

31<sup>st</sup> International Congress of Psychology

July 24-29, 2016

Yokohama, Japan

# Dealing with Challenges of Social and Economic Change: Role of Agency in Regional and International Comparison

Rainer K. Silbereisen

[www.rainersilbereisen.de](http://www.rainersilbereisen.de)



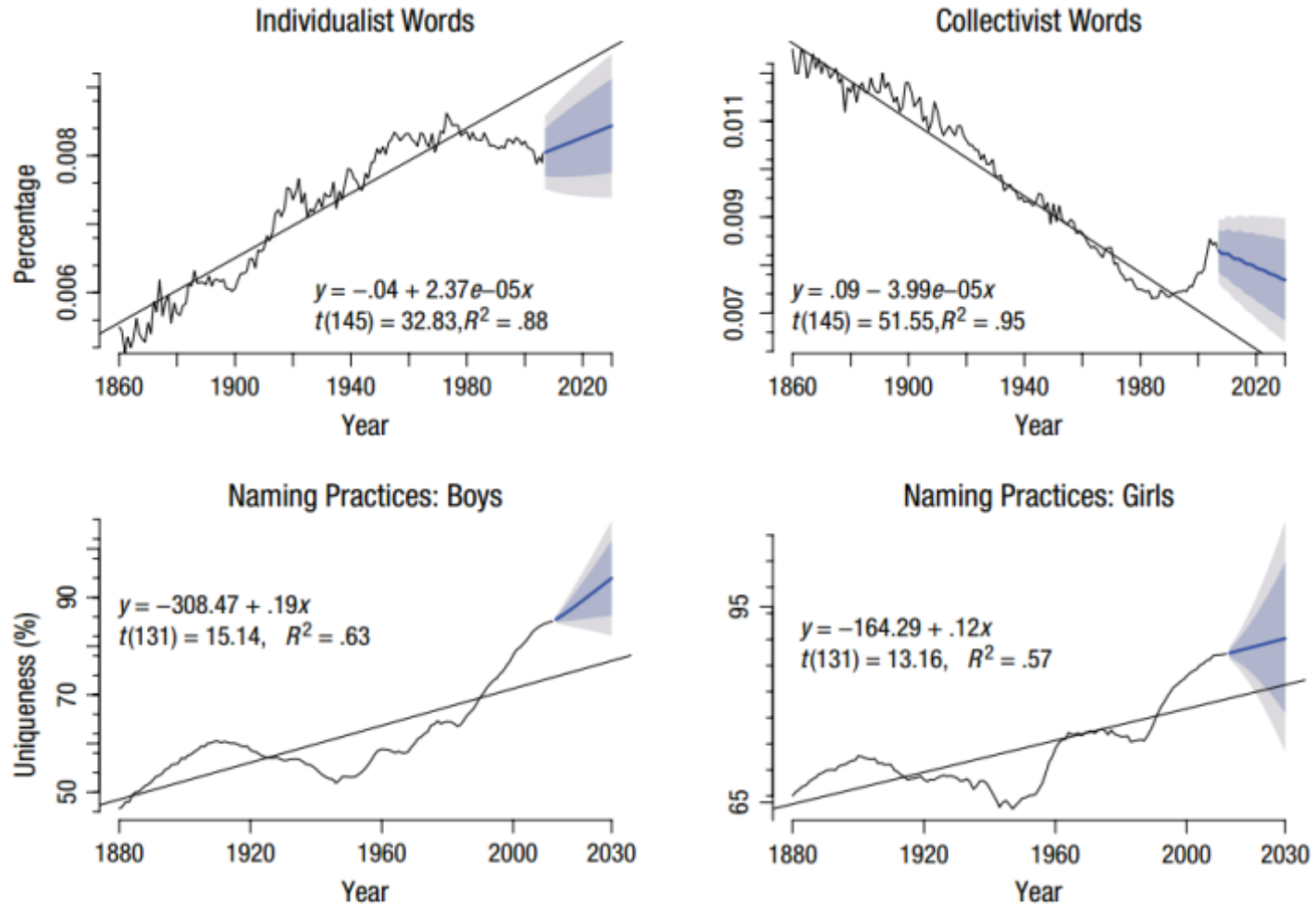
seit 1558



# What is Social Change?



- Some social change is slow and emerging, such as the increase of individualism in countries of the North-West of the globe over the last century, probably triggered by change in socio-economic structures requiring greater self autonomy (Grossmann & Varnum, 2015).
- One indication is the increase in words carrying individualist versus collectivist agency and “unique” baby names.



**Fig. 2.** Frequencies of individualist and collectivist words in U.S. books from 1860 through 2006 and preference for unique baby names (i.e., those not among the 20 most common names in a given year) from 1880 through 2012. Each graph shows the line of best linear fit, as well as forecasts through 2030. The forecasts are from optimal autoregressive moving-average models; the shaded areas correspond to 80% and 95% prediction intervals.

- Some social change is rapid. Case in point is break-up of the communist world order after 1990, combined with globalization and economic crises later on, like last two decades in Europe and other parts of the world.



- Old regimes left traces for decades in many regards, including personality – for example lasting higher external control in the East of Germany (Friehe, Pannenberg & Wedow, 2015), with consequences for economic success (Becker et al. 2012)
- Many believe that the phase of current social change is historically unprecedented, reflected by a broad scale of new „uncertainties“ for life planning (Rosa, 2013).



# **What is Intriguing about Social Change for Psychological Science?**



- Window for the study of agency under changing opportunities - radical change after 1990 had losers and winners.
- People high in self efficacy were more successful in dealing with break-up of social institutions (Titma & Tuma, 2005). Other relevant psychological attributes are exploration and openness when confronted with challenges (Kashdan & Silvia, 2009).
- Social change produces aversive uncertainties vis-à-vis new challenges (Westerhoff & Keyes, 2006). They are unsettling and interfere with behavior planning, especially if concerning one's place in the world.

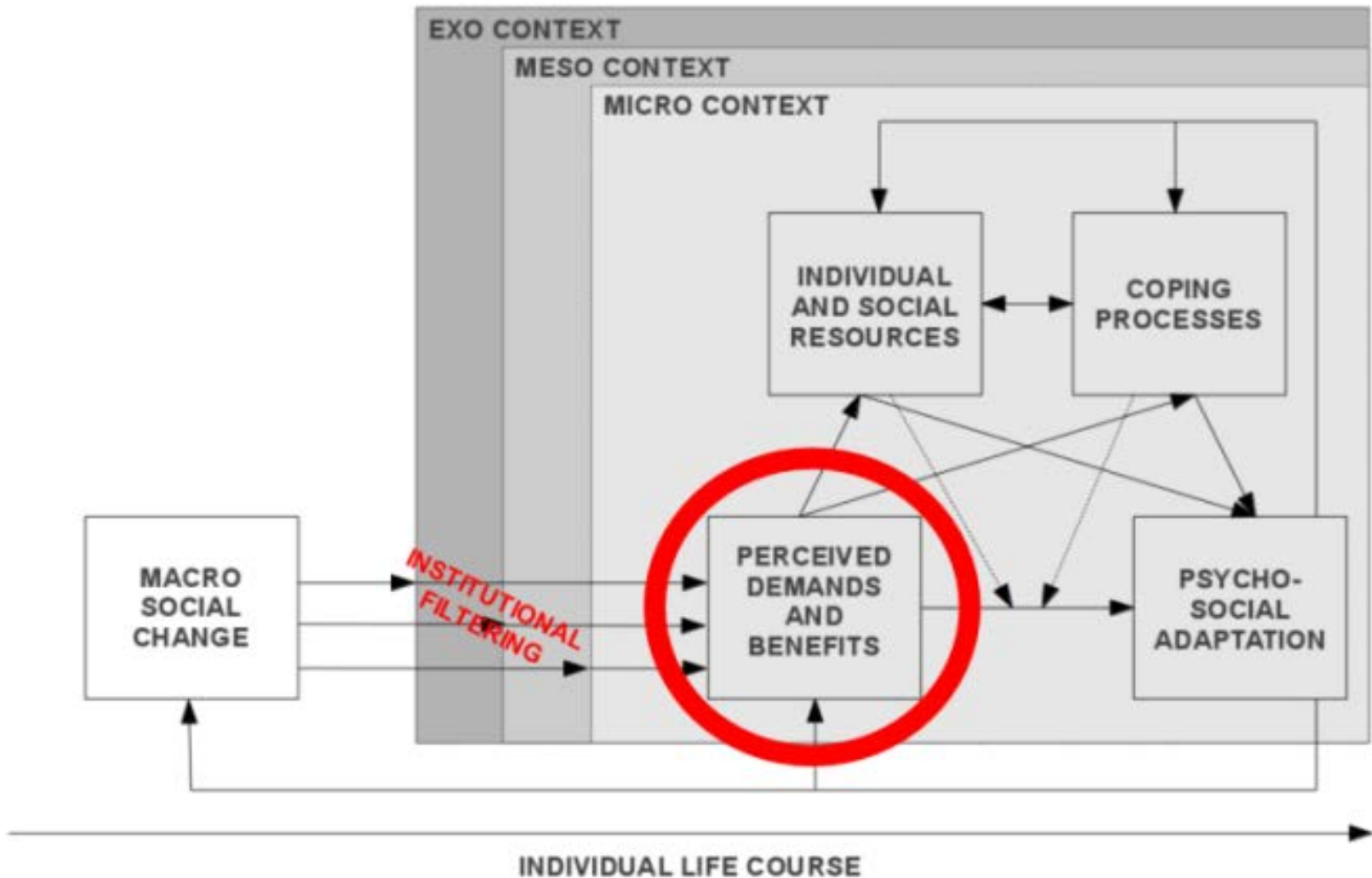
- Likely to affect well-being negatively, equivalent to or even worse than distinct negative events, like unemployment (Clark, 2003).
- Interplay between uncertainties and opportunities offers new insights in adaptation to environmental pressures in general – a prototype of the new environment-minded psychological science (Oishi, 2014; Clayton et al., 2016).

# Some Research Concepts and Strategies

- Earlier research on post-socialist change compared samples from countries representing different periods of the transformation process to market capitalism.
- Pivotal was work by Kohn and his colleagues (Kohn, 2006) who found a trend across Eastern European transformation countries toward closer associations between work experiences and personality among managers, known from capitalist industrial organizations in the West.

