

# **The acceleration of social life in modern societies: sociological theories and empirical results**

**“Health, culture and society”**

**Univerzita Karlova, Praha**  
**April 29th 2016, 11.00-12.30**

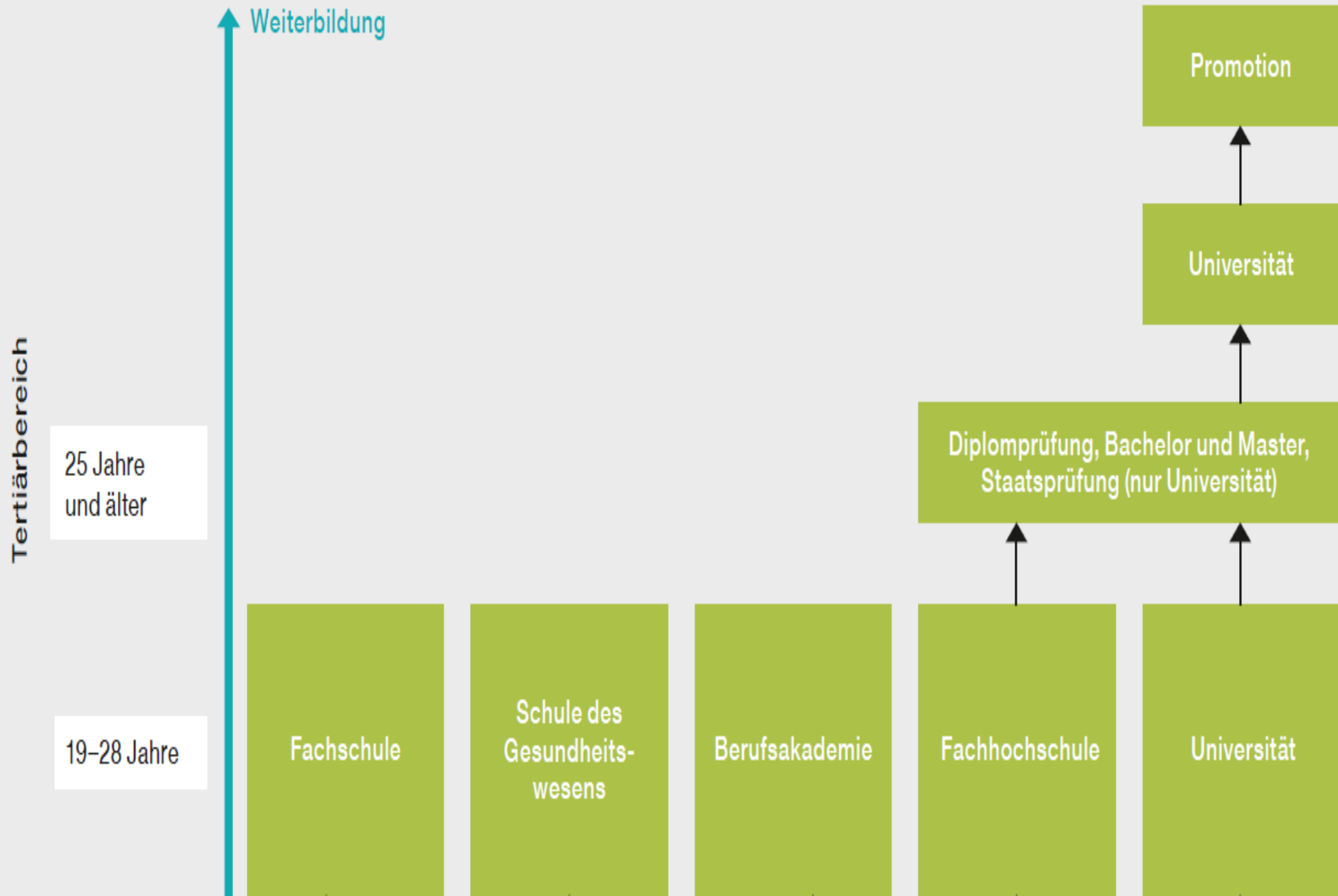
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- 1. My university**
  - 2. Empirical social research: principles, aims, methods, design, process, operationalisation, quality criteria**
  - 3. Research questions aiming at „pace of social life“**
  - 4. Time budgets of full-time-employed in 1965, 1991, 2012**
  - 5. Theories to explain acceleration**
  - 6. Controversial explanations for the happiness-time-stress-paradoxon**
  - 7. Conclusions**
  - 8. Acceleration of education in the life-course**
-

# Nuremberg Institute of Technology: Let me introduce my university to you





# Tertiary Education in Germany





The Nuremberg Institute of Technology, in short Nuremberg Tech, with more than 11,300 students is one of the largest **universities of applied sciences** in Germany, and is known for

## ten strategic leading topics

- a wide range of subjects and departments
- interdisciplinary research
- application-oriented teaching
- international focus



- attractive working conditions
- excellent performance
- importance for the metropolitan region
- our world-famous eponym

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- Students ~ 1.510
    - Bachelor Degree Social Work ~ 1.300
  - Female: male 80:20
  
