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**KEYNOTE PRESENTATION AT THE EIGHT INTERNATIONAL  
CONGRESS OF BEHAVIORAL MEDICINE  
Mainz, Germany August 25–28, 2004**

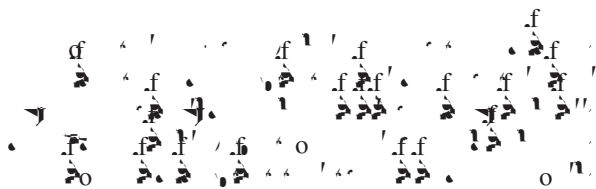
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**The Pittsburgh Common Cold Studies: Psychosocial Predictors  
of Susceptibility to Respiratory Infectious Illness**

**Sheldon Cohen**

*This article provides a selected overview of 20 years of research on the role of psychosocial factors in susceptibility to respiratory infection. We present evidence from our laboratory, a psychological research laboratory, that increased risk for developing respiratory illness for persons in general, especially a common cold virus, has the longer duration of the more the greater the risk, and has a relationship with susceptibility, mainly mediated by the inhibition of the regulation of proinflammatory cytokines. We further provide evidence that social relationships (social integration and social support) are also associated with risk for respiratory illness: Social integration is associated with reduced risk irrespective of gender and social support protection from the pathogenic influence of stress. Finally, the reported evidence has also shown that early childhood socioeconomic status (SES) are associated with greater risk of viral-induced respiratory illness, independent of adult SES.*

*Keywords: psychoneuroimmunology, socioeconomic status, buffering, social integration, social rank, social support, infectious illness, susceptibility, respiratory infection, common cold, inflammation, cytokine regulation, cortisol regulation*





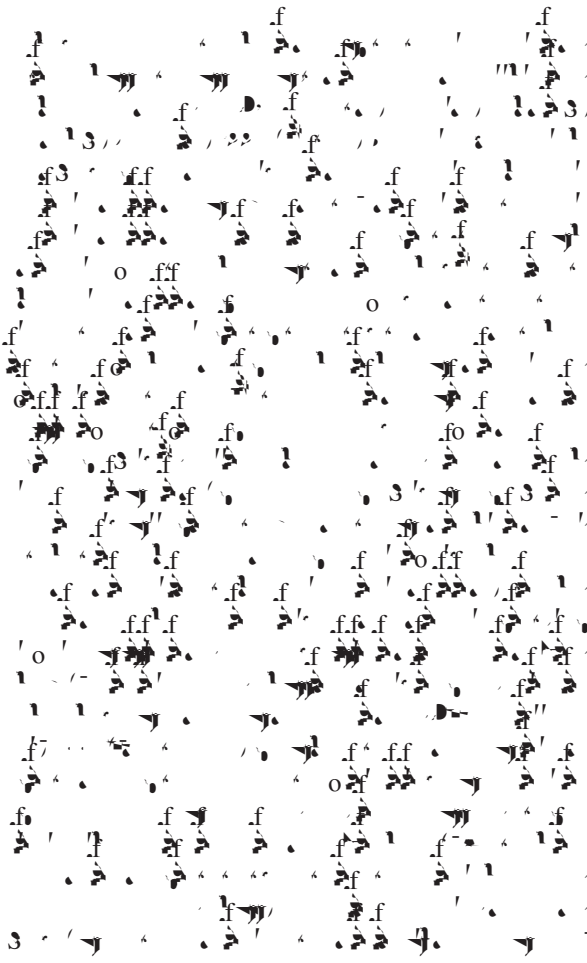


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**Social Environments  
and Susceptibility to Colds**