- We used similar period comparisons around the time of German unification and found that changes in social institutions had an almost immediate effect on the timing of biographical transitions in the former East (Silbereisen, Reitzle & Juang, 2002).
- Because not everybody was effected to the same degree, in our new research begun around 2005, we focused on individual variation in the perception of transformation-related uncertainties in major life domains („demands“).

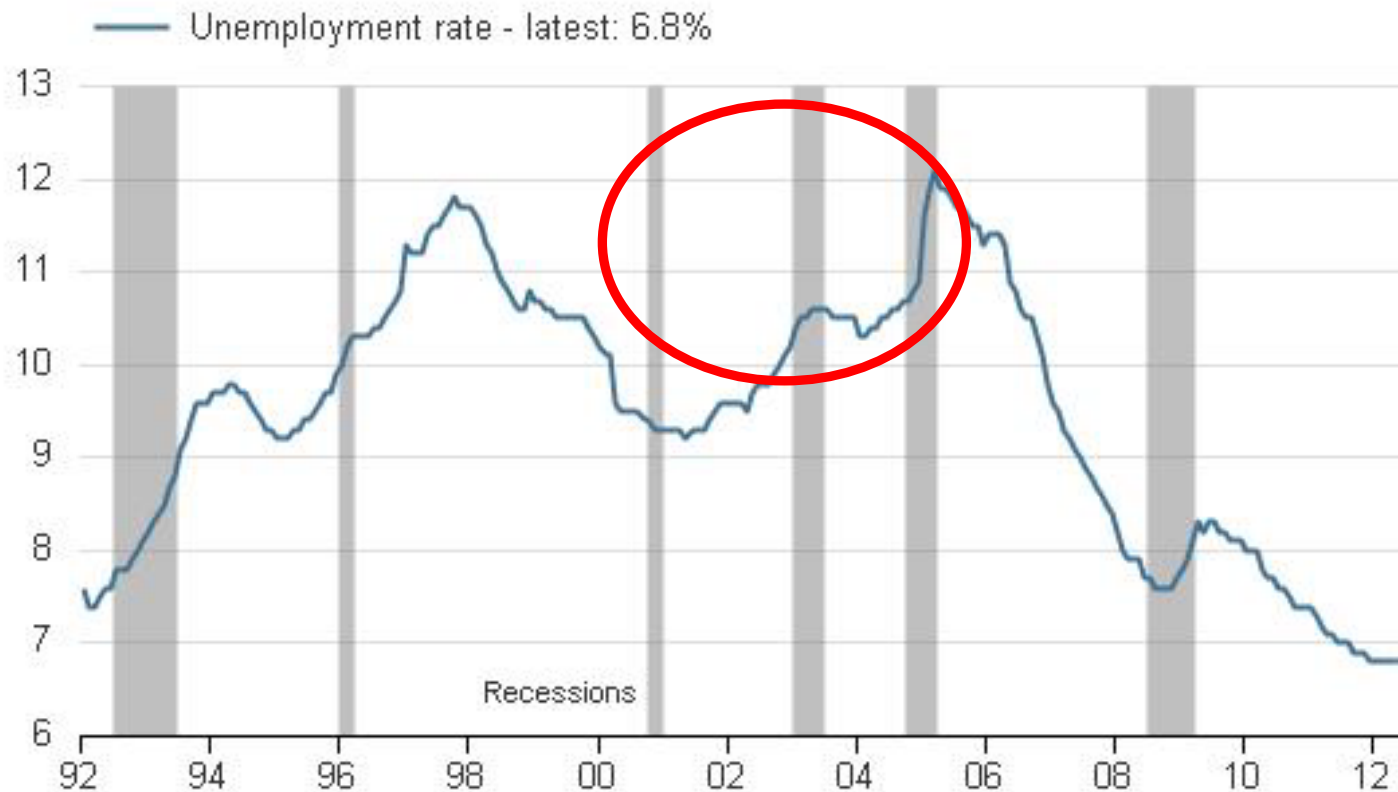
- The resulting Jena Model of Social Change and Human Development (Silbereisen, Pinquart & Tomasik, 2010) addressed the cognitive-motivational processing of demands in the larger context.
- Our approach is reminiscent of the Elder-Conger tradition (Elder & Conger, 2000) in research on economic hardship.
- The Figure shows the model, and in the following we describe its variables and pathways (Silbereisen, Pinquart & Tomasik, 2010):





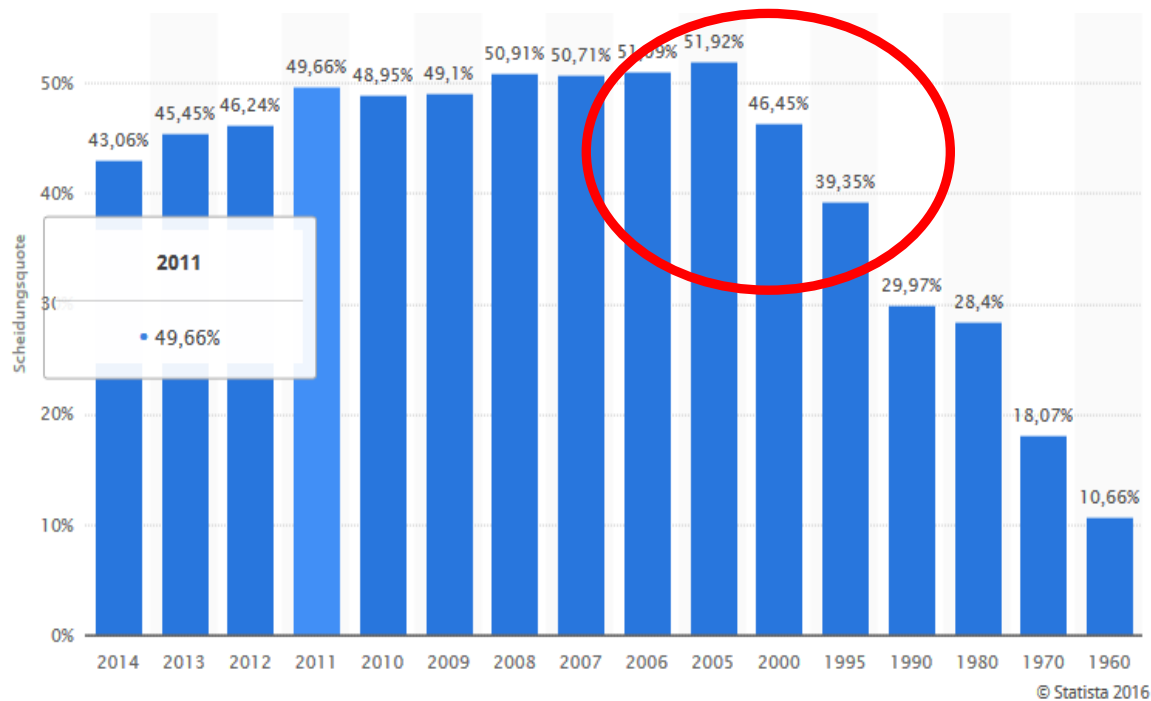
- Demands = perceived changes for the worse concerning the resolution of developmental tasks related to work (e.g., it has become more difficult to plan my career path), family (e.g., have to take more things into account when to decide about my relationship with partner or family).
- Conceived as uncertainties due to societal change related to political transformation, globalization, and individualization, originally in the mid-2000s in Germany.
- Changing rates of unemployment and divorce are examples of the objective backdrop for trends in demands over time (Tomasik & Silbereisen, 2009; Tomasik & Silbereisen, submitted):

# German unemployment rate



Source: Thomson Reuters Datastream, Deutsche Bundesbank Reuters graphic/Scott Barber 10/07/2012