  - Newly enrolled students per annum
    - Bachelor Social Work 300
    - Bachelor Lifelong Learning 40
    - Master Degree Social Work 38
    - Master Counseling and Coaching 10
  
  - Professors 32
  - Part time lecturers ~ 100
-

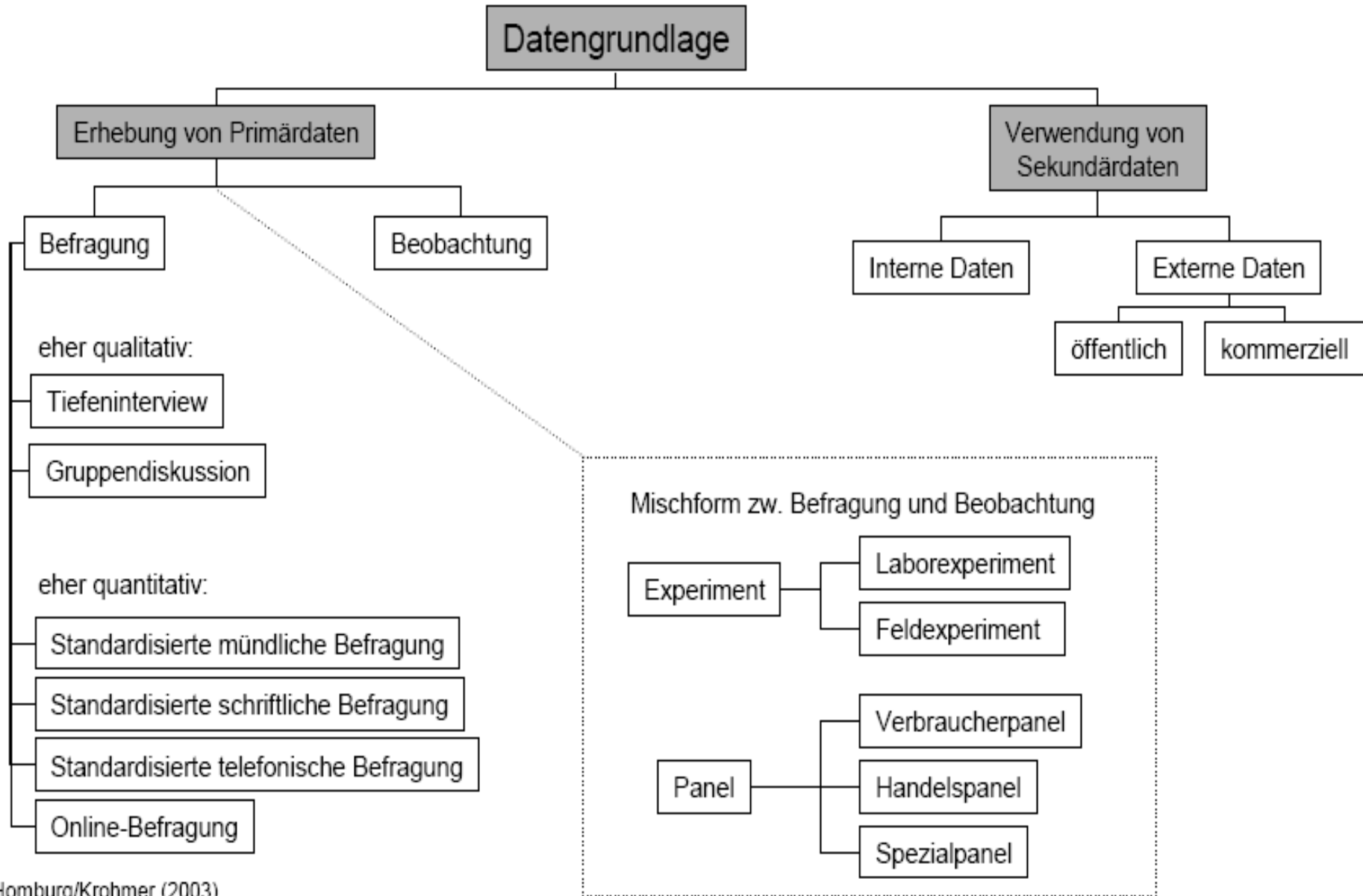
1. Pose significant questions that can be investigated empirically!
2. Link research to relevant theory!
3. Use methods that permit direct investigation of the question!
4. Provide coherent and explicit chain of reasoning!
5. Replicate and generalize across studies!
6. Disclose research to encourage professional scrutiny and critique!



- description of social reality
- exploration, if you have little information. Often leading to generation of hypotheses
- explanation: examination of the empirical validity of hypotheses and theories
- evaluation of the effects of a programme
- prognosis: based on empirical valid theories, prognosis is possible (mainly in psychology, not so often in sociology)

1. Concrete research question
2. Theoretical background (state of the art in research)
3. Research design (explorative, descriptive, analysis of correlations, analysis of causes, longitudinal)
4. Sampling
5. Methods of data collection
6. Methods of data evaluation
7. Reference back to the research question
8. Generalisation

# Methods of empirical social research



- depends on research question
- An example: examination of change  
→ Longitudinal design
- without intervention: time effects in longitudinal studies
- with intervention:  
impact of „measures“:  
evaluation studies
- „What do you think about  
double-blind-experiments“?



