

# Longitudinal Research into Child Development from Birth to Adolescence

Findings from the Mannheim Study of Children at Risk

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# Living Conditions of Young People in Western Countries

- increasing rate of children living in poverty

## Kinderarmut in Deutschland nimmt zu

### Von den unter 15-Jährigen sind knapp 2 Millionen von Armut betroffen

Die Zahl der in Deutschland in Armut lebenden Kinder hat im vergangenen Jahr zugenommen. Im März dieses Jahres lebten mehr als 1,9 Millionen Kinder, die jünger als 15 Jahre alt sind, auf Sozialhilfe-Niveau, teilte der Bundesverband des Deutschen Kinderschutzbundes (DKSB) mit. Das entspricht einem Zuwachs von 3,3 Prozent im Vergleich zum Vorjahresmonat. Berücksichtige man noch die Jugendlichen bis zum Alter von 18 Jahren, lebten derzeit insgesamt 2,6 Millionen Kinder in Deutschland in Familien, deren Eltern Arbeitslosengeld II (ALG II) oder Sozialhilfe bezogen, sagte der DKS-B-Präsident Hilgers am Montag in Berlin.

*Kinderschutzbund: 27. August 2007*



# Unsettled and Overwhelmed Parents

Millions of Euro per Year for Books on How to Educate your Kids!



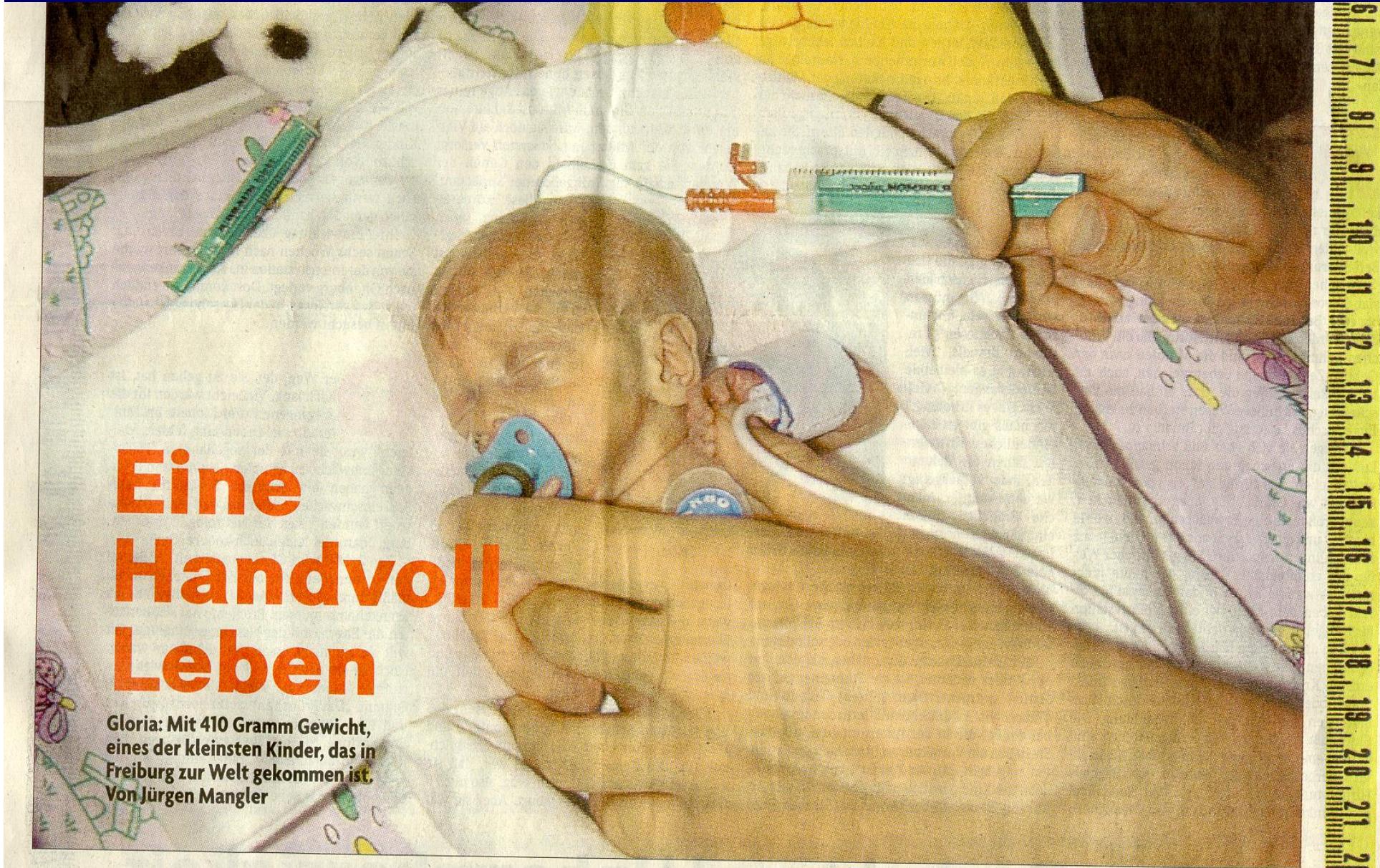
# Break-up of Traditional Family Structures and Bonds



## Familie im 21. Jahrhundert - Auslaufmodell oder Trendsetter

Die Scheidungsrate in Deutschland ist innerhalb der letzten 40 Jahre von 73.000 auf fast das dreifache - 200.000 Scheidungen pro Jahr - angestiegen. Durch die so rasant gestiegene Scheidungsrate kommt es zu einer neuen Familienform - die "Patchworkfamilie" oder auch "Vier-Eltern-Familie". Bei dieser Familienform leben Geschiedene Elternpaare mit neuen Partnern zusammen, so haben die Kinder oft zwei Mütter und zwei Väter, wobei meist nur die leiblichen Eltern das Erziehungsrecht erhalten und so in den Statistiken weiterhin als alleinerziehend gelten. Ist diese Art von Familie die Zukunft des 21. Jahrhunderts?

# The Cost of Medical Progress



# Risk Research

## Aims

- To identify groups of individuals at risk for later disturbed development ► *children at risk*
- To determine conditions of life associated with disturbed child development ► *risk factors*

## Risk Factor

- Condition that, when present, increases the probability of a negative outcome (*Garmezy, 1983*)

# RISK FACTORS

**individual**  
("vulnerability")

e.g.

- genetic disposition
- preterm birth
- low intelligence
- difficult temperament

**environmental**  
("stressors")

e.g.