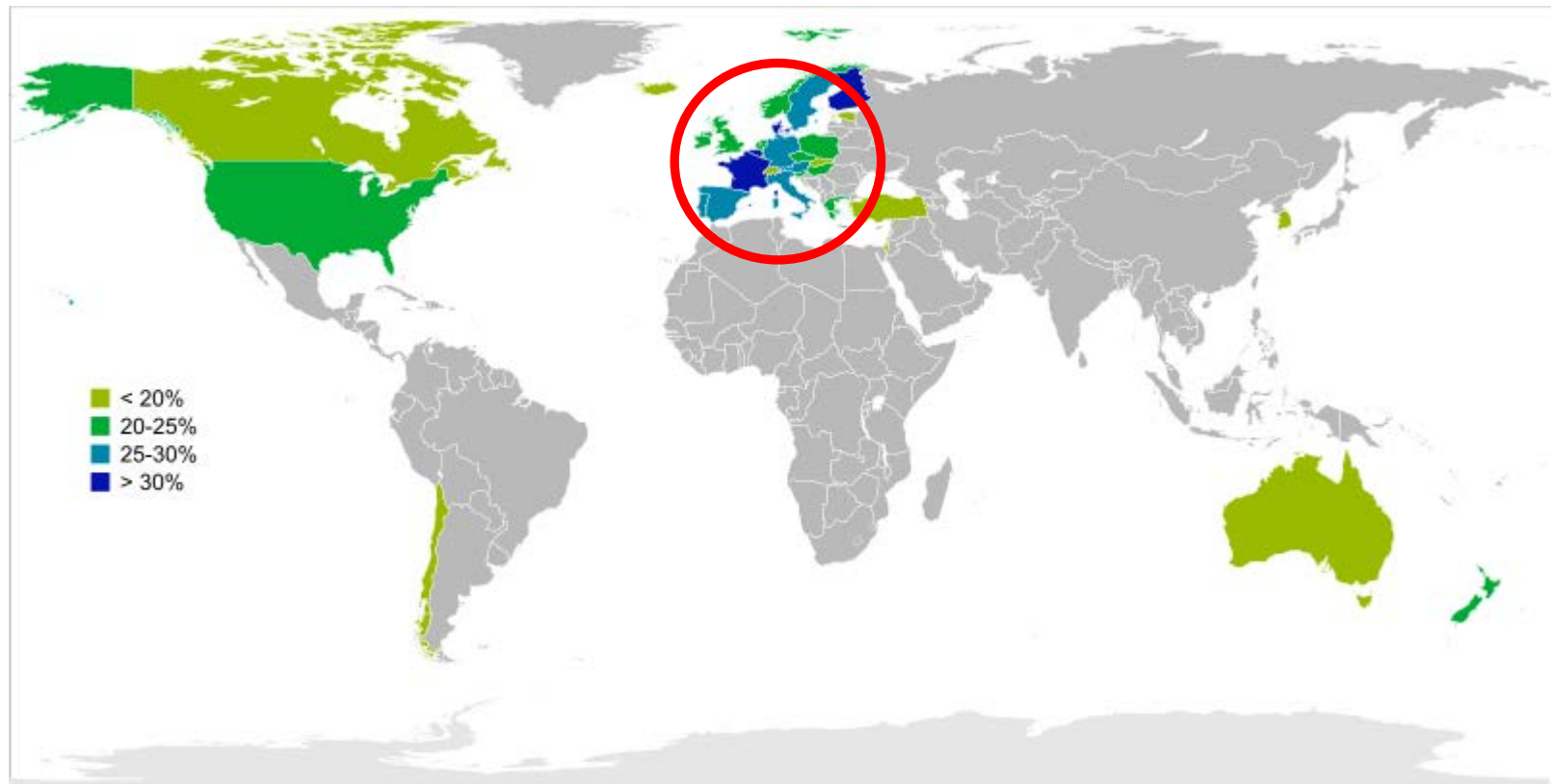
# German divorce rate



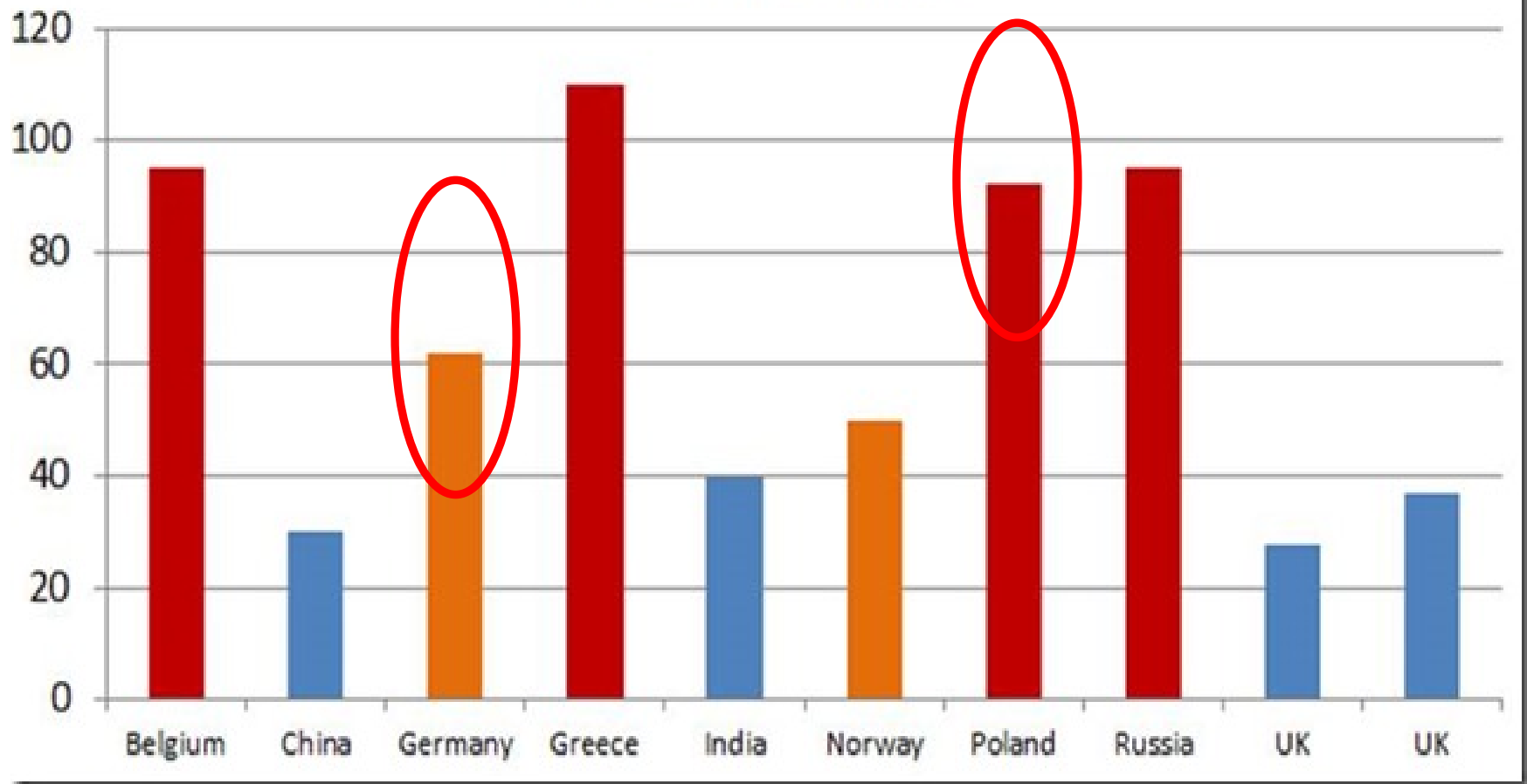
- People with higher resources are less affected by demands (“filter function,” Hofaecker, Buchholz & Blossfeld, 2010).
- High loads of demands are thought to overtax people’s capabilities and result in negative consequences for well-being and other psychosocial and even physical outcomes (Chou, Parmar & Galinsky, 2016).
- Relationship between demands and well-being is mediated and moderated by the interplay between social and personal resources and a range of coping attempts that are thought to be especially effective when in line with opportunities.

- Entire system also influenced by distal (countries, administrative regions) and proximal (opportunities on local levels) contexts that themselves are targets of social change.
- Model was blueprint for research on large representative samples in Germany and Poland – a country undergoing similar social change but with a weaker welfare net (<http://ec.europa.eu/eurostat>) and a much higher uncertainty avoidance in the population (Hofstede, 2003):

## % of GDP in social expenditures in OECD states, 2013



## Uncertainty avoidance

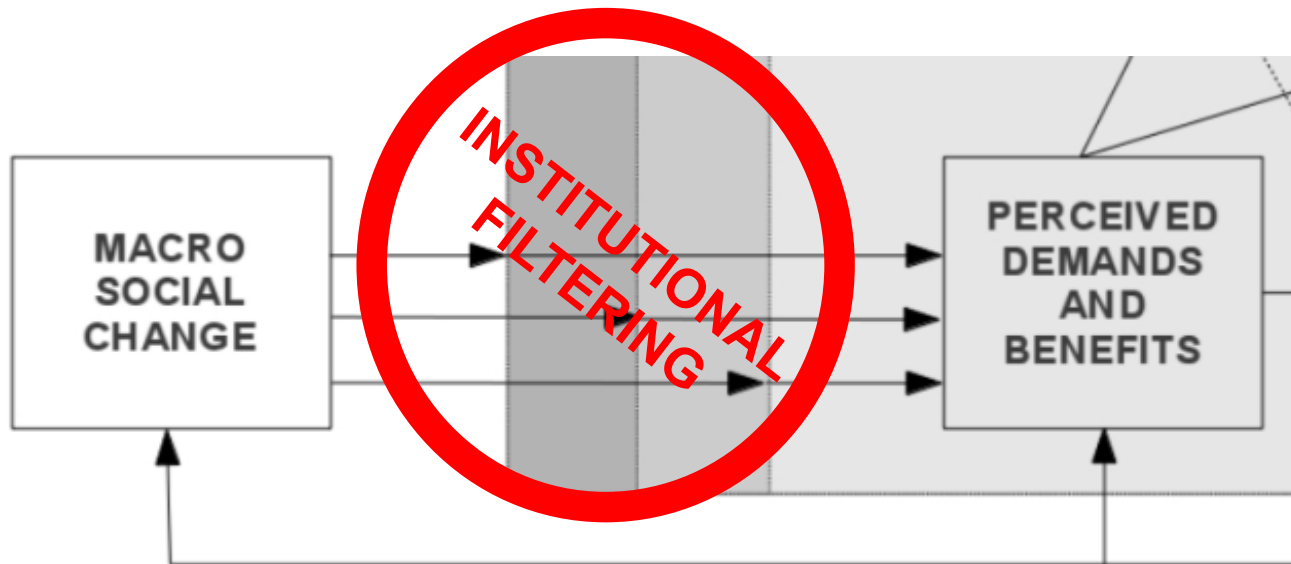




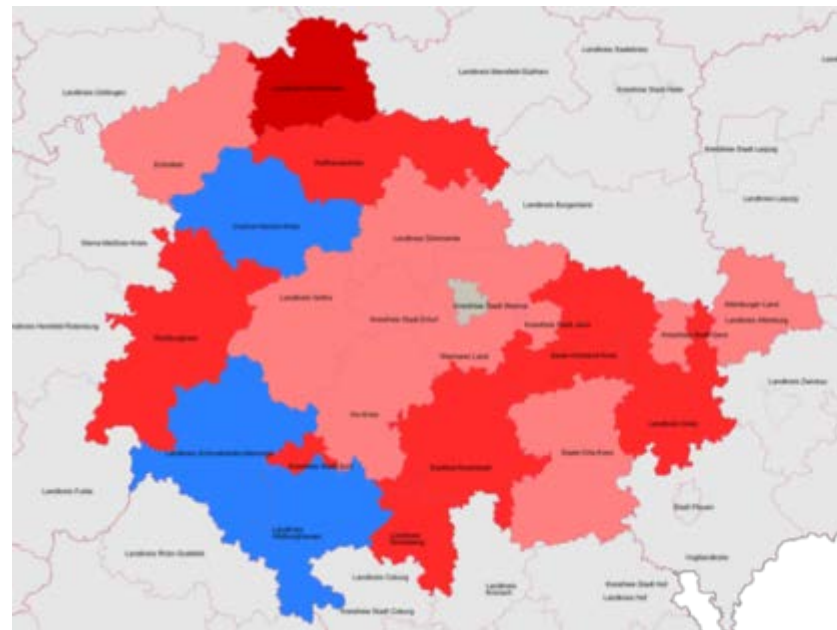
# **Six Major Insights in Dealing with Social Change**

- Used data on adults beyond education and training, but also compared results with those younger and still in education and training, for both Germany and Poland, and differentiated by regions (e.g. East-West) and administrative districts (NUTS-3), representing different opportunity structures  
([https://www.destatis.de/Europa/DE/MethodenMetadaten/Klassifikationen/UebersichtKlassifikationen\\_NUTS.html](https://www.destatis.de/Europa/DE/MethodenMetadaten/Klassifikationen/UebersichtKlassifikationen_NUTS.html)).