# The problem of evaluation



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Integration  
Index

INTERVENTION  
in order to improve  
integration of migrant youths

$\Delta(I)$

Intervention

no  
intervention

Effects of chance

Effects of chance

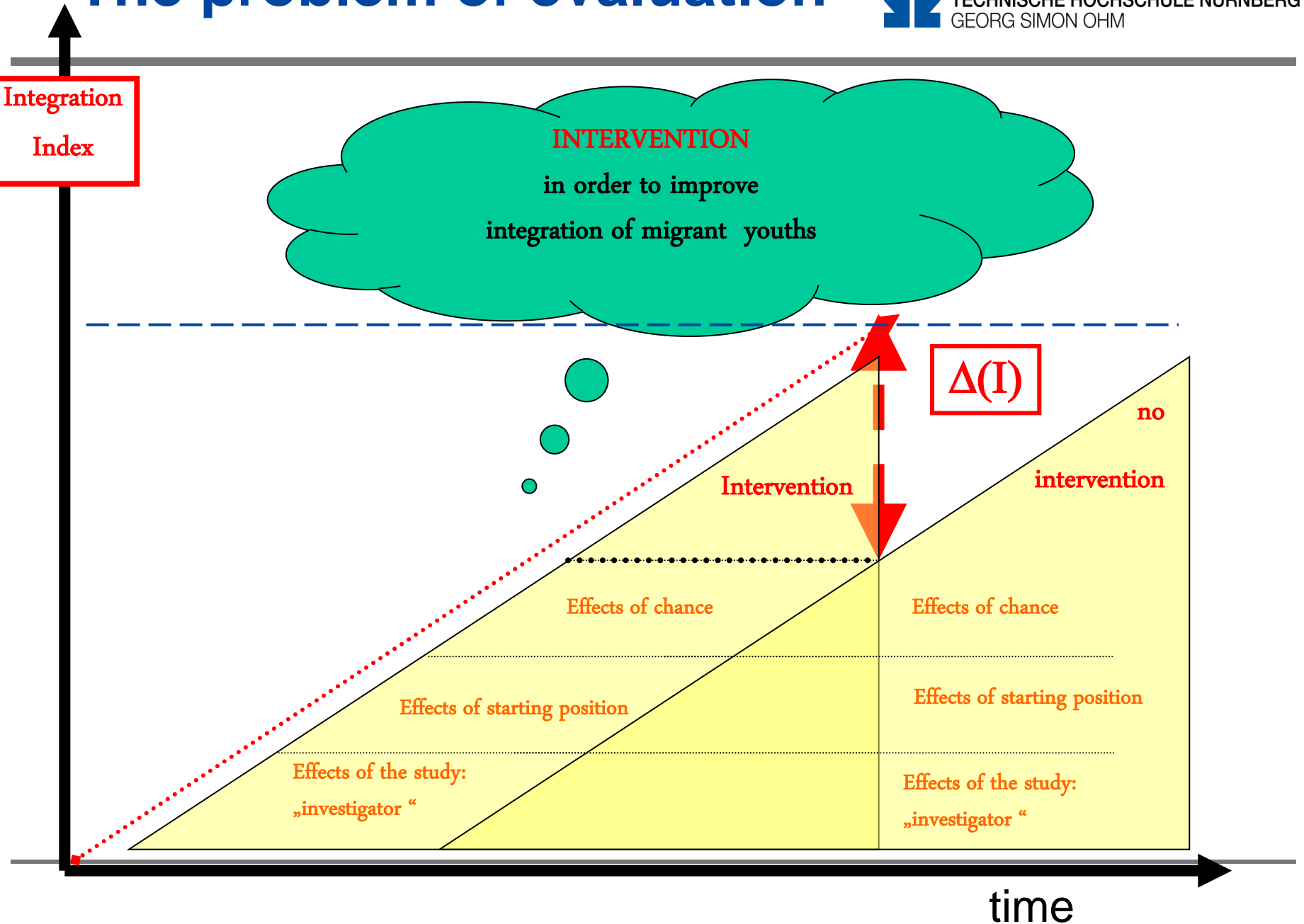
Effects of starting position

Effects of starting position

Effects of the study:  
„investigator“

Effects of the study:  
„investigator“

time



- How can theoretical terms be measured empirically?

term (e.g. acceleration of social life)



dimensions



indicators



measuring instrument



facts in social reality



## Objectivity:

- Independence from investigator
- In the phases of data collection, examination and interpretation

## Reliability

- Can be reproduced steadily

## Validity

- Does the test or questionnaire measure what it intends to measure?

# Research questions to focus on the acceleration of life

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## Acceleration of social life

<http://www.3sat.de/mediathek/?display=1&mode=play&obj=31774>

- What is the time budget of full-time-employed (and students) for their obligations (studying, employment)?
- How much time remains for their leisure time and for personal needs (= sleeping, body care, meals)?
- How has the time budget of these groups changed in recent decades?
- How do the respondents perceive their time-stress subjectively?