- poverty
- parental mental illness
- early parenthood
- family discord

# Mannheim Study of Children at Risk

Prospective Longitudinal Study from Birth to Adulthood



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of Childhood and Adolescence**

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- Social Work:** E. Reichert, Soz.arb.
- Secretary:** S. Heinzel

# Research Questions

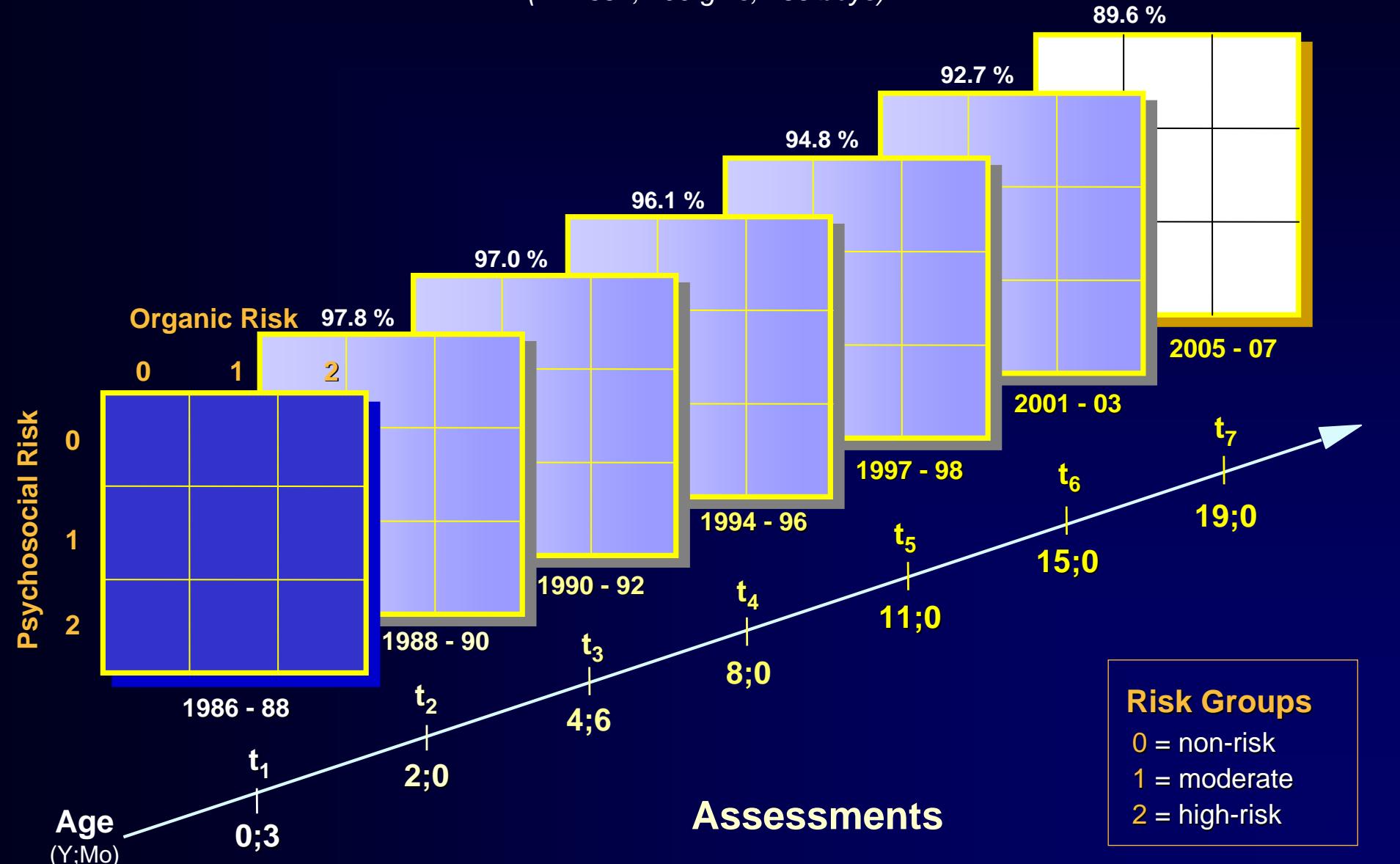
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- Which children are *most at risk*?
- Which *developmental functions* are becoming *impaired*?
- *How and when* do developmental disorders become *manifest*?
- Are *organic* or are *psychosocial* risk factors *more predictive* of later outcome?
- Which children at risk are *resilient*?

# Mannheim Study of Children at Risk

Prospective Longitudinal Study from Birth to Adulthood

(N = 384; 199 girls, 185 boys)