# 1) Filtering by Status and Region



- Throughout we take work-related demands as case in point, but the other domains often show the same results.
- Demands are distributed unequally across regions, reflecting objective challenges such as unemployment rates as shown for NUTS-3 regions of a German Federal State (Silbereisen & Tomasik, 2011).



NUTS 3

blue: low  
deep red: high

- Status variables filter the demands – those better off in terms of current employment, intact family, higher education, and living in the West of Germany were less burdened (Tomasik & Silbereisen, 2009).
- For those in adulthood beyond education and training, demands are a real experience, for those younger and still in education and training it is more of informed expectations. Consequently, the average load was lower, but appraisals as challenge vs. threat or gain vs. loss were more positive than among the older group (Lechner, Tomasik & Silbereisen, 2014):

## Mean Demand Load and Appraisals in Pre- and Post-Transition Groups: Germany

	Post-transition ( $N = 2,268$ )			Pre-transition ( $N = 583$ )	Overall $F_{(xx)}$	Planned Contrast
	Employed ( $n = 1,471$ )	Unemployed ( $n = 324$ )	Outside ( $n = 473$ )			
Work-related demands	2.04 <sup>a</sup>	4.35 <sup>c</sup>	2.86 <sup>b</sup>	1.73 <sup>a</sup>	146.79***	***
Appraisals						
Challenge cognitions	4.08 <sup>b,c</sup>	3.85 <sup>a,b</sup>	3.63 <sup>a</sup>	4.26 <sup>c</sup>	14.84***	***
Gains cognitions	4.50 <sup>b,c</sup>	4.33 <sup>a,b</sup>	4.24 <sup>a</sup>	4.57 <sup>c</sup>	8.20***	***
Perceived competence	5.30 <sup>c</sup>	4.06 <sup>a</sup>	4.63 <sup>b</sup>	5.23 <sup>c</sup>	104.59***	***

*Note.* Overall  $F$ -value for the hypothesis that there are mean differences between the four groups; Planned contrast displays significance of the hypothesis that the mean of those in education and training differs from the mean of the three remaining employment groups; Same superscripts indicate that means do not significantly differ from each other based on Scheffé's homogeneous subset analysis.

## Mean Demand Load and Appraisals in Pre- and Post-Transition Groups: Poland

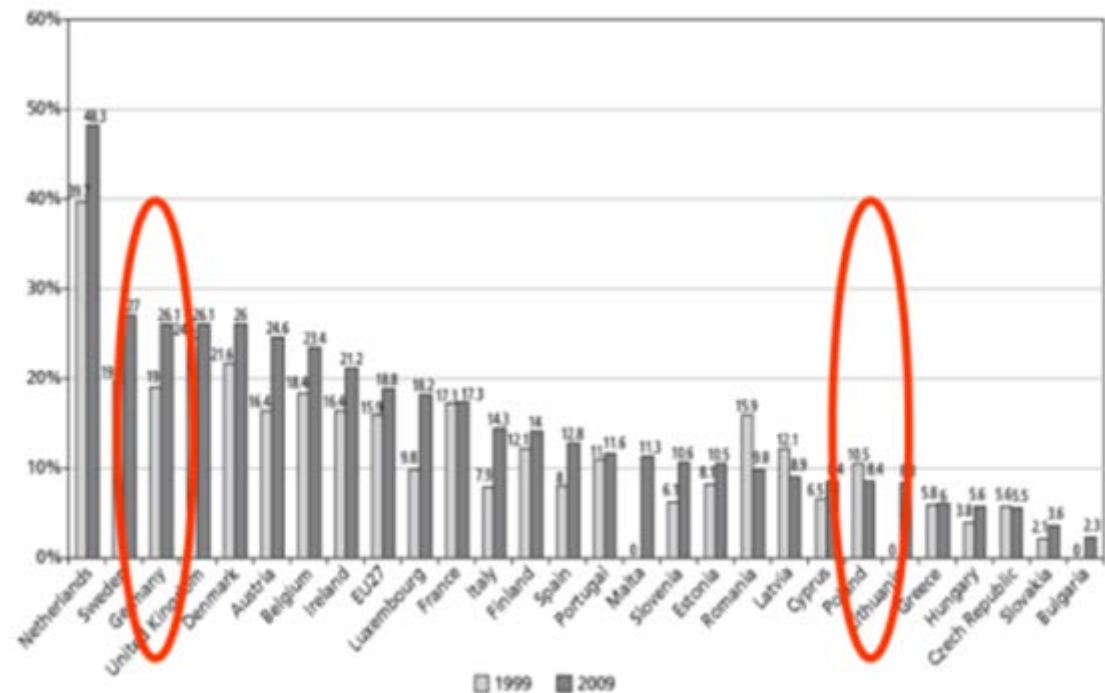
Predictors	Post-transition ( $N = 2,541$ )			Pre-transition ( $N = 537$ )	Overall $F_{(3,2847)}$	Planned Contrast
	Employed ( $n = 1,581$ )	Unemployed ( $n = 354$ )	Outside ( $n = 606$ )			
Work-related demands	1.48 <sup>a</sup>	3.34 <sup>b</sup>	2.41 <sup>c</sup>	1.31 <sup>a</sup>	117.05***	***
Appraisals						
Challenge cognitions	3.99 <sup>a</sup>	3.93 <sup>a</sup>	4.06 <sup>a</sup>	4.32 <sup>b</sup>	6.87***	***
Gains cognitions	4.09 <sup>b</sup>	3.76 <sup>a</sup>	3.86 <sup>a</sup>	4.30 <sup>b</sup>	15.86***	***
Feeling prepared	4.58 <sup>b</sup>	4.28 <sup>a, b</sup>	4.42 <sup>a</sup>	4.95 <sup>c</sup>	21.05***	***

*Note.* Overall  $F$ -value for the hypothesis that there are mean differences between the four groups; Planned contrast displays significance of the hypothesis that the mean of those in education and training differs from the mean of the three remaining employment groups; Same superscripts indicate that means do not significantly differ from each other based on Scheffé's homogeneous subset analysis.



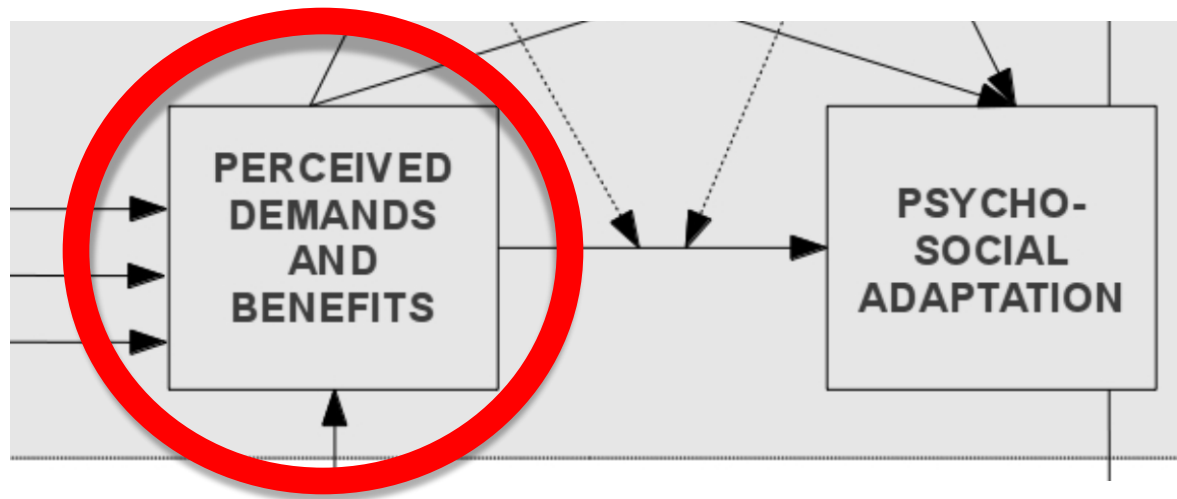
- For Germany and Poland overall the same results, but demands somewhat lower, reflective of the fact that non-traditional forms of employment are less prevalent in Poland, and thus the corresponding uncertainties are less pronounced.

