

Social Mistrust Is Heritable in Chinese Children and Adolescents, Study Shows

Do you sometimes get concerned that friends are not really loyal or trustworthy? Do you often pick up hidden threats or put-downs from what people say or do? Research suggested that a few adults (10%–15%) report paranoid-like thoughts and high levels of social mistrust as well as a host of psychological problems including anxiety, insomnia and poor emotional functioning. However, it remains unclear whether such paranoid-like thoughts exist developmentally in non-clinical adolescents and children.

Another unanswered and important question pertains to the genetic and environmental influences of social mistrust. Twin studies of young adults in the general population have suggested moderate to high (about 50%) heritability estimates in paranoid ideation, but no study to date has examined the heritability of social mistrust, an attenuated form of paranoia, in younger populations.

To resolve the questions mentioned above, Dr. Raymond CHAN's team from the Neuropsychology and Applied Cognitive Neuroscience (NACN) Laboratory, CAS Key Laboratory of Mental Health, the Chinese Academy of Sciences and his international collaborators from Cambridge University, UK and University of Utah School of Medicine, USA have carried out a large cross-sectional survey of 8 to 14 year-old Chinese twins ($N=2094$), using a new dimensional measure of childhood suspiciousness: the *Social Mistrust Scale* (SMS). This study confirmed the three-factor structure of SMS with three factors: home mistrust, school mistrust, and the general mistrust.

Replicating similar findings in adults, social mistrust existed on a continuum of severity and was positively skewed, with many children being trusting and a few being mistrustful. In addition, the twin study design also demonstrated moderate heritability of



childhood social mistrust (19%–40%), with significant shared environmental effects (24%–50%) and specific environmental effects (36%–50%) on all levels of social mistrust as well. Additionally, SMS was also found to have a good discrimination to differentiate a group of 32 childhood-onset schizophrenia patients from 34 matched typically developing children.

This study has systematically examined the prevalence, structure, and heritability of childhood social mistrust in mainland Chinese children and adolescents, providing invaluable cross-cultural evidence to the existing adult literature and theory of paranoia.

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