# Mannheim Study of Children at Risk

Prospective Longitudinal Study from Birth to Adulthood

**What becomes of children  
at risk?**

» *the long-term outcome*

# Mannheim Study of Children at Risk

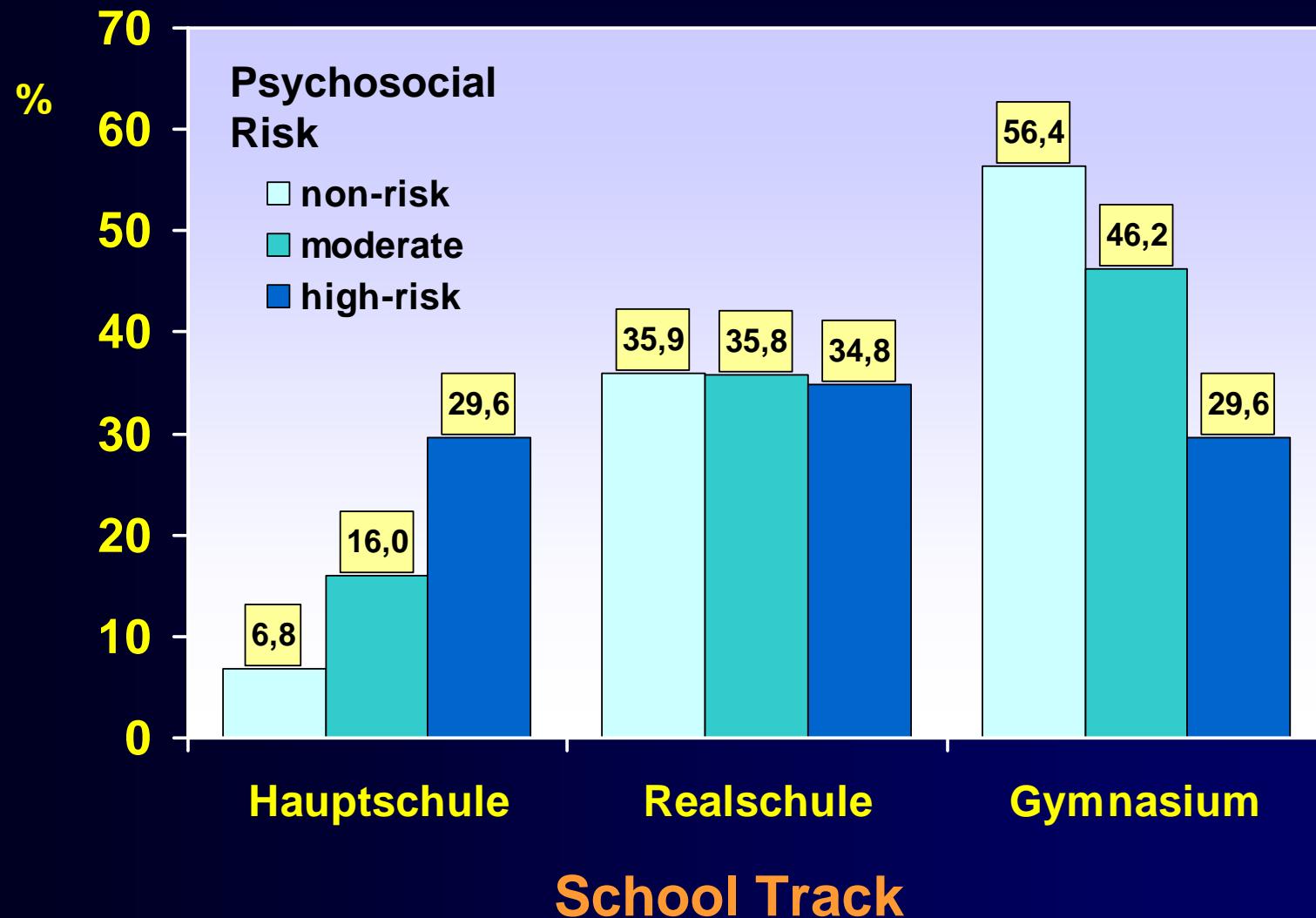
Prospective Longitudinal Study from Birth to Adulthood

## Main Findings

- Unfavourable consequences of early risk factors continue to *persist until adolescence*
- Impairments are found in *all domains* of developmental functioning

# School Attendance of 15-Year-Olds

## from Psychosocially Disadvantaged Families



# Mannheim Study of Children at Risk

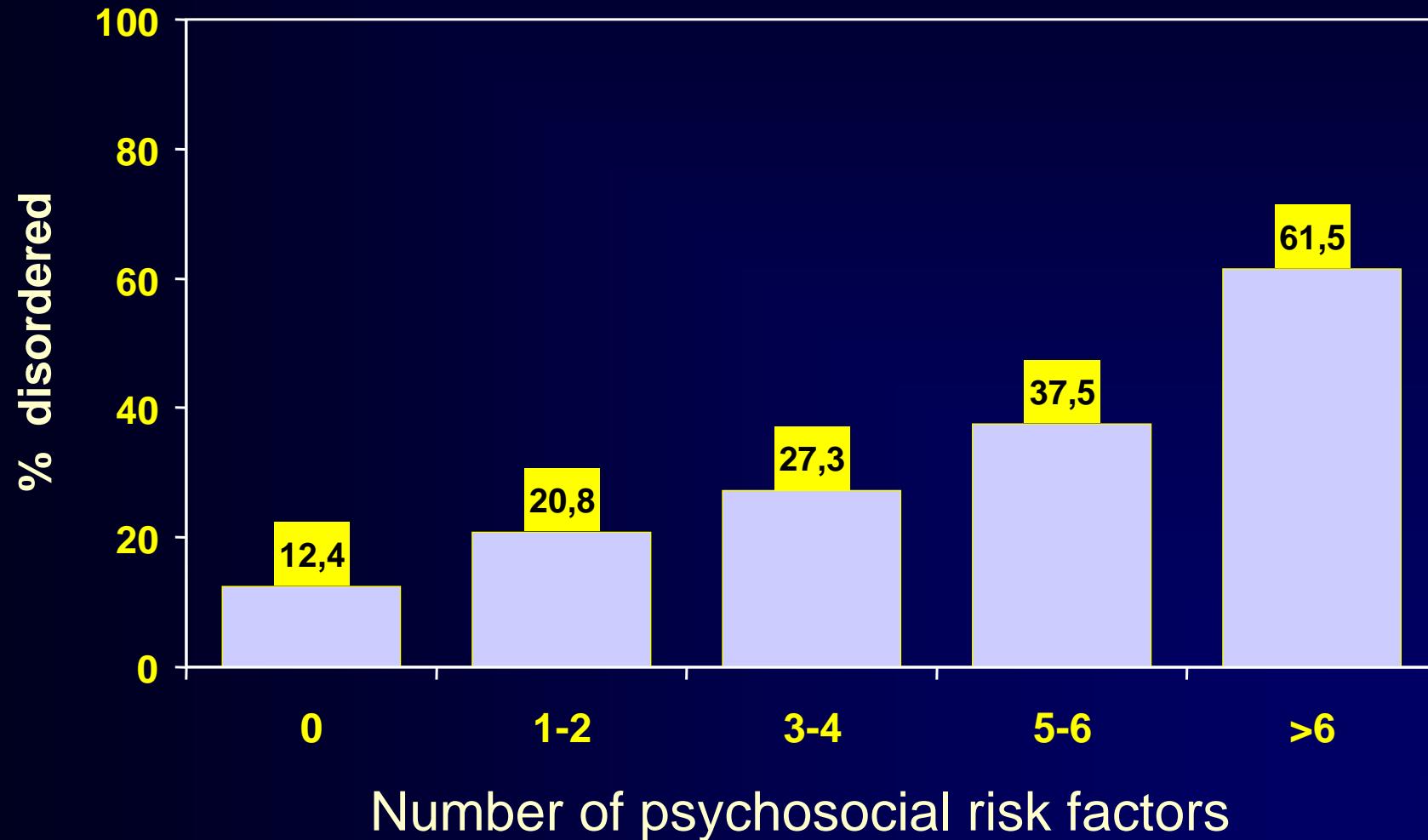
Prospective Longitudinal Study from Birth to Adulthood

## Main Findings

- Unfavourable consequences of early risk factors continue to *persist until adolescence*
- Impairments are found in *all domains* of developmental functioning
- *Cumulative effect of risk factors:* children with multiple risks present with the poorest outcome

# Cumulative Effect of Risk Factors

## for Mental Disorders in Childhood



# VULNERABLE BUT INVINCIBLE

*A Study of Resilient Children*



EMMY E. WERNER • RUTH S. SMITH  
FOREWORD BY NORMAN GARMEZY

## Protective Factors

“factors that hinder or are able to counterbalance the potentially damaging effects of stressors”.