Figure 3: Proportion of part-time workers in EU27 countries, 1999 and 2009



Source: Eurostat (Labour Force Survey)

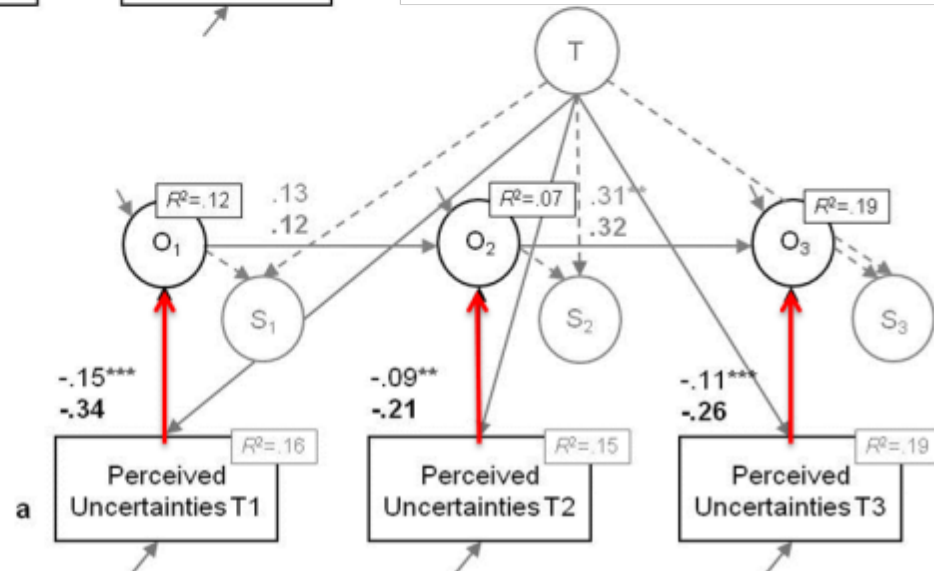
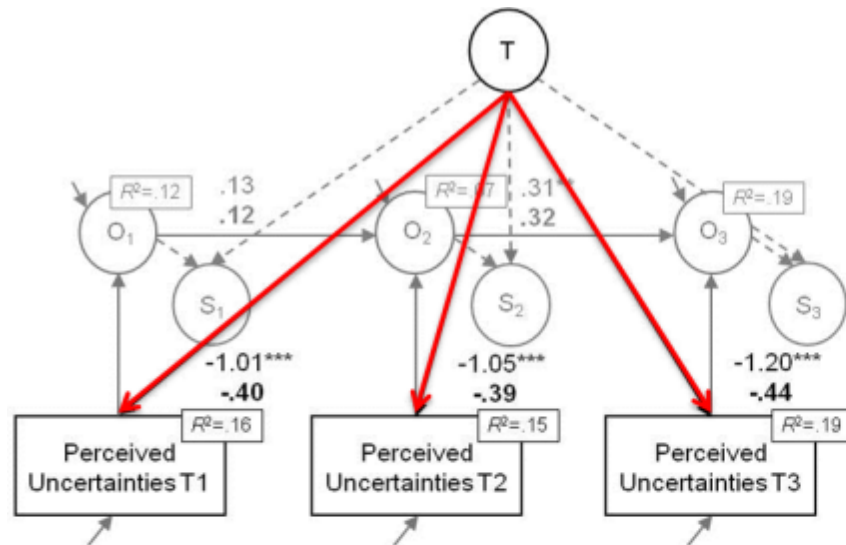
## 2) Do Demands Affect Well-being Negatively?



- Used German survey plus two annual follow-ups, and modeled the direction of effects by an approach (Cole, Martin, & Steger, 2005) that distinguishes between a stable „trait“ component, and a variable „occasion“ component of well-being.
- Results showed that negative effects, of about the same strength, run in both directions, (Körner, Silbereisen & Cantner, 2014) – the differences in uncertainties we found are not simply a function of trait-like differences in well-being, but reflect the temporary deviations in well-being due to uncertainties experienced.

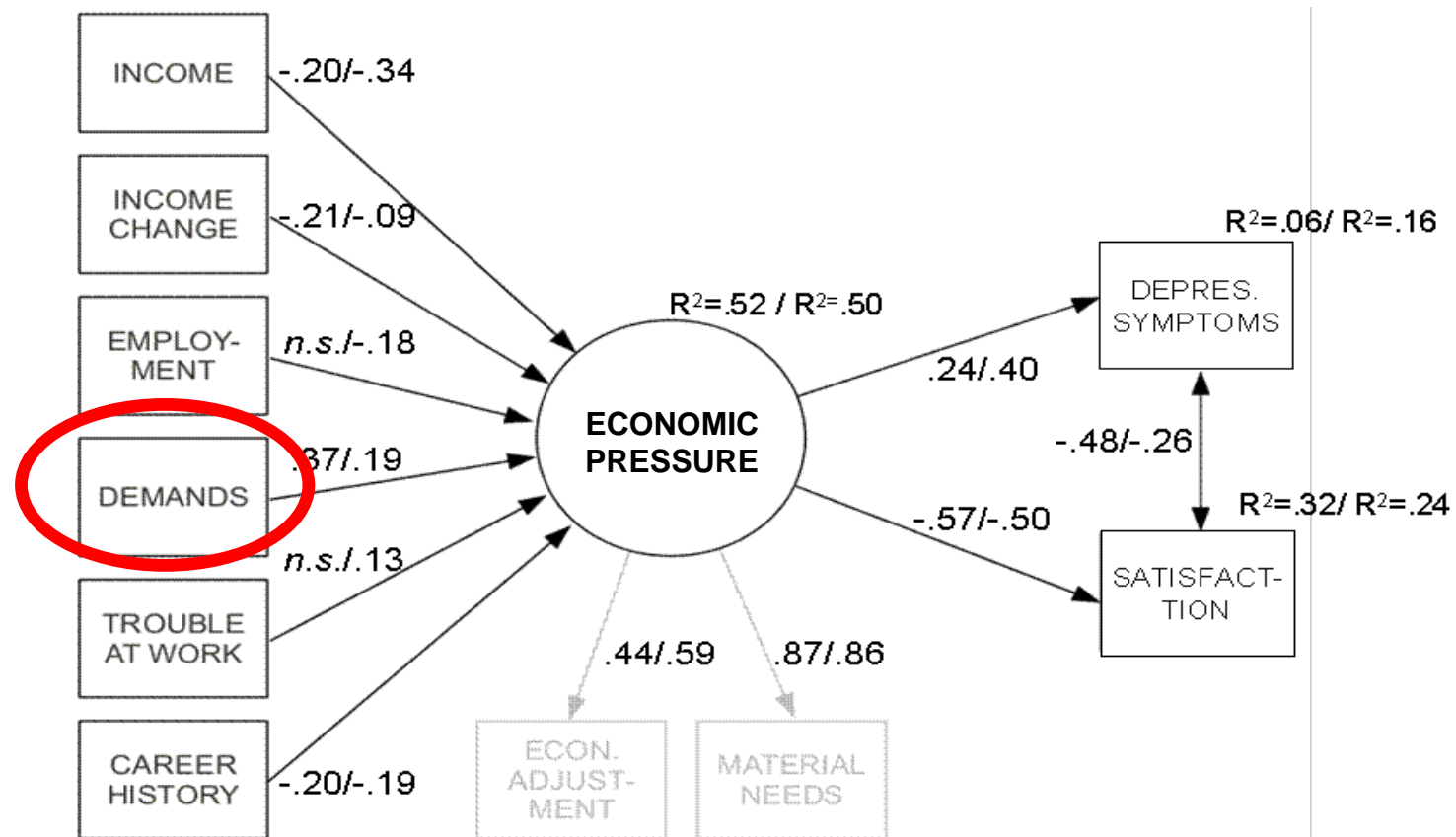


seit 1558

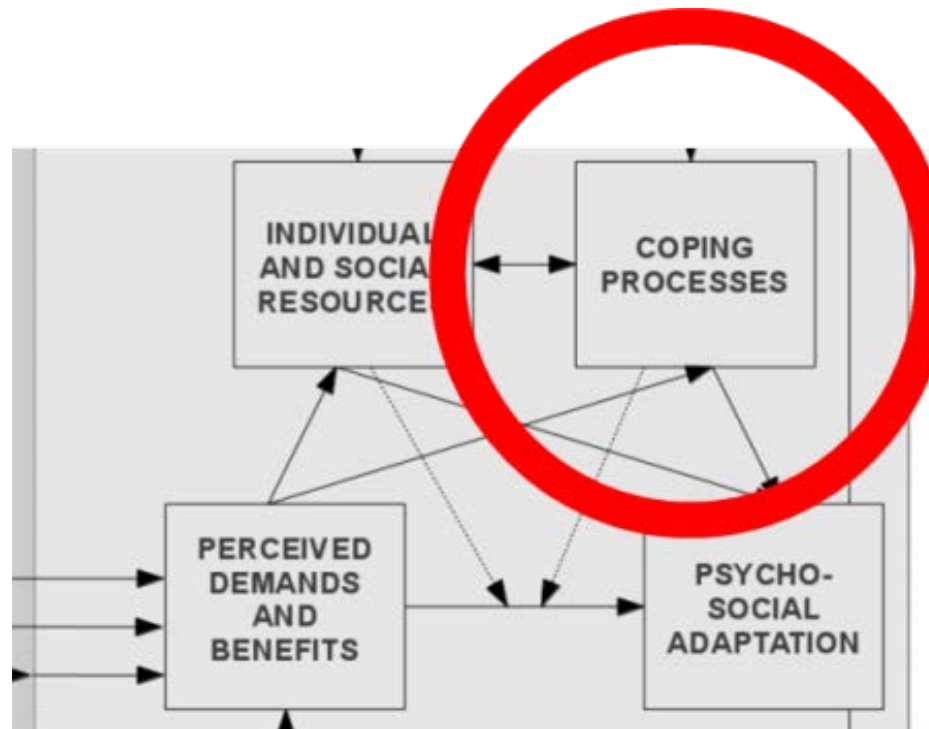


- To illuminate their distinctness, we analyzed whether demands play a role in predicting economic pressure (household adjustments due to income change, deficiencies in spending power).
- Results, reminiscent of Conger, Conger & Martin, 2010, showed the expected effect of demands (stronger for younger age), beyond low per capita income, negative income change, unemployment and downward trends in career (Silbereisen, Tomasik & Gruemer, 2014):

- The data refer to the period of the Great Recession 2008/2009.



