East. For constructing the indicator variable we re-estimate equation (2) with regional permutations of Germany into one part with five federal states and a second part with nine federal states based on the current place of residence. Saarland is merged with Rhineland Palatinate, Berlin is excluded from all permutations. The number of observations corresponds to 2,002 regional permutations.

Table S.8: Conditional fixed-effects logit estimations with varying cutoff points on the life satisfaction scale (female sample)

	Cutoff at 1	Cutoff at 2	Cutoff at 3	Cutoff at 4	Cutoff at 5	Cutoff at 6	Cutoff at 7	Cutoff at 8	Cutoff at 9
UE	-0.974	-0.209	-0.822	-0.803*	-0.710**	-1.366***	-0.788***	-0.623	-0.831
	(0.860)	(0.872)	(0.566)	(0.418)	(0.343)	(0.325)	(0.295)	(0.614)	(1.111)
$UE \times East$	1.876	-0.938	-0.386	0.086	0.213	1.056^{***}	0.847**	0.384	2.446^{*}
	(1.360)	(1.105)	(0.789)	(0.523)	(0.413)	(0.409)	(0.396)	(0.772)	(1.408)
$UE \times D$	-0.050	-0.649	-0.178	-0.214	-0.152	0.534	-0.080	0.312	0.949
	(0.997)	(0.916)	(0.594)	(0.441)	(0.368)	(0.350)	(0.320)	(0.641)	(1.146)
$UE \times East \times D$	-2.371	0.020	-0.114	-0.797	-0.665	-1.379***	-0.993**	-0.682	-2.852*
	(1.494)	(1.168)	(0.830)	(0.564)	(0.452)	(0.447)	(0.448)	(0.835)	(1.531)
N	4,640	12,515	26,321	40,581	67,214	83,938	98,728	67,748	24,240
Control variables	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	√	\checkmark	\checkmark
Individual FE	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	√	\checkmark	\checkmark	\checkmark
Time FE	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	√	\checkmark	\checkmark
Federal state FE	√	\checkmark	\checkmark	√	√	√	\checkmark	√	~

Sources: SOEPv37, Statistisches Bundesamt (2023), Statistik der Bundesagentur für Arbeit (2023) Notes: *** p<0.01, ** p<0.05, * p<0.05, * p<0.10. Robust standard errors clustered at the individual level. The table presents estimations of separate conditional logit models based on equation (2). They consider all possible dichotomisations (i.e., nine cutoff points) of the life satisfaction scale. All logit models include individual-fixed effects (Chamberlain, 1980) and the same control variables as our main specification (see Tables 1, A1, and A2).

Table S.9: Persistence analysis

	(1)Female	(2) Male
UE	-0.553^{***} (0.151)	-0.690^{***} (0.170)
$UE \times East$	0.313 (0.204)	0.234 (0.214)
UE \times East \times 1945-54	-0.728^{**} (0.308)	-0.257 (0.309)
UE \times East \times 1955-64	-0.569^{**} (0.259)	0.288 (0.277)
UE \times East \times 1965-74	-0.639^{**} (0.308)	-0.072 (0.281)
UE \times East \times >1974	-1.205^{***} (0.394)	$0.303 \\ (0.325)$
$rac{N}{R^2}$	$132,211 \\ 0.020$	$142,082 \\ 0.020$
Control variables Individual FE	\checkmark	\checkmark
Time FE Federal state FE	\checkmark	\checkmark

Sources: SOEPv37, Statistisches Bundesamt (2023), Statistik der Bundesagentur für Arbeit (2023) Notes: *** p<0.01, ** p<0.05, * p<0.10. Robust standard errors clustered at the individual level. Estimations are based on a modification of our main specification (see equation (2)) in which our binary cohort indicator is replaced by separate indicators for the following birth cohorts: <1945 (ref.), 1945-1954, 1955-1964, 1965-1974, 1974-1989. Predictions are based on gender-specific sample means of the covariates. All models include the same control variables as our main specification (see Tables 1, A1, and A2).

Figure S.1: Different cohort cutoff years



Sources: SOEPv37, Statistisches Bundesamt (2023), Statistik der Bundesagentur für Arbeit (2023) Notes: Whiskers indicate 95% confidence intervals based on robust standard errors clustered at the individual level. Coefficient plot of the triple interaction effects of unemployment, the East dummy and the cohort indicator (see equation (2)) for various cohort cutoff years in the female sample. All models include the same control variables as our main specification (see Tables 1, A1, and A2). The estimate of our preferred cohort definition from Table 1 is highlighted in red.

References

- Chamberlain, G. (1980). Analysis of covariance with qualitative data. The Review of Economic Studies, 47(1), 225–238.
- Statistik der Bundesagentur für Arbeit. (2023). Arbeitslosigkeit im Zeitverlauf, Deutschland und Länder. Arbeitsmarkt in Zahlen. Nürnberg.
- Statistisches Bundesamt. (2023). Verbraucherpreisindex für Deutschland Lange Reihen ab 1948. Statistischer Bericht. EVAS-Nummer 61111, 61131. Wiesbaden.