(Rutter, 1985)

## Resilience

“ability to overcome the adverse consequences of early experiences or stressful life events without becoming mentally disordered and to develop coping abilities”.

(Petermann et al., 1998)

# Protective Factors

Werner & Smith (1982)

## **1 Dispositional attributes of the child**

which evoke positive reactions in the environment, such as a positive temperament, intelligence, and self-esteem

## **2 Emotional bonding and rearing practices of the family**

which encourage self-esteem, autonomy and initiative of the child

## **3 Support from the extra-familial social environment**

which stimulates children's competences and strengthens the development of positive moral concepts

# Mannheim Study of Children at Risk

Prospective Longitudinal Study from Birth to Adulthood

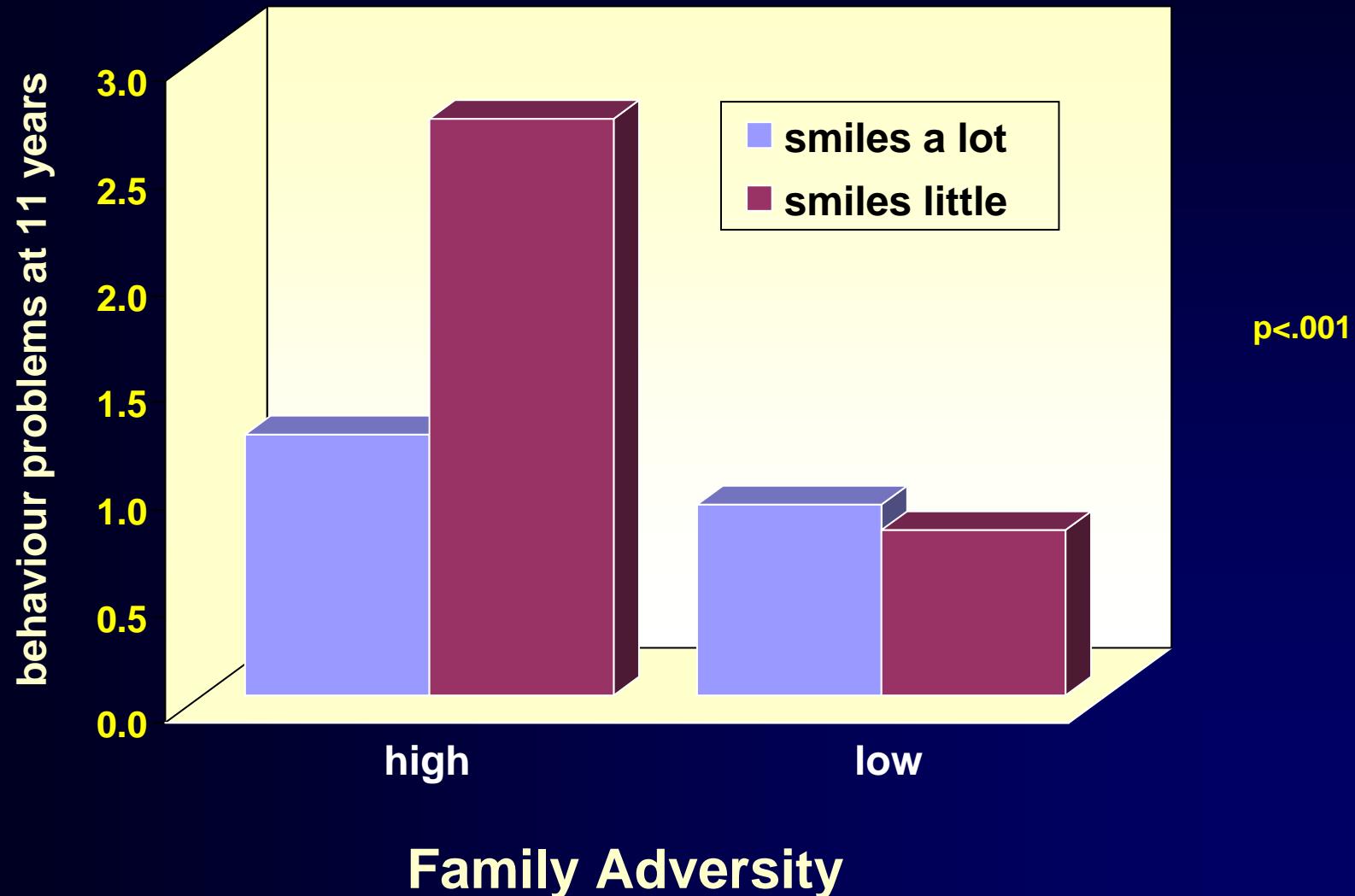
## Which children are resilient?