# 3) Engagement and Disengagement with Demands



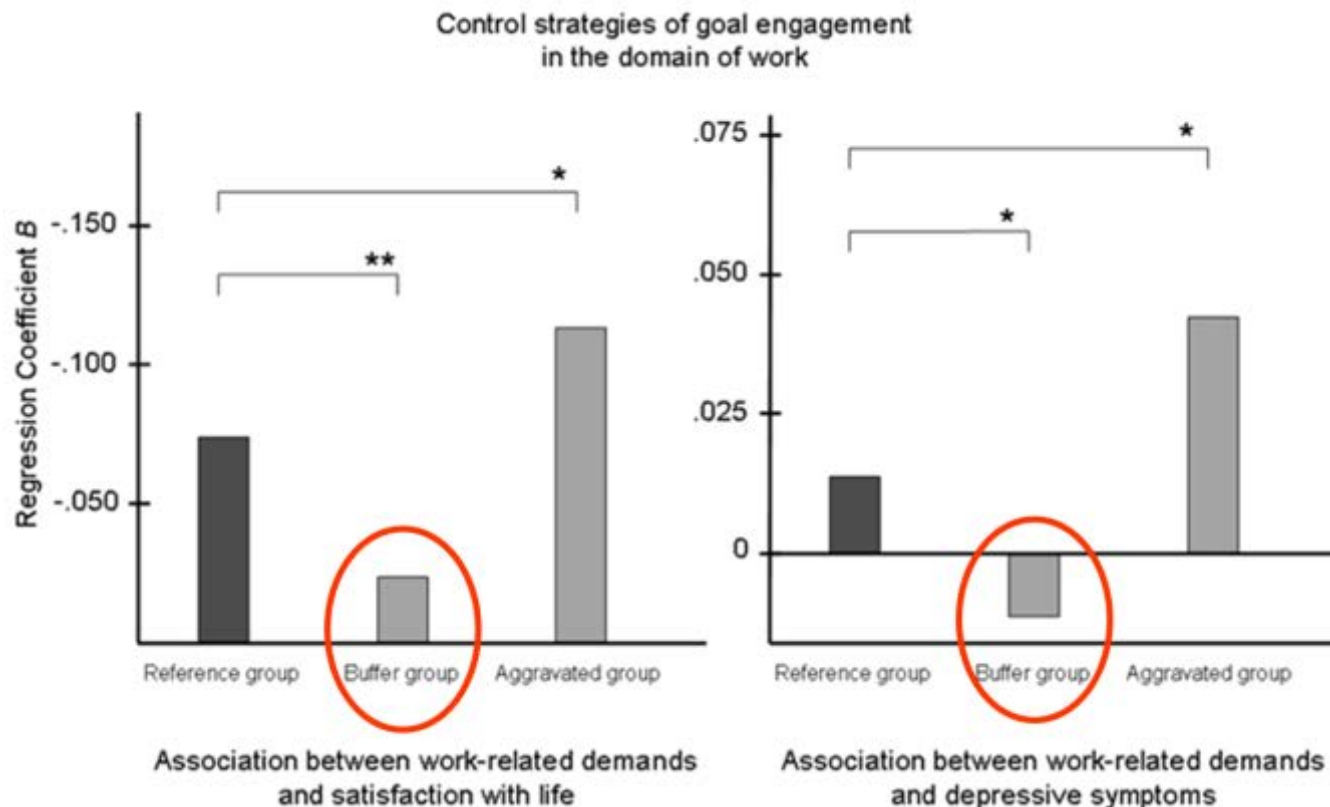


- Following the approach of “developmental regulation” introduced by Heckhausen (Heckhausen, Wrosch & Schulz, 2010), we distinguished two types of coping with our demands.
- Engagement = to be active in tackling aversive experiences directly, thereby rallying energy and motivation and in the case of failure not giving up easily and instead trying again by other means.
- Disengagement = either looking for a face-saving excuse in case of failure, or giving up tackling the problem and leaving the field, possibly with the implication that energy and motivation may be saved for alternative actions.

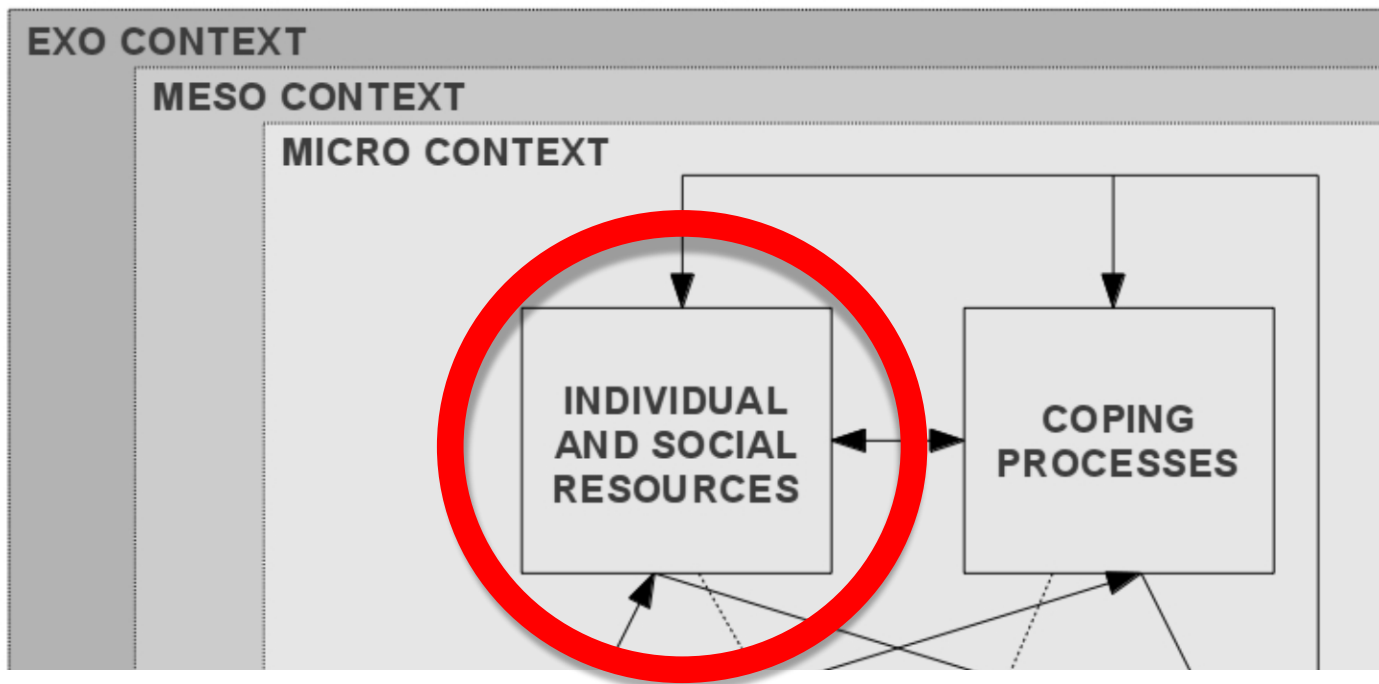
- In general, modes of engagement were more prevalent than disengagement. Beyond that we found a remarkable difference between the countries (Tomasik, Silbereisen, Lechner & Wasilewski, 2013).
- In Germany engagement was high if the demands were experienced as challenge rather than threat, and as gain rather than loss. In Poland these appraisals were irrelevant for action, probably related to smaller welfare support in Poland.
- Basically same results for those before the education-to-work transition (Lechner, Tomasik & Silbereisen, submitted).

- According to Heckhausen (1990), the effect of demands on well-being should be smaller (less negative than on average) when high engagement and high sense of control come together, whereas the negative relationship should be aggravated when an incongruent combination applies. This is exactly what we found (Gruemer, Silbereisen & Heckhausen, 2013):

- The Figure shows the buffering group (congruent) almost consistently reveals a less negative/positive association with life satisfaction and the aggravate group (incongruent) a more negative association.



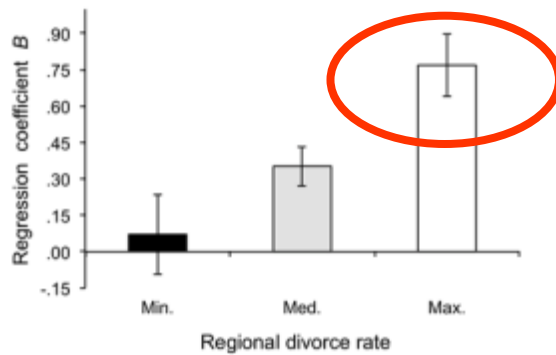
## 4) The Role of Resources



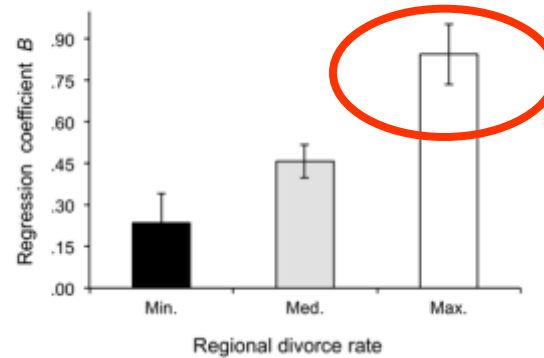
- Exploration as first example. It is a disposition to scrutinize context and embrace novelty for personal growth (Kashdan & Silvia, 2008).
- In both Germany and Poland people higher in exploration reaped the benefits of social change, such as new lifestyle options and new learning opportunities, more than others (Lechner, Obschonka & Silbereisen, 2015).

- This was especially so when living in regions characterized by a higher divorce rate and a higher rate of internet domain registrations, seen as providing more opportunities, frames of reference, and behavioral models for societal trends toward individualization and knowledge society.

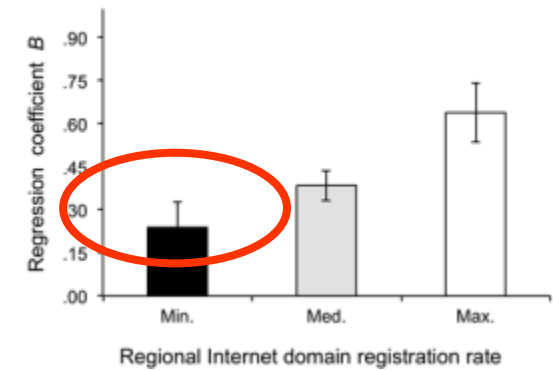
**A** Regressing new lifestyle options on exploration (Germany)



**B** Regressing new lifestyle options on exploration (Poland)



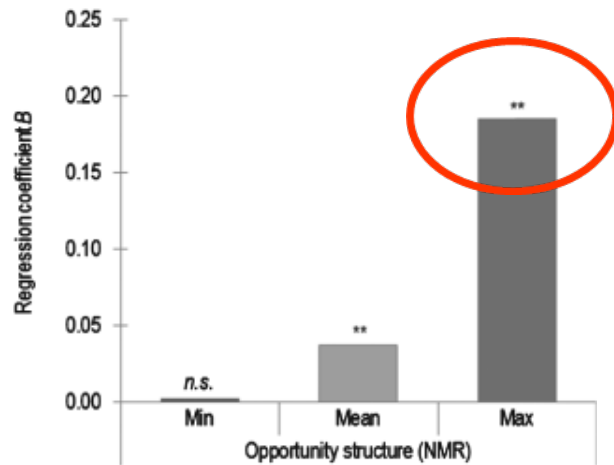
**C** Regressing new learning opportunities on exploration (Germany)