Childhood SES and Susceptibility to the Common Cold

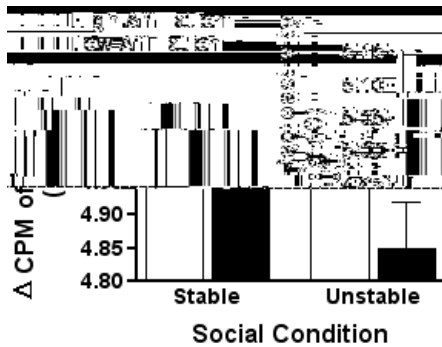
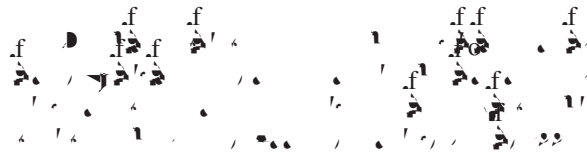
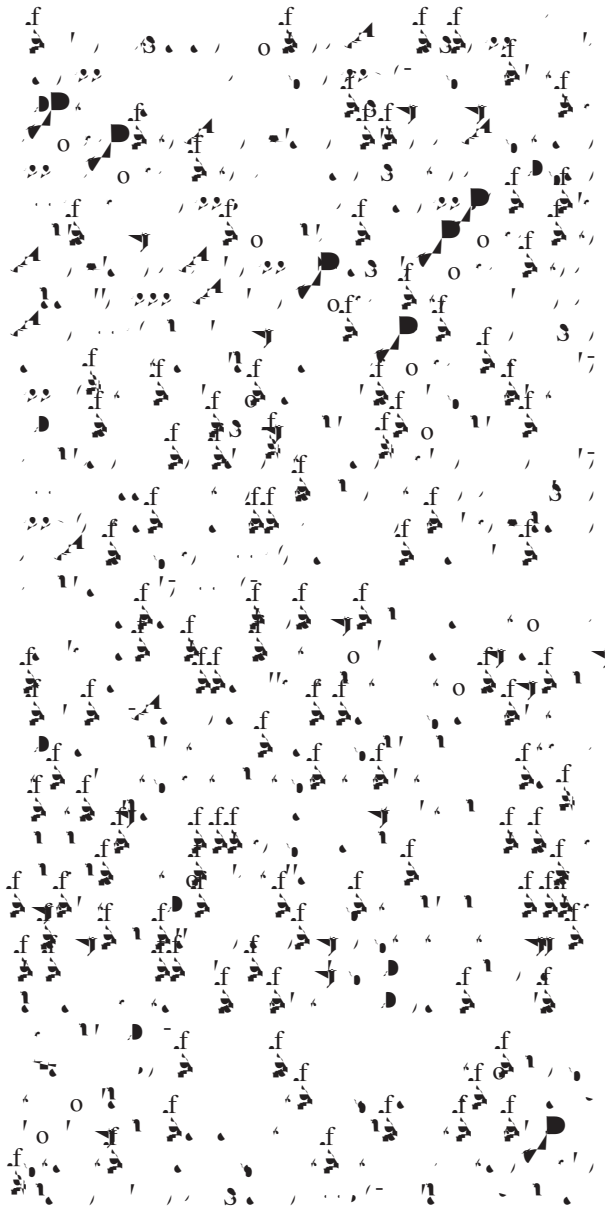
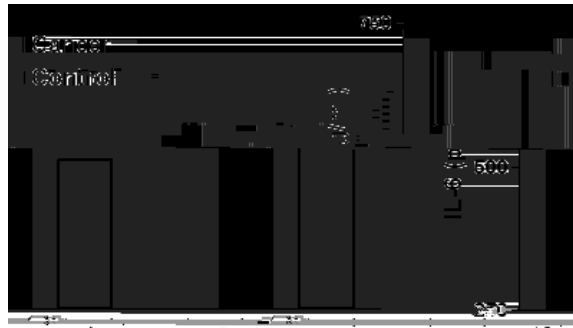


Figure 6. Chronic stress (unstable social environment) interacts with affiliation in predicting cellular immune response in cynomolgus macaques.

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Tangible Social Support

Figure 7. Stress (child with cancer of matched control) and instrumental social support interact in predicting the ability of dexamethasone to suppress IL-6 production.

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Figure 8. Adjusted (for standard controls) incidence of infectious diseases among infected volunteers (b) decrease as a function of years of parental home ownership (table 1). No evidence of a significant association between years of parental home ownership and incidence of infectious diseases among infected volunteers (b) decrease as a function of years of parental home ownership (table 1). *Journal of Infectious Diseases*, 2004, 189, 1000-1005. P, *Journal of Infectious Diseases*, 2004, 189, 1000-1005.



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