- » *Protective effect of the early parent-child relationship*



# Protective Effect of Early Interaction

## Infant Smiling in the Interaction with the Mother



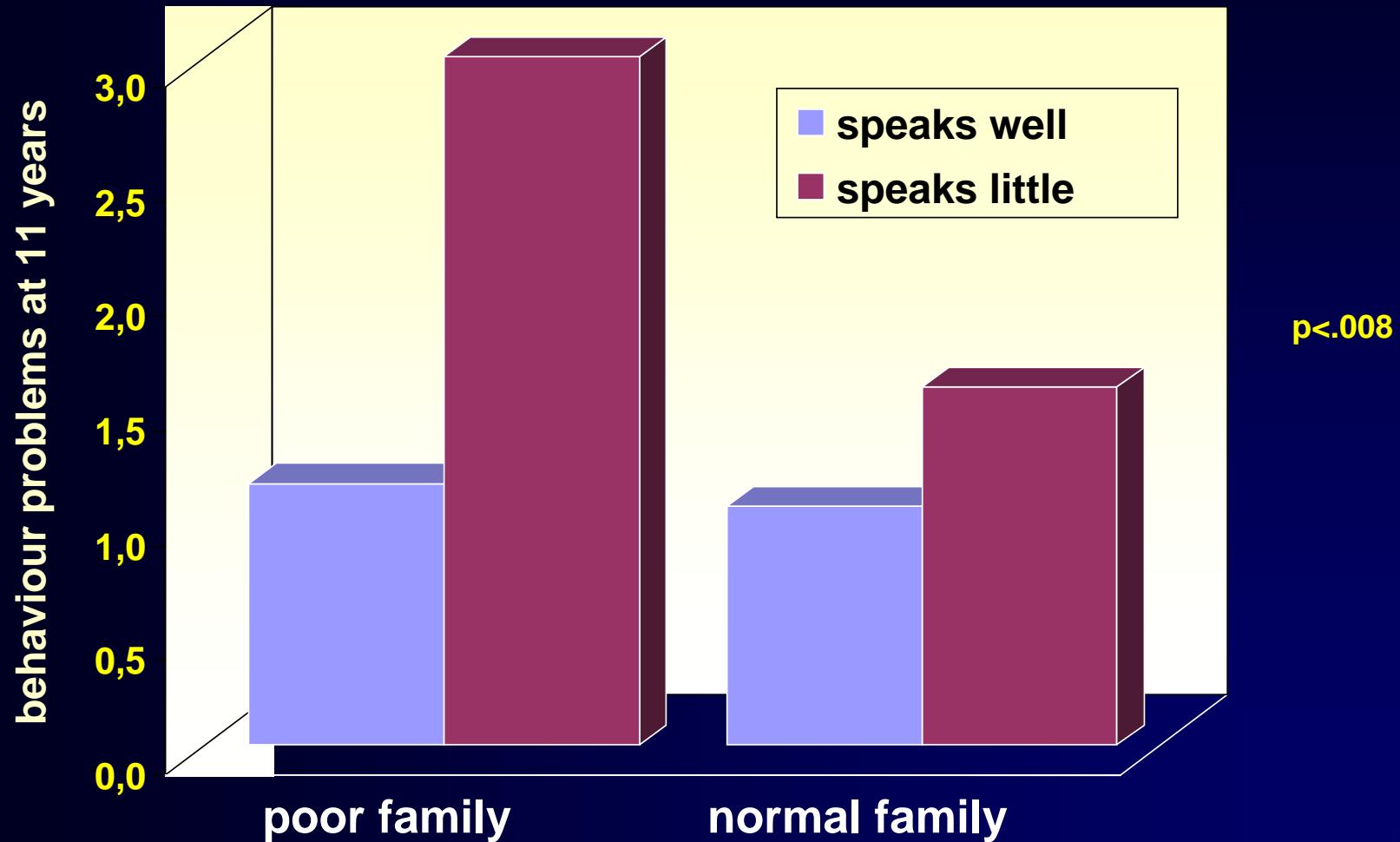
# Mannheim Study of Children at Risk

Prospective Longitudinal Study from Birth to Adulthood

## Which children are resilient?

- » *Protective effects of the early parent-child relationship*
- » *Competences of the child as protective factors*

# Protective Effect of Early Language Competence: Expressive Language in Toddlers



# Summary I

- Numerous risk factors of early childhood are linked with an unfavourable developmental outcome. Many adverse consequences persist into adolescence.
- Children's responses to adverse conditions reveal a high degree of variability. Not all children at risk develop unfavourably; many are resilient.
- Protective effects against adverse outcomes may result from
  - *a positive early parent-child relationship*; and
  - *individual competences of the child*.These protective factors form the basis for the development of ► ***resilience***.

# Summary II

- **Conclusions:** We are in need of more *prevention and early intervention programs*, which focus on the early relationship between child and caregiver and which are particularly addressed at psychosocially disadvantaged families.

The *primary aim* of these programs should be to enhance the resources of children and families.



# Our sincere thanks go to ...



the DFG and the BMBF  
for many years of funding

the study members  
for their loyalty and patience

the current and former co-workers  
for their great commitment:

Lioba Baving, Katja Becker, Dorothea Blomeyer, Giulietta Cucchiaro, Richard Dinter,  
Monika Dinter-Jörg, Günter Esser, Erikson Furtado, Dirk Gerdes, Martin Gerhold,  
Miriam Gschwendt, Silvile Heinkel, Johanna Herlitz, Anne Hinckers, Ingrid Hösch,  
Annette Hoffmann, Erika Hohm, Wolfgang Ihle, Christine Jennen-Steinmetz,  
Claudia Laufer, Walter Löffler, Athanasios Maras, Alexander Marcus, Anika  
Petrova, Magdal Polowczyk, Elisabeth Rechert, Arnold Reiser, Thomas Rellum,  
Frauke Rose, Aribert Rothenberger, Brigitte Schmid, Martin H. Schmidt, Petra  
Steigleider, Birgit Stöck, Rosa-Maria Stein, Joachim Thyssen, Patricia Trautmann-  
Villalba, Frigga von Gontard, Diana Weindrich und Hiltrud Weinel.

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# CHILD OUTCOME

# Neurophysiological development

# Attentional processes in EEG

# Motor development

# Motor skills

## Neurological dysfunction

# Cognitive development

# Reasoning (verbal / non-verbal)

## Specific skills (verbal / nonverbal)

# Social-emotional development

# Psychopathology

# Temperament

## Social adjustment

## Self-concept

# PREDICTORS OF OUTCOME

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## Family environment

- Bio- and sociographic characteristics of the *parents*
- Characteristics of the *partnership*
- Psychosocial characteristics of the *family*

## Parent-child relationship

- Parenting behaviour / attitudes
- Characteristics / patterns of the parent-child interaction  
(behavioural observation, microanalysis)

# Organic Risk

## Pre- and Perinatal Complications

|   |  | n          |
|---|--|------------|
| <b>1 EPH gestosis</b>                       | edema, proteinuria,<br>hypertonia  | <b>53</b>  |
| <b>2 preterm birth</b>                      | $\leq$ 37 weeks  | <b>151</b> |
| <b>3 signs of risk of<br/>preterm birth</b> | preterm labour; tocolytic<br>treatment, cerclage   | <b>43</b>  |
| <b>4 very low birth weight</b>              | $\leq$ 1.500 g   | <b>46</b>  |
| <b>5 clear case of asphyxia</b>             | pH $\leq$ 7.10;<br>Lactate $\geq$ 8.00 mmol/l;<br>CTG score $\leq$ 4 + neonatal<br>treatment $\geq$ 7 days | <b>38</b>  |
| <b>6 neonatal complications</b>             | seizures; respiratory therapy;<br>sepsis   | <b>83</b>  |

**Moderate Risk** : one out of items 1 - 3 and none of 4 - 6

**High Risk** : one out of items 4 - 6

# Psychosocial Risk

## Family Adversity

### Parents

|   | n   |
|---|-----|
| 1. <i>Psychiatric disorder</i>  | 76  |
| 2. <i>Anamnestic threats:</i><br>a) "Broken home" b) <i>Delinquency</i> | 74  |
| 3. <i>Low educational level</i>   | 74  |
| 4. <i>Poor coping skills</i>  | 146 |