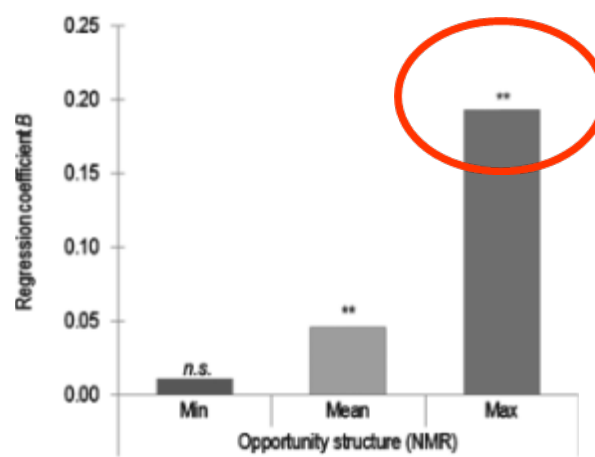


- Religiosity as second example. It is the proclivity to draw on one's faith when confronted with challenges, thereby enhancing resources such as social support, hope, positive emotions, sense of control, solace and comfort.
- In Poland, living in prosperous environments revealed a stronger association between religiosity and engagement, and precarious environments a closer relationship with disengagement.
- Apparently religiosity functions as empowerment of opportunity-congruent coping (Lechner et al., 2014).

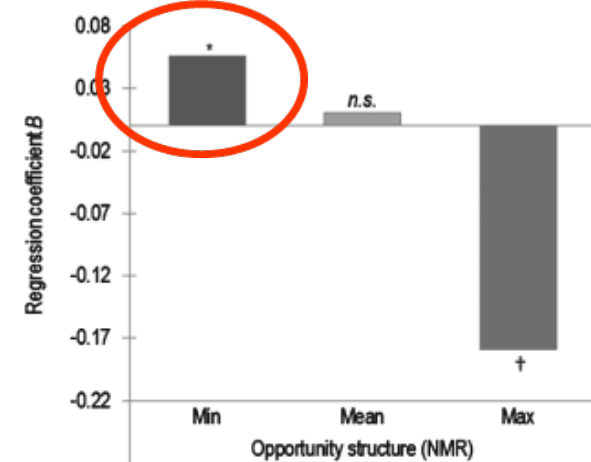
(a) Religiosity → Selective primary control



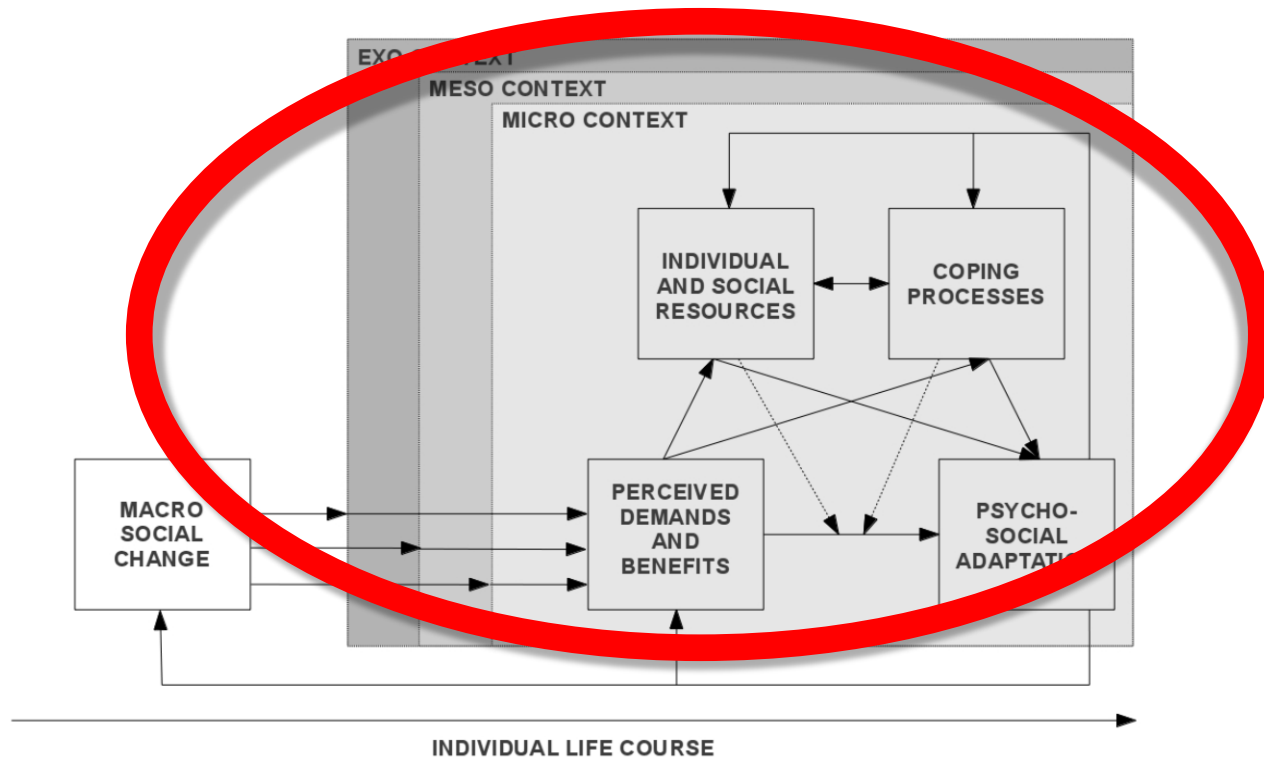
(b) Religiosity → Compensatory primary control



(c) Religiosity → Goal-distancing



# 5) All Taken Together in Multi-Level Format



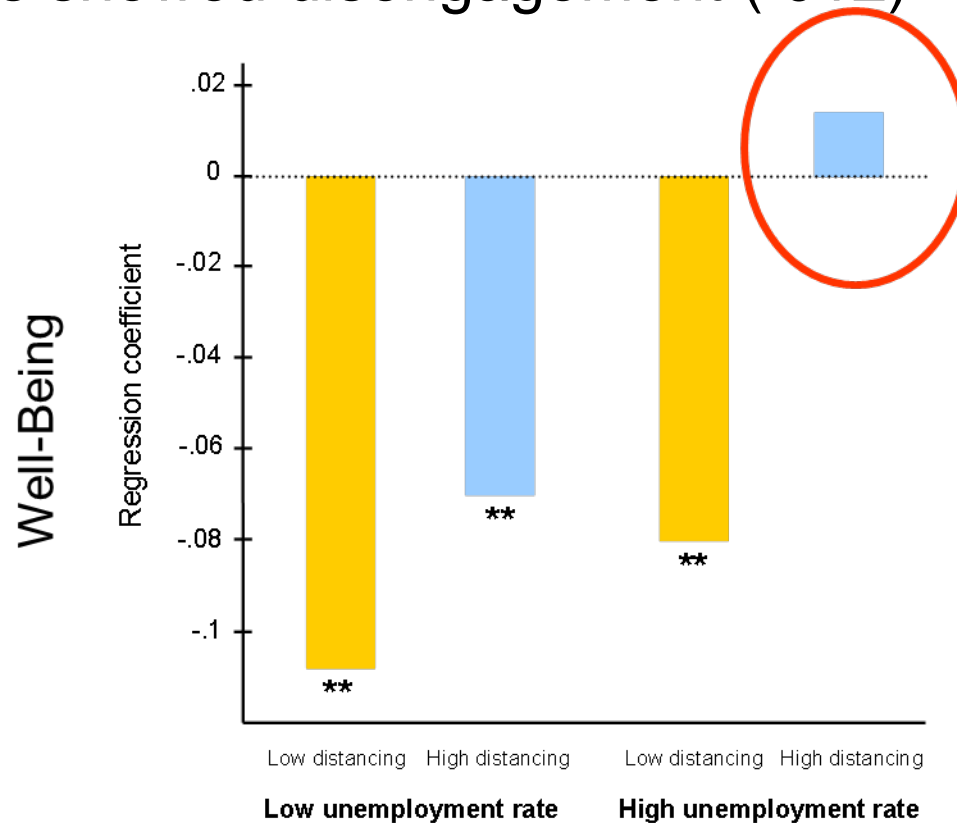
- In economics the „social norm“ effect is well known – as to Clark (2003) the negative individual-level relationship between unemployment and mental health is weaker if the aggregate unemployment is higher.
- Reminiscent of that, Pinquart, Silbereisen & Koerner (2009) expected and found a moderating effect of the regional economic prosperity on the processes in the Jena Model.

- More specifically, the relationship between demands and well-being became less negative (.024) among those who live in regions with high unemployment rate. The effect of engagement, however, was less positive (-.058).