# Indicators of time pressure

	“objective” indicators time-budgets- (diaries) and social indicators		“subjective” indicators perception and importance of		
indicators at individual level	<ul style="list-style-type: none"> <li>leisure time</li> <li>paid work</li> <li>unpaid work</li> <li>share of burden in unpaid work for men</li> <li>time for personal needs:                             <ul style="list-style-type: none"> <li>sleeping time</li> <li>time for a rest</li> <li>time for meals</li> </ul> </li> </ul>		<ul style="list-style-type: none"> <li>time pressure index: 10 items</li> <li>percentage who often feel rushed</li> </ul>	<ul style="list-style-type: none"> <li>satisfaction with one's life</li> <li>happiness</li> </ul>	<ul style="list-style-type: none"> <li>feeling of</li> <li>security</li> <li>looking confidently ahead to one's future</li> </ul>
national time cultures	<ul style="list-style-type: none"> <li>time values (importance of well-being values)</li> <li>time norms (maximum speed on motorways ...)</li> <li>time institutions (free evenings after work, weekends, holidays, youth and retirement)</li> <li>social infrastructure (hours of children in schools, public child care facilities)</li> <li>waiting times in traffic, at doctors, in offices ...</li> <li>extent of paid work, variation: proportion of employed &gt; 48 hours and &lt; 15 hours/week</li> <li>flexible working hours (weekend, shift, autonomy in co-determining one's working hours etc.)</li> <li>proportion of workers with high speed work</li> <li>job insecurity</li> </ul>				

Trends	Time structure at the macro-level	Individual time use at the micro level
Acceleration	<ul style="list-style-type: none"> <li>• higher „pace of social life“</li> <li>• faster global communication</li> </ul>	<p>Less time for</p> <ul style="list-style-type: none"> <li>• sleeping</li> <li>• relaxation</li> <li>• Meals</li> <li>• more people suffer from time pressure</li> </ul>
Compression	<ul style="list-style-type: none"> <li>• in the life-span: shortening of education phase</li> <li>• quicker transitions</li> <li>• less time for work-breaks</li> </ul>	<ul style="list-style-type: none"> <li>• more simultaneous activities</li> <li>• more multi-tasking</li> <li>• more dense paid and unpaid work</li> </ul>

# Measuring instrument to collect data of time-use: diaries for seven days



- 30 prescribed activities
- standardised daily routine diary
- on seven days and over 24 hours in 15-minutes-cycle

## Zu Haus

Persönlicher Bereich zu Haus	5	6	7	8	9	10	11	12	13	14
1 Schlaf										
2 Körperpflege, Anziehen										
3 Mahlzeiten										
Studienbezogene Aktivitäten zu Haus	5	6	7	8	9	10	11	12	13	14
4 Vor- und Nachbereitung, Fachlektüre, schriftl. Arbeiten, studentische AG, studienbezogene Mail u. Internet-Recherche										

# Time budget of full-time employed 1991 and 2012/13

1.545 full-time employed in West Germany 1991/92 (my own data)

Full-time employed 2012/13 according to Statistisches Bundesamt, 1965: Szalai 1972

Mean of 7 days Monday – Sunday in hours

Aktivities at home	1965	1991	2012/13
Sleeping	8,3	7,6	8,2
Body care	0,7	0,6	0,8
Meals	1,3	1,0	1,5
Relaxation		0,4	0,3
Learning at home		0,1	0,2
Homework		1,0	2,4
Child care		0,2	0,3
Talking, including on phone		0,6	0,6
Reading		0,3	0,4
TV, Video		1,5	1,8
On the computer		.	0,4
Sports at home		0,1	0
Employment at home		0,4	0,3



# Which objective time constraints have contributed to the spread of time-crunch

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- A comparison of German time-budgets in 1965 and 1991/92: While in these thirty years the work-free time of full-time-employed Germans has increased by one hour per day this was counterbalanced through the reduction of one hour devoted to personal needs.
- Time devoted to sleeping has decreased for full-time-employed Germans by 40 minutes.
- However, from 1991 to 2012 this loss in sleeping-time was nearly compensated.
- Consequently, every second employed German “could not get a proper sleep” in 1999.
- The trend in the time devoted to sleeping also applies to the French from 1986 to 1999 (12 minutes less).
- In Japan time for sleep continued to decline from 1995 to 2000.