### Partnership

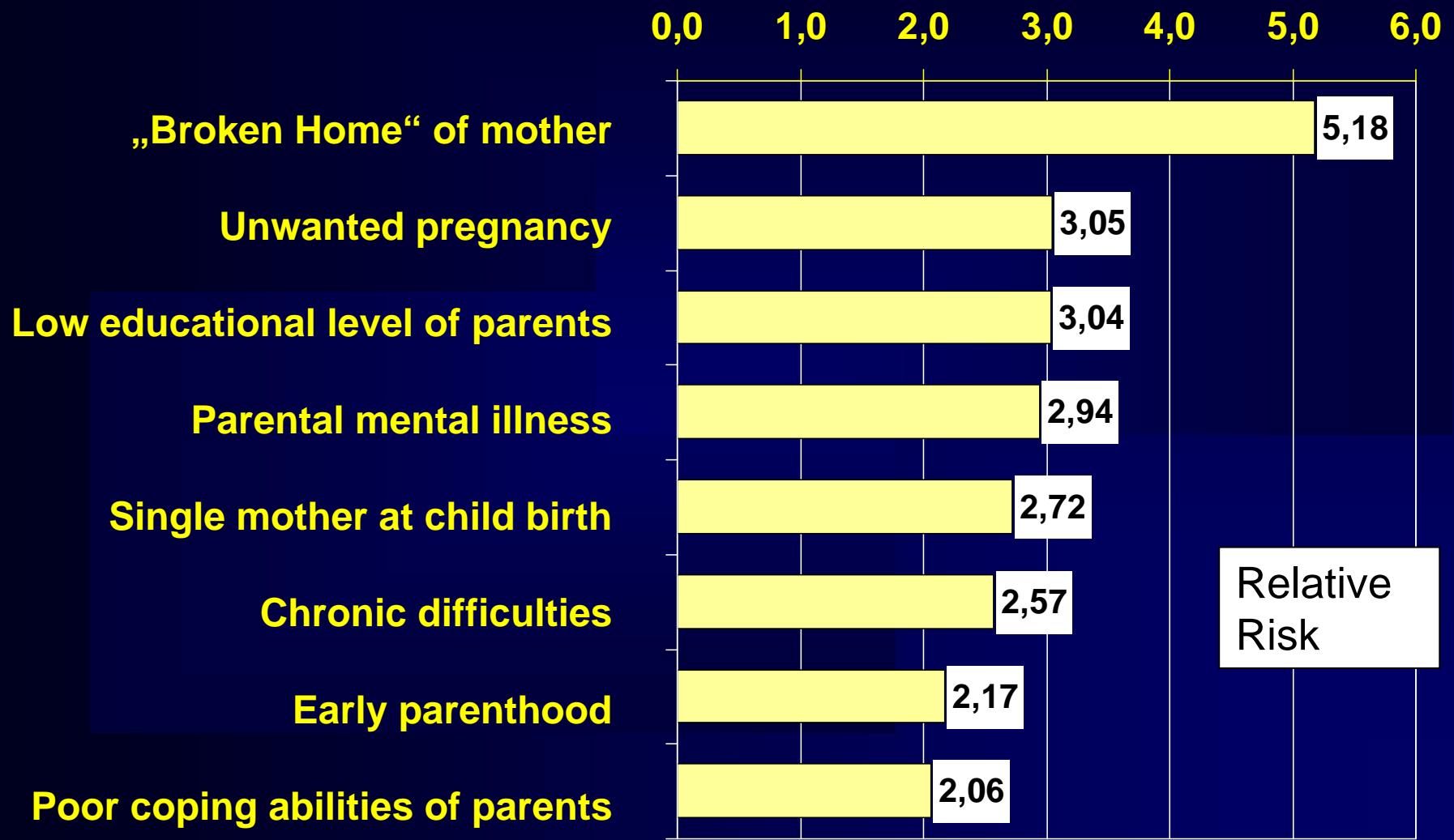
|                              |    |  |
|------------------------------|----|--|
| 5. <i>Marital discord</i>    | 43 | <b>Risk score =</b><br><i>number of items present</i>              |
| 6. <i>Early parenthood</i>   | 93 |  |
| 7. <i>One-parent family</i>  | 41 | <b>No Risk:</b> score = 0  |
| 8. <i>Unwanted pregnancy</i> | 57 | <b>Moderate Risk:</b> score = 1 - 2<br><b>High Risk:</b> score > 2 |

### Family

|   |     |
|---|-----|
| 9. <i>Overcrowding</i>                            | 34  |
| 10. <i>Lack of social integration and support</i> | 14  |
| 11. <i>Severe chronic difficulties</i>            | 104 |

# Psychosocial Risk Factors

## Prediction of psychiatric disorders at age 11 years



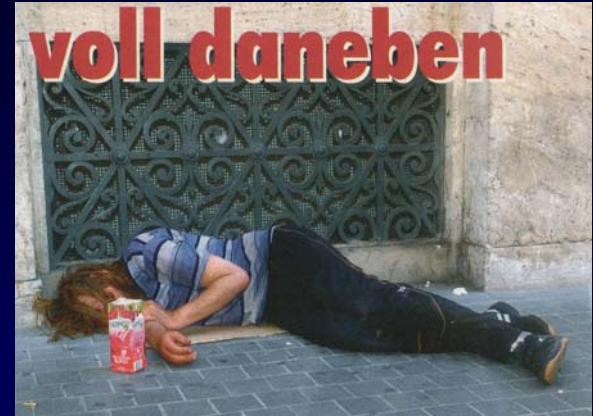
# **Psychoactive Substance Use among Youth**

## in the Focus of Media Attention

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**Sucht hat bei  
Jugendlichen  
Konjunktur**

