THE POLICY REQUIREMENTS OF GENE-ENVIRONMENT RESEARCH

Paul H. Wise, MD, MPH

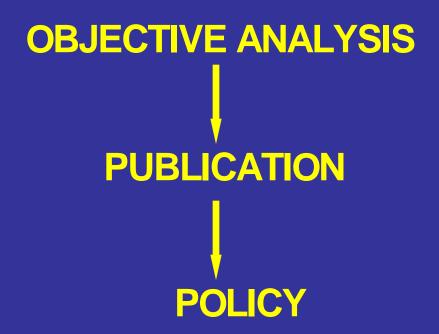
POLICY FORMATION

OBJECTIVE ANALYSIS

POLICY FORMATION

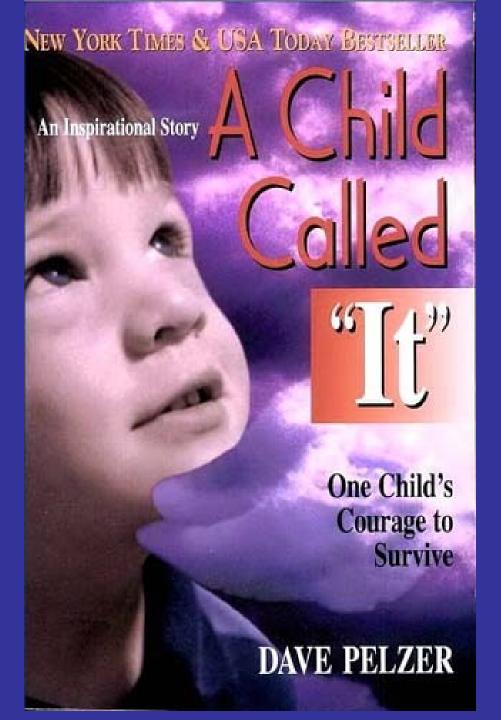
OBJECTIVE ANALYSIS
PUBLICATION

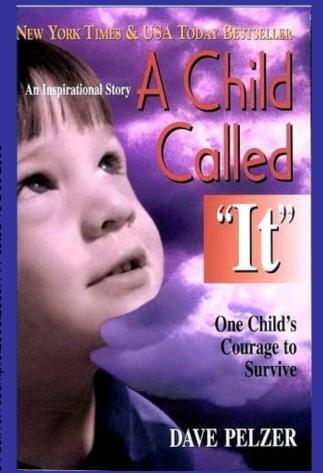
POLICY FORMATION

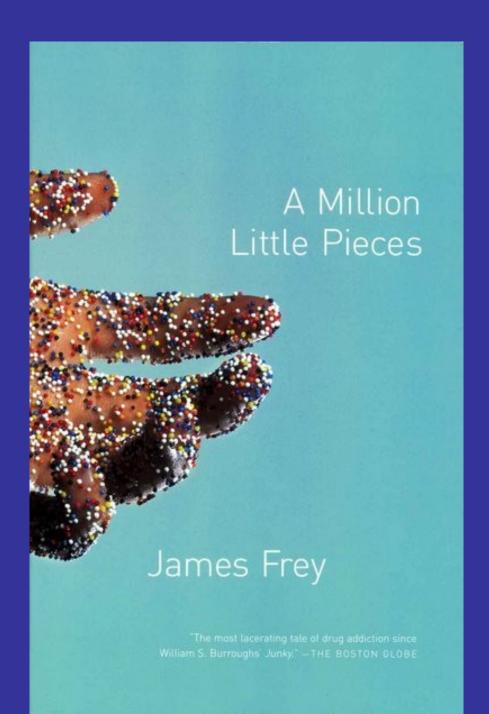


POLICY FORMATION JECTIVE ANALYS **'CATION**











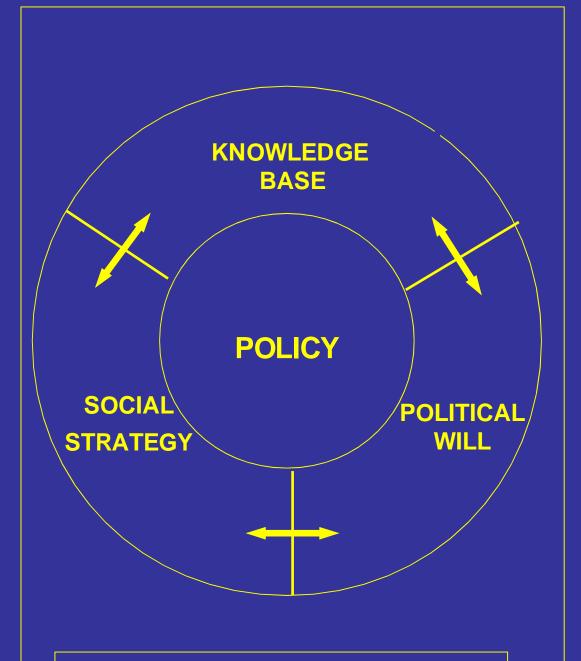


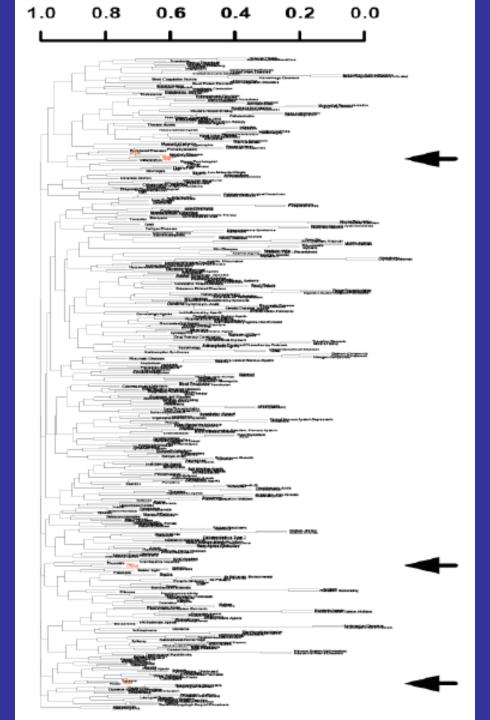
FIGURE 1. The tripartite model of policy development

New Insights of Special Policy Relevance

• G x E Interdependence

DISEASE-POLICY TAXONOMY

DISEASE-POLICY TAXONOMY MULTIPLE G x E PRECURSORS



Personalized Medicine

Personalized Medicine vs Standardized Care

Personalized Medicine vs Standardized Care

Personalized Strategies

Personalized Medicine vs Standardized Care

 Personalized Strategies vs Collective Social Strategies

New Insights of Special Policy Relevance

• G x E Interdependence

Norm of Reaction

NORM OF REACTION

Genotype-Phenotype relationship changes in different environments

NORM OF REACTION

Genotype-Phenotype relationship changes in different environments

- Breakdown of "protective" and
 - " harmful" exposure dichotomy

" Whatever does not kill me makes me stronger"

Friedrich Wilhelm Nietzsche

Twilight of the Idols



ARMY STRONG

New Insights of Special Policy Relevance

G x E Interdependence

Norm of Reaction

Developmentally Confined

LIFE-COURSE TRAJECTORIES Nature Precedings: doi:10.10380 Less Constant Less Con **HEALTH STATUS**

TIME

POLICY CHALLENGES

Reaggregation of G x E precursors (Etiome)

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 Revisioning of public efficacy (amenability and creation of new social strategies)

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Frameworks for collective action