# Top 5 origins for stress Germany 2015



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DEUTSCHLAND: TOP 5 HAUPTURSACHEN VON STRESS

23%



Der Druck,  
den man sich selbst  
macht

19%



Das Geld, das  
zum Leben zur  
Verfügung steht

15%



Die tägliche Arbeit

15%



Schlafmangel

14%

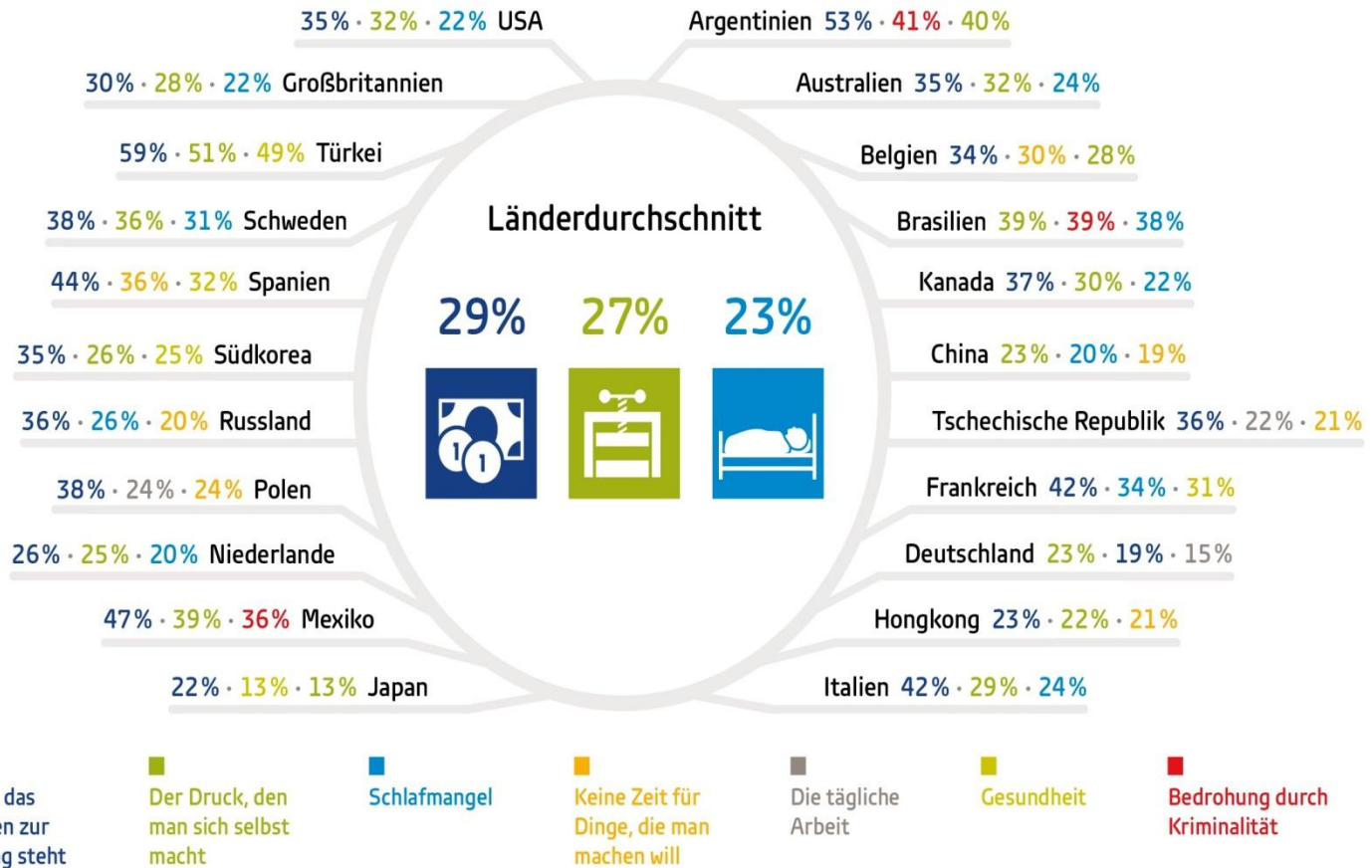


Keine Zeit für  
Dinge, die man  
machen will

# Top 3 reasons for stress D-CZ 2015

## TOP 3 HAUPTURSACHEN VON STRESS

Länderergebnisse



# Time stress increased for younger and middle ages 2011-13

## Keine Zeit für gar nichts: Haushalte zunehmend im Zeitstress

Haushalte mit sehr stark / stark empfundenem Zeitstress



# Ten items of time-pressure among German workers 1999



Items	often in %
under time pressure 1999	46
under time pressure 1991/92	25
cannot get a proper sleep	49
wish to have more time for myself	48
I am stuck to a timetable	39
feel myself under time pressure from others	25
cannot deal with important things properly due to lack of time	17
cannot recover properly from illnesses due to lack of time	18
under so much time pressure that my health suffers	16
arrive late for appointments	8
cannot keep deadlines	5

2015:  
36% of all adult  
respondents >  
14 years  
IfD Allensbach

431 full time employed 1999  
reliability: standardized item alpha .85

# Pace of life in seven nations

	←	slower	or	faster	pace	of	life	→
	Spain 96	Germany 99	UK 95	Sweden 91	U.S.A. 98	Japan 00	Portugal 99	
leisure time per day acc. to diaries mean Mon – Sun	5.4	5.2	5.3	4.8	4.6	4.4	3.6	
percentage who claim to suffer from frequent time pressure	11	46	.	.	40 1993	.	45	
hours per day for a rest or siesta mean Mon – Sun	0.7	0.4	0.1	0.2	0.1 1985	.	.	
Levine-ranking: pace of life (37 nations, 1: fastest)	.	3	6	.	16	2	.	