**Tatort  
Schule: Ein  
Joint für die  
große Pause**



**11 % der 15-Jährigen kiffen regelmäßig**

**Alkohol ist  
die größte  
Gefahr ...**

**Saufen bis zum  
Umfallen ...**

**Coole Jugend nur  
mit Alkohol und  
Tabak**

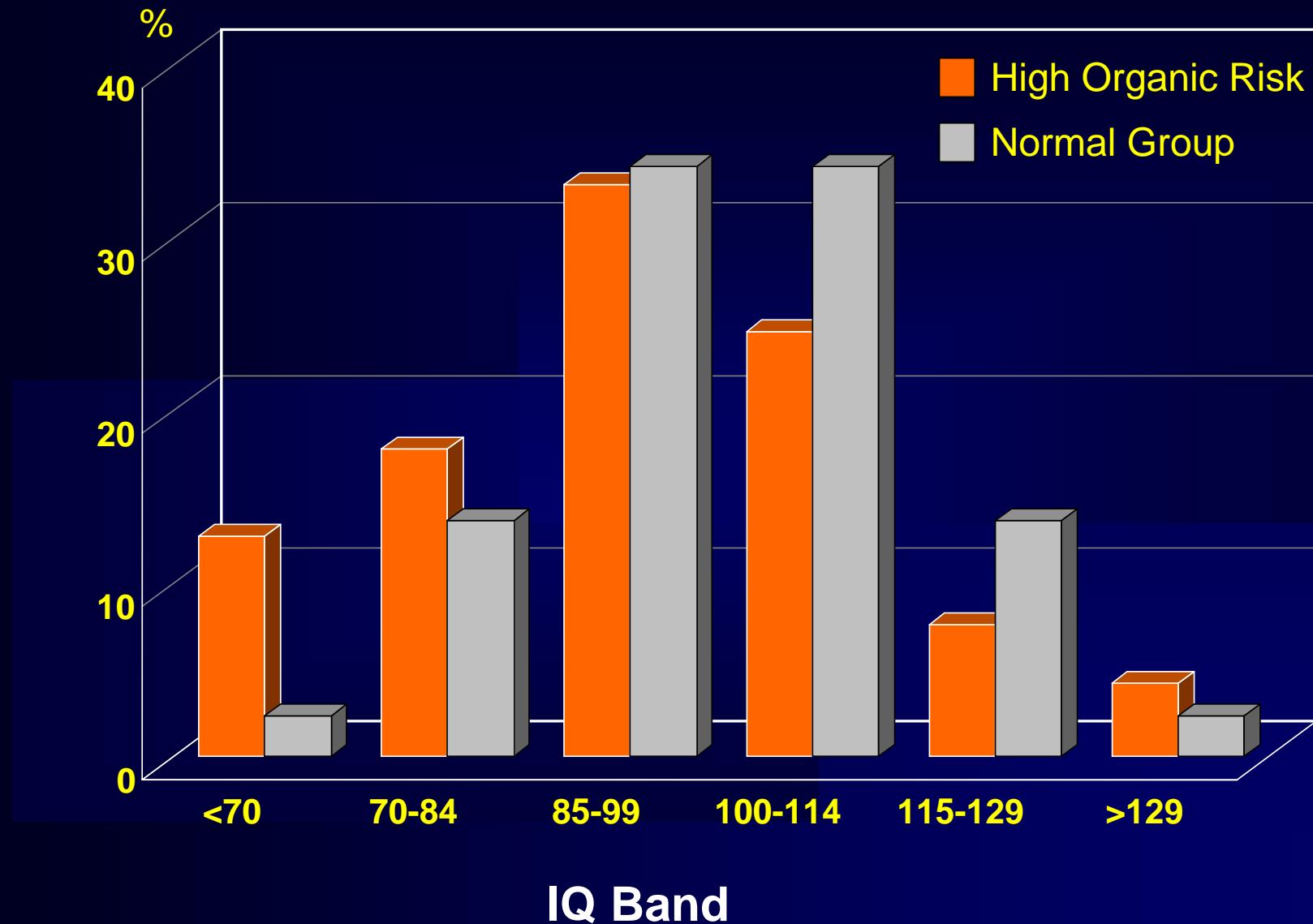
**Junge Deutsche im Paffen „spitze“**

**Jeder Zweite Zwölfjährige schon betrunken**

**Die knallen sich einfach weg ...**

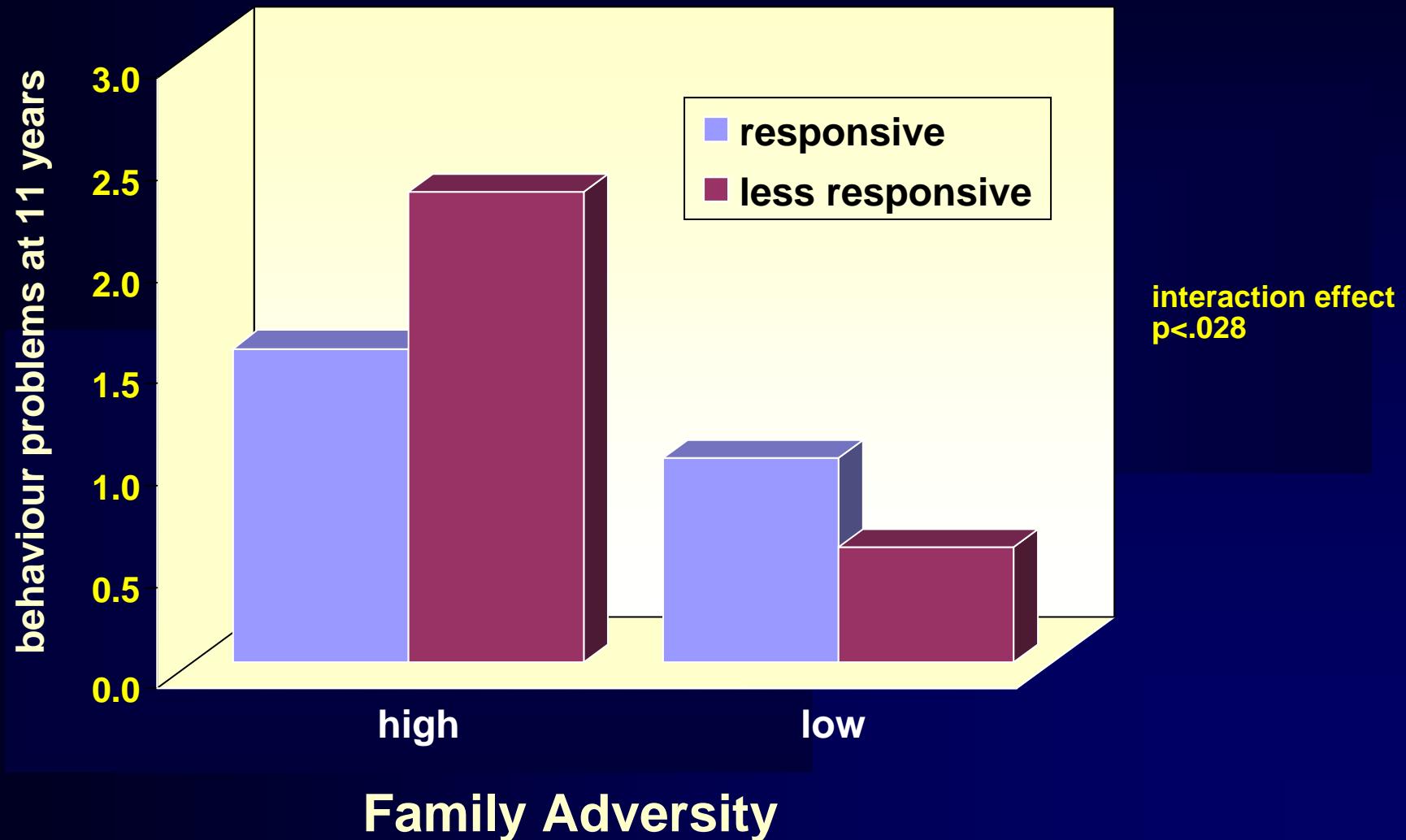
# Heterogeneous Outcome of High-Risk Children