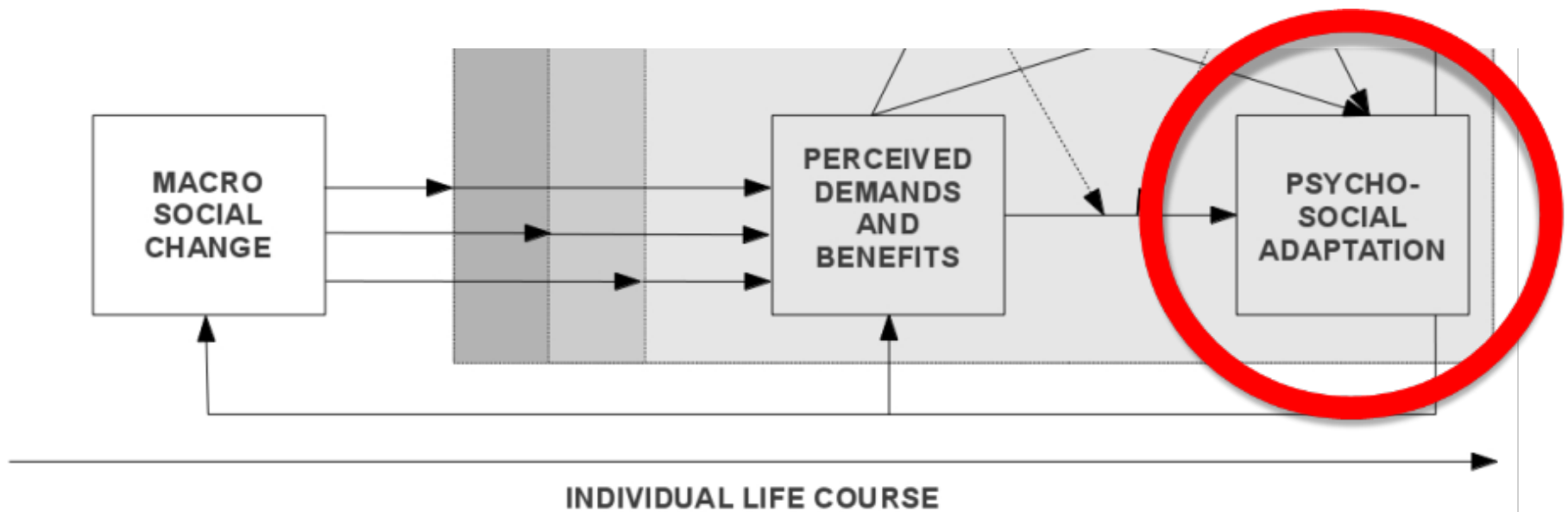
Dependent variables (Level-1)										
	Association of level of demands with well-being		Association of engagement with well-being		Association of disengagement with well-being		Interaction effect of demands x engagement		Interaction effect of demands x disengagement	
Independent variable (Level-2)	$\gamma$	SD	$\gamma$	SD	$\gamma$	SD	$\gamma$	SD	$\gamma$	SD
Unemployment & poverty	.024 **	.011	-.058 *	.022	-.043	.024	.002	.015	.012 *	.006

\*  $p < .05$ , \*\*  $p < .01$

- Additionally, demands were no longer negative for well-being, if participants living in economically weak regions showed disengagement (.012).

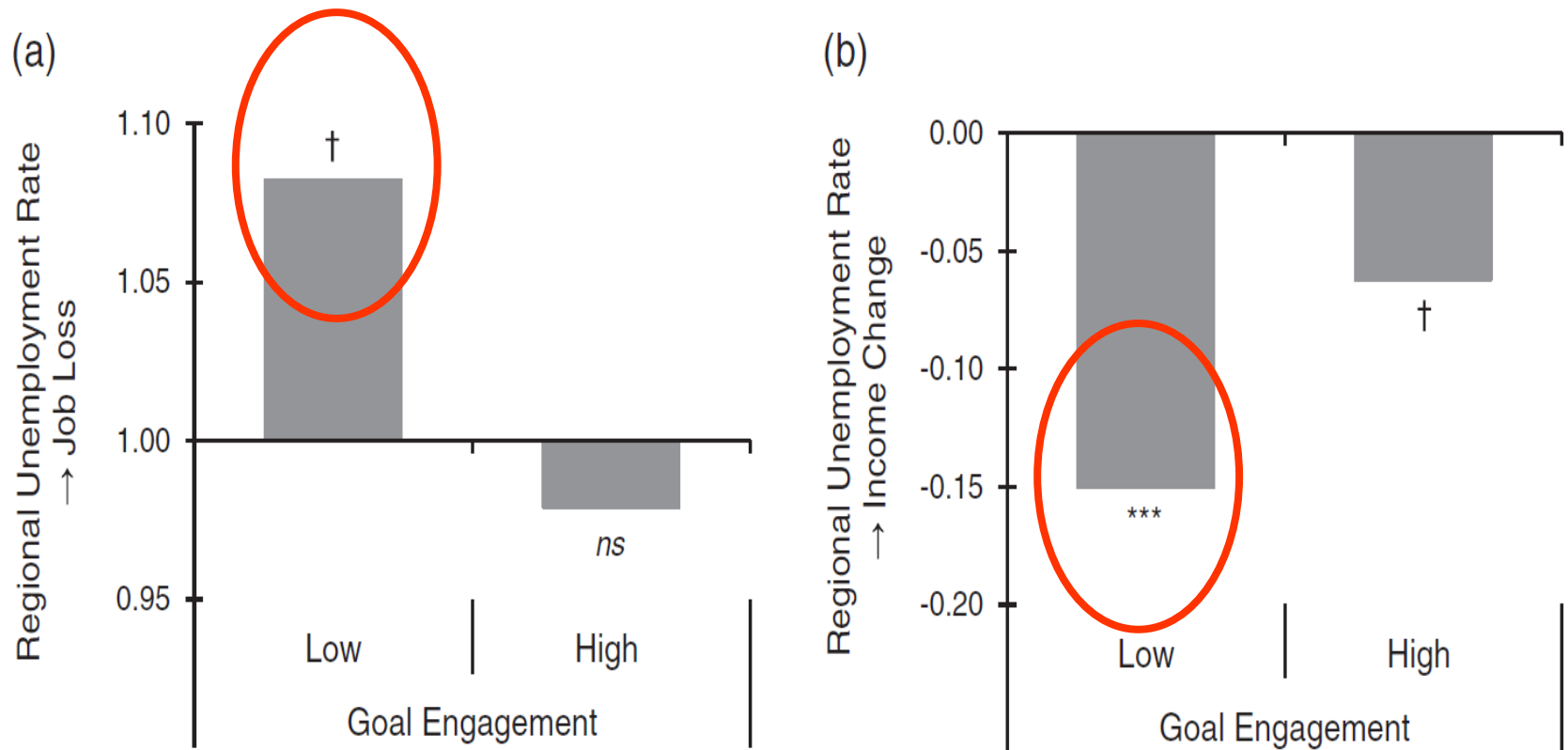


# 6) What about Protective Effects on “Hard” Facts of Life?



- Indicators of well-being can be deemed “soft” criteria, and thus the question remains whether engagement also is able to buffer people against “hard” facts in the domain of work.
- Compared the effect of prior high and low engagement on later odds of job loss and income loss, as a function of the regional unemployment rate. On average a higher rate corresponded to higher odds in both criteria, but the effect was not significant for high engagement, indicating a protective effect as expected (Koerner et al., 2015):





**Fig. 1.** Associations between regional unemployment rate and objective career-related outcomes for high and low (i.e.,  $M \pm 1 SD$ ) levels of goal engagement in coping with occupational uncertainty at  $T_1$ . Outcomes are (a) the likelihood of job loss between  $T_1$  and  $T_2$  (associations expressed in odds ratios), and (b) income change (i.e., income at  $T_2$  controlled for income  $T_1$ ; associations expressed in unstandardized regression weights). † $p < .10$ . \*\*\* $p < .001$ .

# Future Avenues of Research



- Want so summarize our future time perspective in six points and give examples of own initial research and advice to public policy.
- First, we need studies of demands and their effects in other transformation countries. Encouraging results were already found for China (Chen et al. , 2010), Ghana (Mahama, Silbereisen & Eccles, 2014), and Korea (Silbereisen, 2016).

- Second, a more comprehensive assessment of demands, including other domains of life such as the public policy initiatives for “active aging” (WHO, 2002; Pavlova & Silbereisen, 2012) may be interesting. Likewise one could analyze domains more in-depth, such as following Kubicek, Paškvan & Korunka (2014) who distinguished five aspects of the current acceleration of life (Rosa, 2013) in the work domain.

- Third, groups such as NEETS (not in employment education and training which amount to 16% of the population in OECD countries) deserve a closer look concerning their dealing with demands. Interventions need to be developed in order to avoid “scarring” effects on future adult unemployment and low life success more in general (Schmillen & Umkehrer, 2013).

- Fourth, the approach needs to be expanded to other psychosocial outcomes. For instance, experiencing high demand loads makes no difference in itself for whether individuals are willing to volunteer for a good cause. What matters is how people deal with uncertainties at what life stage (Pavlova & Silbereisen, 2014).
- Fifth, there are also benefits of social change that may compensate demands. We showed for Germany and Poland that groups characterized by high demands and low benefits particularly suffer from low psychological resources and adjustment (Obschonka, Silbereisen & Wasilewski, 2012).

- Sixth, the proximal processes producing the context moderation of the effect of demands on psychosocial outcomes need more study. Beyond social norm effects and country-specific policies of financial compensation and measures for further qualification (Lunau et al., 2011), differential risks and opportunities in peoples' immediate neighborhoods (affected by social change) are candidates for exacerbating or attenuating demand effects on psychosocial outcomes (Votruba-Drzal, Miller & Coley, 2016).

# Conclusions





- Comparisons of multiple context x person interactions across the lifespan of dealing with demands of social change are of utmost importance (Pinquart, Silbereisen & Koerner, 2009; Lechner, Obschonka & Silbereisen, 2015).
- We need a systematic approach to these “cascading effects” that also controls for possible selection behind the moderation (Sampson, Morenoff & Gannon-Rowley, 2002).
- Our finding that young people still in education and training appreciate demands more compared to those in employment gives hope – it shows a positive outlook among those most struck by social change that in itself can be productive (Tomasik et al., 2013).

- As demands/uncertainties and their course over time are an ordinary part of life for most people (Tomasik & Silbereisen, submitted), attempts at simply avoiding them will probably fail, and after all there are also challenges that may help to grow (Friedman & Kern, 2014; Mancini, Littleton & Gruills, 2015).
- Consequently it is important to promote capabilities for adequate coping and control beliefs, whereby skills to perceive and exploit the opportunity structures in the environment should be core of policy interventions (Banerji et al., 2014).

- On the level of social policy, our results are conducive to the new “social investment approach” (rather than compensatory social spending) that invests in human capital development and that helps to make efficient use of human capital, while fostering greater social inclusion (Morel, Palier & Palme, 2012).
- All this will only work if contexts offer ample opportunities for striving, based on the skills promoted. Otherwise people will “accentuate” old behaviors rather than revert to the new behaviors required (Casp & Roberts, 2001).

## Reference:

Silbereisen, R. K. (in press). Coping with perceived chances and risks associated with social change. In R. A. Scott, S. M. Kosslyn, & M. Buchmann (eds.), *Emerging trends in the social and behavioral sciences*. Oxford: Wiley.