Time budget data for full-time employed only

Garhammer, 1999, p. 454, Germany 1999 according to GFK-data 1999

USA 1993: Robinson and Godbey, 1997

Japan 2000: own calculations based on Japan: Mitsuya and Nakano, 2001, table 5 and 21 for “jobholders”, part-timers included

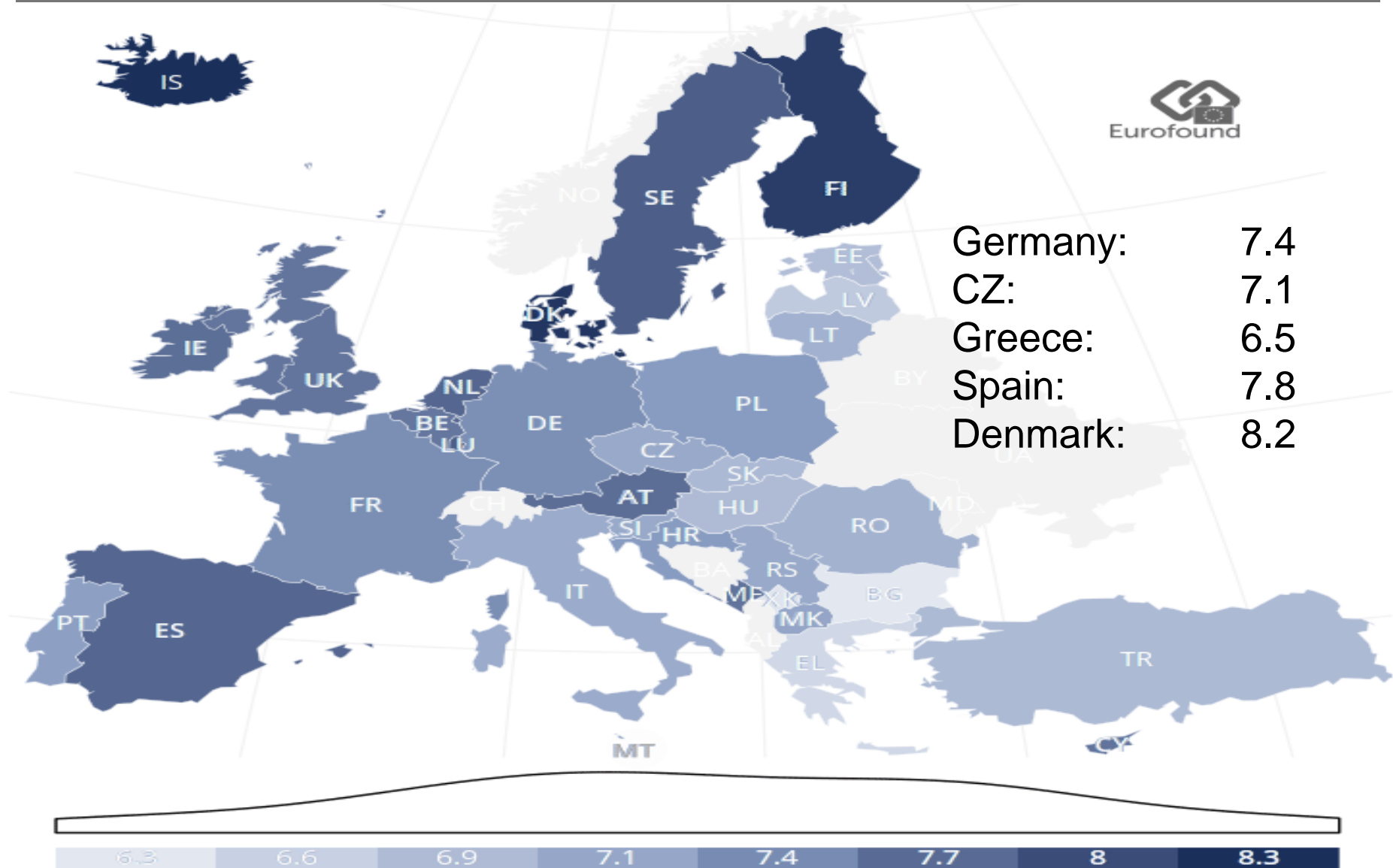
Portugal 1999: Instituto Nacional de Estatistica Portugal (June 19, 2001)



# How happy you are? All age groups > 14

## European Quality of Life Survey 2012 (0-10)

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# Theories in sociology to explain acceleration of life