Nonverbal Intelligence (*CFT1*) at Age 8 Years

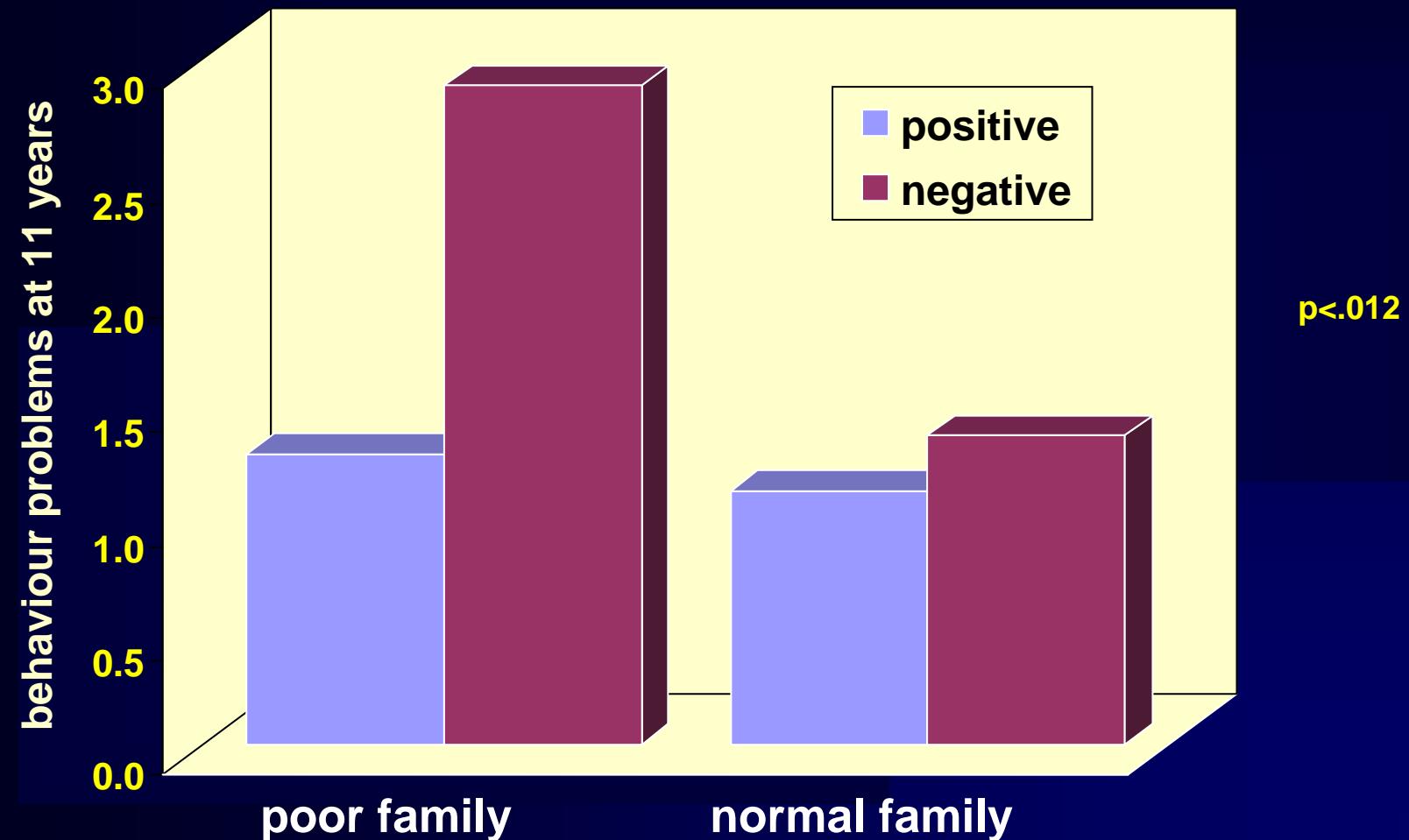


# Protective Effect of Mother-Infant Interaction

## Maternal Responsiveness



# Protective Effect of Social-Emotional Competences: Self-Concept at 8 Years



# Summary I

- Numerous risk factors of early childhood are associated with an unfavourable developmental outcome. Many adverse consequences persist into adolescence.

- ***Early indicators*** for later disorders are:

## ***Organic Risks***

- ▶▶ preterm birth, very low birth weight

## ***Psychosocial Risks***

- ▶▶ psychiatric disorder of a parent, poverty, early parenthood

# Summary II

- Children's responses to adverse conditions reveal a high degree of variability. By no means do all children develop unfavourably; many are resilient.
- Protective effects against adverse outcomes may result from
  - *a positive early parent-child relationship*; and
  - *individual competences*.

These protective factors form the basis for the development of ► ***resilience***.

# Summary III

- **Conclusions:** We are in need of more ***prevention and early intervention programs***, which focus on the early relationship between child and caregiver and which are particularly addressed at psychosocially disadvantaged families.

The ***primary aim*** of these programmes should be to enhance the resources of children and families.



# Increasing Violence

High Rates of Child and Adolescent Delinquency

( Deegener, 2002)

Jedes 4. Kind  
auffällig  
aggressiv

Tatort  
Schule:  
jeder fünfte  
ist  
bewaffnet!



Elfjähriger Junge erpresst Mitschüler

Aggression im  
Kindergarten:  
Erzieherinnen  
in Not

Wie können Kinder so  
brutal sein?

Gewalt und  
Gefülsarmut  
verändern Klima in  
unseren Schulen

Wieder Ausländer brutal zusammengeschlagen  
Maßnahmen der Politik gefordert

Schon Zehnjährige erpressen Schutzgeld

Schüler lassen Waffen sprechen