Chapter 9 tackles questions concerning the apparently variable distribution and relevance of spirit concepts and possession (e.g. the high degree of women's participation relative to men's participation in possession cults). Taking some of the necessary cognitive mechanisms for the emergence and spread of spirit concepts described in chapters 6–8, this chapter considers what environmental and other factors may enhance or inhibit the natural output of these mechanisms.

Europeanization and Organizational Change in National Trade Associations: An Organizational Ecology Perspective

Jürgen R. Grote and Achim Lang

The first section of this chapter on Europeanization in relation to organizational change in national trade associations addresses the paradigm of Europeanization and business interest associations. The second section discusses change in sectoral business associations from an ecological perspective, looking at the different strategies that organizations can use to confront external challenges. Absorption and compensation, integration, cooperation and intervention. The third and final sections of the chapter are written with particular reference to the Information and Communications Technologies (ICT) Sector and the
Chemicals Sector in Germany. The third section, on change-inducing environmental factors, distinguishes between the political, economic, technological and social environments that influence the individual groups and group populations in different ways according to sector via national, European or international channels. The final section looks at change in an intra- and inter-organizational perspective, and describes the interest group populations and focal organizations dominating both sectors before looking at selected results that shed some light on the ways that leading representatives of trade associations perceive external challenges and related modifications in the application of resources.

The Urgent Need for Structural-Environmental Models of HIV Risk and Prevention in U.S. Latino Populations

Kurt C. Organista, Paula A. Worby, James Quesada, Alex H. Kral, Rafael M. Díaz, Torsten B. Neilands, and Sonya G. Arreola

in HIV Prevention with Latinos: Theory, Research, and Practice

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DOI: 10.1093/acprof:oso/9780199764303.003.0001
Item type: chapter

This chapter presents a structural-environmental model of alcohol-related sexual HIV risk and prevention in Latino migrant day laborers (LMDLs). That is, the structural vulnerability of LMDLs to HIV, problem drinking, and many other psychosocial and health problems are theorized as rooted in the harsh living and working conditions that are reproduced for day labor in America (i.e., poverty, prolonged separation from family and country of origin, loneliness and isolation, stigma). Thus HIV prevention should involve scaling up community and cultural resources that help to mitigate such structural vulnerability, and help individuals cope more effectively with the risky environments and situations they frequently encounter. Chapter 1 serves as an overriding frame for subsequent book chapters, each of which considers where it stands in relation to a structural-environmental model of HIV risk and prevention in U.S. Latinos.

Summary and Conclusions

K. Warner Schaie

in Developmental Influences on Adult Intelligence: The Seattle longitudinal study

Published in print: 2005 Published Online: September 2007
DOI: 10.1093/acprof:oso/9780195156737.003.0018
This chapter presents conclusions from the Seattle Longitudinal Study. The lessons learned are reviewed in the context of the five questions considered in this book regarding the life course of intellectual competence, and the conclusions reached from interventions in the normal course of adult cognitive development are discussed. The findings from studies designed to learn more about adult cognition in a developmental behavior, genetic, and/or family context are described, along with findings from extensions into identifying the genetic and environmental influences that shape adult intellectual development. The chapter ends by providing information on how to access certain limited data sets from the SLS that are being made available for use by qualified researchers and college teachers for secondary analyses or instructional purposes.

Nestmate Recognition
Patrizia d'Ettorre and Alain Lenoir
in Ant Ecology

The ability to recognize group members is a key characteristic of social life. Ants are typically very efficient in recognizing non-group members and they aggressively reject them in order to protect their colonies. There are a range of different recognition mechanisms including prior association, phenotype matching, and recognition alleles. The concept of kin recognition should be considered different from that of nestmate recognition. Most of the available studies address the nestmate recognition level, namely the discrimination of nestmates from non-nestmates, independently of actual relatedness. Indirect and direct evidence identify long-chain cuticular hydrocarbons as the best candidates to act as recognition cues in ants, even if other chemical substances could also play a role, at least in some ant species. The relative importance of genetic and environmental factors on the expression and variation of the cuticular hydrocarbon profile vary among species and is linked to life history strategies.
This chapter discusses the contributions of migrant studies to cancer research. Migrant populations have contributed essential information to research on the etiology of cancer. Foremost, they have shown the dominant role of environmental factors in determining cancer risk. Because the direction and magnitude of change in incidence vary by cancer site for each migrant group, these studies support the view that the major risk factors for various cancer sites also differ. In some instances, migrant studies have provided information on critical periods of life when risk factors are most influential. They have also suggested useful etiologic hypotheses, particularly those related to lifestyle, especially diet.

Environment

Robbin L Gibb

This chapter discusses how environmental parameters influence the physiology and behavior of rats and thus the experimental outcome. It considers lighting, humidity, airflow, noise, cage construction, diet, and social opportunity. Maternal influences, age at weaning, animal care, exercise regimens, and enrichment are also discussed. These factors can induce changes in brain weight, cerebral vascularization, adrenal size, and body weight.

Genetic and Environmental Influences on Individual Differences in Language and Theory of Mind: Common or Distinct?