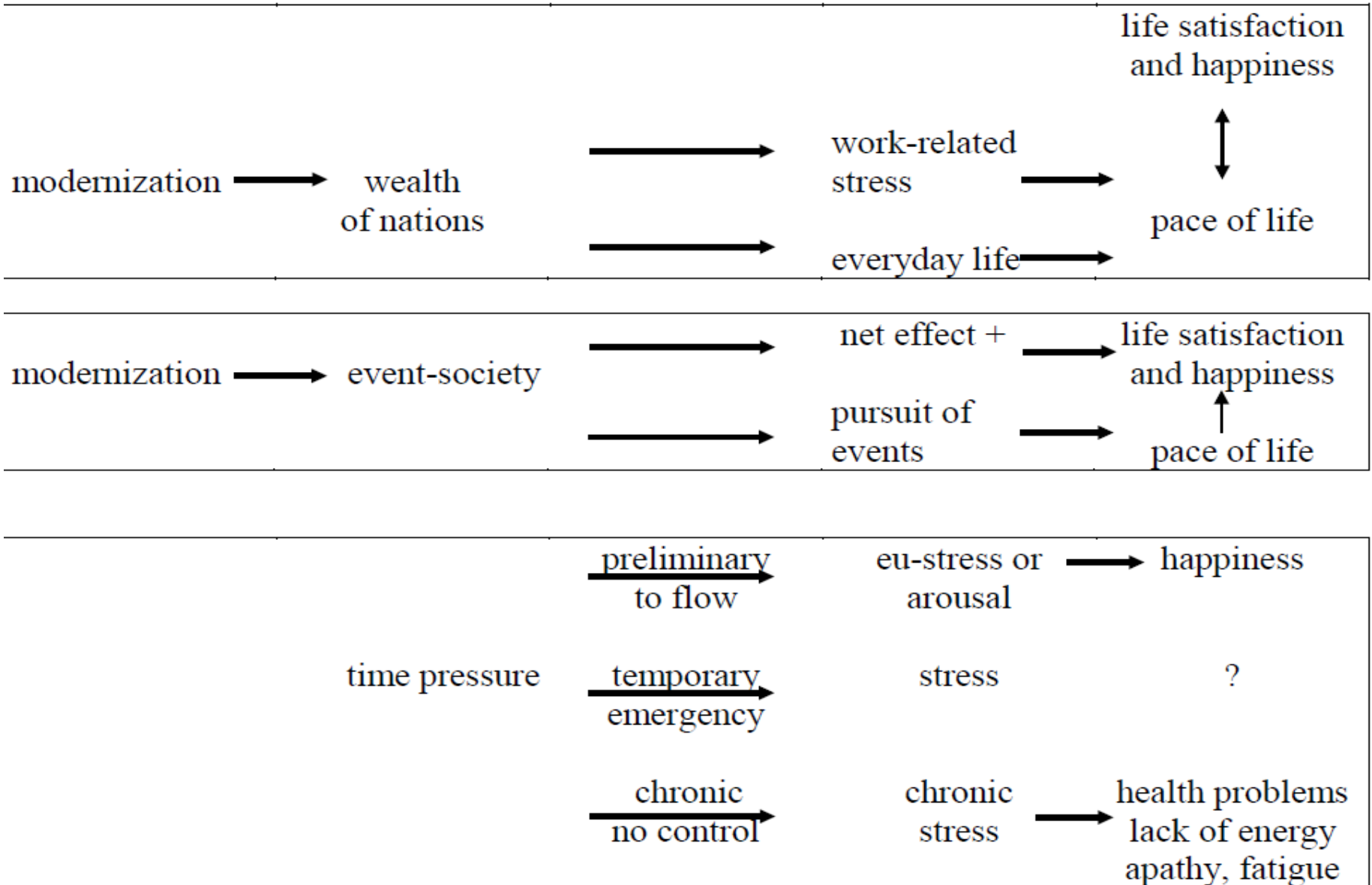
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- Karl Marx 1867: Das Kapital, Vol. I-III, e.g. in ch. 13 on modern industry
- Emile Durkheim 1893: De la division du travail social
- Georg Simmel 1895: The meaning of money for the pace of life
- Staffan B. Linder 1970: The harried leisure class
- Gerhard Schulze 1992: The event Society
- Mihály Csikszentmihalyi 1990: Flow
- Peter Gross 1994: The multi-option-society
- Hartmut Rosa 2005: acceleration: the change of time structure in modern society:

The „paradox“ he stated for the modern society:

We all have less time although we are winning time almost in every areas of life! (see also Linder-paradox)

# Pace of life – enjoyment of life – paradox and possible answers



- As modernization theory argues life satisfaction is proliferating along with living standards (e.g. **Parsons** 1971). It is exactly this change that accelerates social life. Hence, the negative effects of growing stress are counterbalanced by the yields of modernization.
- In 1893 **Durkheim** began his analysis on the division of work questioning Adam Smith's thesis that higher productivity of industrial work would enhance the "happiness of individuals". He argued that in fact industrialization has enhanced the suffering of workers at the same time.
- **Marx** 1867 contributed convincing arguments for the necessity of this fact in capitalism.
- **Durkheim** 1893 (in his book III on the "anomic division of labour") argued that the exaggerated velocity of social change which has increased through modernity "will put a strain on people" and may result in illness. The problem in Durkheim's explanation of "anomy" is not "too little progress but rather too much of it."
- **Schulze** (1992) and **Gross** (1994) associate the origins of time pressure with the opportunities for and the pressure on individuals to "experience more and more in the same length of time": People do not want to miss anything in life. An overloaded agenda is assumed to be the major reason.

- What **Simmel** 1895 observed in Berlin has now intensified: Rapidly changing fashions provide opportunities to discover one's individuality. This multiplication of leisure activities and sense experiences is one reason for the feeling of restlessness: both as a sense of time pressure as well as a “thrill” stimulating one's mind.
- **However:** Leisure within the family prevails particularly in the lower classes. Empirical research has shown that the family-centred life-style is the most proliferated one.
- A second explanation for the paradox is given through the psychological approach according to which time pressure may fulfil a positive function for generating flow and mobilizing resources. Two psychological states which may *both* be connected with time scarcity: “eu-stress” (from the Greek word: eu = happy) or arousal and stress (**Csikszentmihalyi** 1975, 1991, 1992, 2002).
- The crucial condition which sets the “positive” function of arousal as well as temporary emergency-stress apart from negative stress is whether the actor feels in control of his actions or not. In the first case arousal may become the “spice of life”, a challenge, not a threat. When actors lack this sense of control then the notion of stress changes: from the “spice of life” to the “kiss of death”.

- Findings are consistent throughout recent literature that *chronic time pressure in work life* is increasing and is associated with *poor mental health* and *psychic and somatic symptoms* (see *European Surveys on Working Conditions*)
- One feature which distinguishes arousal or temporary stress in emergency situations from disease-provoking stress and time pressure has been identified as the *chronic occurrence of stress*. In this case time pressure is a cause for concern since it is linked with health symptoms such as fatigue, sleeping difficulties etc.
- This paper has given evidence for various stress factors in work life which do not evolve from free decisions made by actors. They refer to *structural* reasons which are more or less pronounced in distinct cultures.
- Regardless of the North-South-differences within Europe there is a specific *European* organisation of social time as opposed to the U.S.-model where the sense of restlessness is more pronounced.
- Globalisation seems to generalise this US-model.



# Timing of Education Phases in Life

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- Bachelor-reform in the context of bringing forward and compressing in general the educational phase in one's life cycle
- Pre-school education should assume the responsibility of initial school education (neuropsychology: „optimal time frames of child development“)
- School enrolment should take place earlier (6.7 years → 6.0 → 5 years)
- Secondary school (Gymnasium) should take only 8 years (no longer 9)
- Transition to study should be immediate (no gap year)
- The primary degree should only take 6 semesters („Diplom“: 8-12)
- Life-long learning after graduation is defined as a private responsibility
- This corresponds with shortening and compressing institutional education

# Transition Ages 1953-2003

<b>Birth cohort 1953</b>			<b>School enrollment 6.7 years</b>			<b>Graduation age: 27.75</b>
<b>4.5 years parental education at home</b>	<b>1.5 Kin der gar ten</b>		<b>4 years primary school</b>	<b>G9: 9 years secondary education</b>	<b>1. 3 Ci vil Se rvi ce</b>	<b>6.25 years Diplom (university)</b>

<b>Co- hort 2003</b>			<b>School enrollment: 6.0 years</b>		<b>Gradu ation age: 21.5</b>
<b>2 years parent al educat ion</b>	<b>C rè c h e</b>	<b>3 years Kinder garten</b>	<b>4 years primary school</b>	<b>G8: 8 years secondary education</b>	<b>3.25 years Bache lor</b>

## Typical Transition Ages within the Education System UK – Germany 2007/08

	<b>School enrolment</b>	<b>Graduation age upper secondary</b>	<b>Graduation age tertiary 5-6 years („Diplom“)</b>	<b>Graduation age Bachelor 2008</b>
Germany	6-7	19-20	28.1 (2008)	25.8
UK	4-5	16	22-24	22

# Time budget of full-time employed and students 2012/13

Full-time employed according to Statistisches Bundesamt 2012/2013

103 Bachelor-Students of Social Work Nürnberg 2012

Mean of 7 days Monday – Sunday in hours

Aktivities at home	Students 2012	Employed 2012/13
Sleeping	8,4	8,2
Body care	0,8	0,8
Meals	0,9	1,5
Employment/Jobs at home	0,1	0
Learning at home	1,5	0,2
Homework	0,7	2,4
Child care	0,2	0,3
Talking, including on phone	0,9	0,6
Reading	0,2	0,4
TV, Video	0,9	1,8
On the computer	0,4	0,4
Sports at home	0	0
Relaxing	0,4	0,3

# Time budget of full-time employed and students 2012/13

Full-time employed according to Statistisches Bundesamt 2012/2013

103 Bachelor-Students of Social Work Nürnberg 2012

Mean of 7 days Monday – Sunday in hours

Aktivities outside home	Full-time employed 2012/13	Students 2012
Employment/jobs	4,9	0,9
Studies	0	2,9
Work- or study breaks	0	0,4
Commuting to work or to university	0,5	0,6
Other travel time	0,3	0,8
Shopping, errands	0,5	0,3
Visits	0,5	0,7
Sports	0,1	0,2
Hobbies	0,3	0,1
In pubs, cinema, ...		
At events	0,0	0,3
In clubs, organisations ...	0,1	0,1
Walking or excursions	0,2	0,4
Missing data	-0,3	0,9

# Perceived time pressure 2012



How often do you perceive ...

Often/  
always %

Often/  
always %

N = 103  
students  
2012

Under time pressure

60

Forced to multi-tasking

77

Difficult to sleep in the night

29

Time pressure leading to suffering in health

13



**Thank you for your attention!**