Claire Hughes

This chapter discusses how environmental parameters influence the physiology and behavior of rats and thus the experimental outcome. It considers lighting, humidity, airflow, noise, cage construction, diet, and social opportunity. Maternal influences, age at weaning, animal care, exercise regimens, and enrichment are also discussed. These factors can induce changes in brain weight, cerebral vascularization, adrenal size, and body weight.
This chapter presents data from two twin studies conducted at two different times in development—3;6 years and 5;0 years. Both studies showed a strong correlation between general verbal ability and theory of mind. However, the twin study design provides a unique methodological perspective from which to investigate the nature of the relationship between language and theory of mind. The first study, with a sample of three-year-old twins, showed a large influence of genetic factors on theory of mind, with these having little overlap with genetic factors influencing verbal ability. The second study revealed a substantial environmental influence on theory of mind. The association between theory of mind and verbal ability was accounted for by common effects of shared genes, and the common effects of shared environment and socioeconomic status. This chapter concludes that there may be developmental change in the relative impact of genetic and environmental factors on individual differences in theory of mind.

Public health assessment of genetic predisposition to cancer
Steven S. Coughlin and Wylie Burke

This chapter focuses on cancer prevention and control. Topics discussed include genetic polymorphisms and cancer susceptibility, breast and ovarian cancer susceptibility genes, colorectal cancer susceptibility genes, lung cancer genetic susceptibility, prostate cancer genetic susceptibility, and melanoma genetic susceptibility. Studies of genetic susceptibility to common cancers highlight the need for additional population-based molecular epidemiologic research to define better the contribution of genetic factors to cancer, and to examine interactions with environmental factors amenable to preventive interventions.
Environmental and genetic factors affect individual development from fetus to adult, both generally and in the case of music. This chapter considers the difference between shared and nonshared environmental influences, and different types of interaction between the individual and the environment. Parents, teachers, and peers strongly influence this development. Early nonverbal interactions between child and mother or caretaker, and parental support for music activities in childhood, seem to be of particular importance. These and other influences (e.g., exposure to music through the media) occur in the more general framework of the societal, historical, and generational context. Environmental conditions for musical development may be optimized by paying more attention to shared music experiences between child and parents (e.g., parent-baby singing), and exposing the child to a wide variety of music.

Orcadian Rhythms
Michael C. Antle and Ralph E. Mistlberger

This chapter discusses circadian rhythms in rats. Topics covered include the measurement and analysis of circadian behavioral rhythmicity, circadian regulation of behavior and physiology, environmental factors that may alter circadian timing, and neural mechanisms of circadian rhythms.

Health hazards in the physical work environment
Clare Bambra

This section covers health hazards in the physical work environment, focusing on topics such as occupational health and safety, workplace injuries, and health effects of work-related stress.
This chapter examines the health effects of three traditional dimensions of the physical work environment: chemical hazards including exposure to toxic substances used in industrial processes (asbestos, silica, coal dust, and lead); environmental factors such as noise, vibration, and workplace injuries; as well as ergonomic hazards such as repetitive movements, heavy lifting, and including shift work. It argues that despite changes in the nature of the economy in advanced market democracies, these physical hazards are still an important public health issue for many working age people. It suggests that differences in occupational exposures may well be of significance in terms of explaining socio-economic inequalities in health. It also examines how exposure to physical work environment hazards varies by country and how legislation can reduce the levels to which workers are exposed.

A Genetic Analysis of Extremes in Externalizing Behavioral Problems and Negative Family Environments

Kirby Deater-Deckard

in Nature, Nurture, and the Transition to Early Adolescence

This study explores whether the genetic etiology of individual differences in externalizing problems in an “unselected” sample (that is, variation in the “normal” observed range) is similar to or different from the etiology for children selected as being extreme in aggressive and delinquent behavioral problems during the transition to adolescence. It is possible to analyze separately the individual differences in unselected populations and group differences in selected extreme groups using quantitative genetic analysis, as a means of answering this question. The study also examines selected extreme groups of children based on several dimensions of the family environment. Selecting more extreme groups assesses the extent to which family processes involved in child and adolescent adjustment problems in more negative family environments are due to child genetics and environmental factors as part of gene-environment correlational processes.
Decoupling Behavior from Nature
Carl N. Degler

in In Search of Human Nature: The Decline and Revival of Darwinism in American Social Thought
Published in print: 1993 Published Online: October 2011
Item type: chapter

This chapter examines the shift in the study of nature towards the issue of social and environmental factors. This shift led to the abandonment of the sexual explanations for differences in human behavior. This chapter cites studies concerning the relation between feeblemindedness and criminality. It suggests even though the concept of human instincts had come under serious criticism in the early 1920s, almost the precise opposite was true of the idea that human races and ethnic groups differed in mental abilities.

Contested Illnesses
Phil Brown, Rachel Morello-Frosch, and Stephen Zavestoski (eds)

Published in print: 2011 Published Online: January 2017
Item type: book

The politics and science of health and disease remain contested terrain among scientists, health practitioners, policy makers, industry, communities, and the public. Stakeholders in disputes about illnesses or conditions disagree over their fundamental causes as well as how they should be treated and prevented. This thought-provoking book crosses disciplinary boundaries by engaging with both public health policy and social science, asserting that science, activism, and policy are not separate issues and showing how the contribution of environmental factors in disease is often overlooked.

Links between Temperament and Behavior Problems in Early Adolescence
Stephanie Schmitz and Kimberly J. Saudino

in Nature, Nurture, and the Transition to Early Adolescence
Published in print: 2003 Published Online: March 2012
Item type: chapter
There is growing interest in clinical and developmental psychology in the antecedents of problem behavior in children. One of the possible antecedents of problem behavior is temperament, in particular “difficult temperament.” Problem behavior in early and middle childhood involved both genetics and environmental factors. Rende (1993) tested correlations between different aspects of temperament in infancy and early childhood with problem behavior when the children were seven years old, utilizing data collected in the Colorado Adoption Project. The emotionality aspect of temperament was most consistently related to problem behavior at later ages while there were only sporadic relationships for activity, sociability and persistence. This chapter examines antecedents of problem behavior, as indicated by the Child Behavior Checklist and the Teacher Report Form, with ratings from the temperament domain. Twin, adoption, and genetically non-informative studies show phenotypic associations between temperament rated at prior age points and later aspects of problem behavior. Twin studies reported genetic and some shared-environmental correlations as underlying these associations.

Genetic Influences on Temperament in Early Adolescence
Jeffrey R. Gagne, Kimberly J. Saudino, and Stacey S. Cherny
in Nature, Nurture, and the Transition to Early Adolescence

Although twin studies of infant and child temperament consistently yield evidence of moderate genetic influences, adoption studies do not. For example, in the Colorado Adoption Project (CAP), genetically related non-adoptive siblings were no more similar for parent-rated temperament than genetically unrelated adoptive siblings. However, most twin and adoption research exploring genetic factors underlying temperament during infancy and early childhood has relied on parent-rating scales, which may be susceptible to contrast effects wherein the differences between siblings may be exaggerated. Because contrast effects reduce the similarity of non-adoptive and adoptive siblings, adoption studies that use parent-rating measures may underestimate heritability. This chapter investigates changes in heritability across age and examines genetic and environmental factors underlying continuity and change in temperament during early adolescence in the CAP. To date, most of the research on continuity and change in temperament has focused on infancy and early childhood and suggests that genetic influences remain stable or increase.
with age. This study tested whether the patterns would hold true for a sample of early adolescents.

Teacher and Mother Ratings of Attention Problems
Stephanie Schmitz

in Nature, Nurture, and the Transition to Early Adolescence

Attention problems are highly prevalent, with rates of occurrence depending on the definition used, and make up to 50% of child psychiatric cases. Previous behavior genetic studies of attention problems have analyzed either twin, family, or adoption data, and reported heritability estimates ranging from 0.55 to 0.98. Adoption studies can provide a direct test for the presence of shared environmental factors by examining the similarity between unrelated siblings growing up in the same family; however, the power will be relatively low in small samples. Previous studies reported that adoptees show an increased incidence of attention problems, as high as 13–21% in some samples. This chapter discusses the results of a study showing that both mothers and teachers rate boys as having more attention problems. Separating the overall score into the aspects of inattention and hyperactivity follows the overall picture in that boys seem to show more of these behaviors than girls. For both sexes, the behaviors were rated as relatively stable during the grade-school years.

Loneliness during the Transition to Early Adolescence
Shirley Mcguire and Jeanie Clifford

in Nature, Nurture, and the Transition to Early Adolescence

This chapter examines children's reports of loneliness while they were making the transition into early adolescence. Loneliness is often conceptualized as an internalizing behavioral problem in developmental psychopathology research. Few studies have addressed the correlation between children's reports of peer isolation and other measures of internalizing problems. Are individual differences in loneliness heritable during the transition to adolescence? Are children's perceptions of
loneliness linked to parent and teacher reports of internalizing problems over time? The sample consisted of 590–661 Colorado Adoption Project (CAP) children when they were nine, ten, eleven, and twelve years old. Eight percent of the CAP children reported feeling really isolated from their peers. While there were no gender differences, children's reports of loneliness decreased across age. Individual differences in loneliness were linked to genetic and non-shared environmental factors. Chronically lonely children seem to believe that peer rejection or isolation is their fault and it cannot or will not change. Consequently, extreme loneliness is often grouped with other “internalizing” behavioral problems such as depression, anxiety, and low self-worth.

Aggression and Its Causes
John W. Renfrew

Published in print: 1996 Published Online: March 2012
Publisher: Oxford University Press
Item type: book

This book explores the causes and control of aggression from a broad scientific perspective. It discusses the methodological concerns involved and reviews representative studies of the contributions of biological, environmental, experimental, and social factors in producing aggression. It examines how many of these factors function as it discusses several areas of current concern: juvenile delinquency, physical and sexual child abuse, spousal abuse, rape, and aggression associated with psychiatric conditions.