ple, the commonly used correlation analysis, has failed to discriminate the "genuine" effects of genetics on human behavior and development from the mixed influences of environmental factors. This obstacle was not resolved until recent years. In their groundbreaking work, Guo and Wang[8] proposed a newly constructed mixed or multilevel statistical model as a possible resolution to the much-needed behavioral genetic analysis. In the field of behavioral genetic analysis, the truth is that overt measures of genes are normally unavailable. This usually forces the behavioral genetic researcher to resort to genetically related members clustered into families. The newly developed mixed model is able to readily handle families of behavioral genetic data, which include paired sibling data (especially twin data) and clustered siblings' data (a family with more than 2 biological siblings). Not only can a family of behavioral genetic data contain more than 2 siblings, it can also possibly contain multiple types of siblings. In contrast to traditional statistical approaches, the mixed model is insensitive to the order of the siblings in a sibling cluster. These exclusive characteristics enable the mixed model to readily deal with behavioral genetic data appropriately, while the traditional correlation analysis appears unable to handle clustered or families of behavioral genetic data.

In addition, in further evolution of research on the genetic effects on human behavior and development, studies devoted to prediction of human development must be conducted simultaneously with an appreciation of the dynamic relations between a specific person and a specific display of distinct family, community, and socialcultural settings constituting the person's individual developmental trajectory. As a consequence, such studies have to involve individual differences (diversity) and change-sensitive measures, research design, and analytical strategies. Together, such studies should incorporate both structural and measurement models that include indices of personal-contextual relations.

All in all, any interpretation of human behavior and development has to be tied to the inspection of empirical data in order for it to have a function in science. It is essential, then, to comprehend the character of the research methods available to behavioral genetic researchers to be able to examine the genuine effects of genetics on a specific developmental mechanism. This has been a major obstacle in the past for studies of ge-

netic influences on human behavior and development, since too many latent factors have to be taken into account for a specific developmental mechanism. Advantageously, based on the development of computer and statistical sciences, researchers nowadays are able to conduct more-complicated research to reveal specific developmental mechanisms assisted by the new power of computing and advanced statistical models. As pointed out in the title of this paper, a new era of research in to genetic influences on human behavior and development is about to begin.

CONCLUSIONS

In general, current advances in genetic research have suggested that the era of or, more appropriately, the error of genetic reductionism is completely over. Although genes influence behavior, this neither justifies the behavior, nor means that it is inevitable. Even very high heritability of a behavioral trait does not imply inevitability, as reciprocal influences between the environment and phenotype can amplify either genetic or persistent environmental differences.[9] In fact, high heritability may be a signal that reciprocal influences are multiplied so that persistent environmental stresses can have very large effects on phenotypes.[10] The scientific evidence has made it clear that genes do not constrain human development but rather, as parts of a dynamic, developmental system, are plastic entities that simultaneously influence and are influenced by other levels or organization (cells, tissues, organs, and the physical, social, and cultural ecology) within this system.[6] In other words, human behavior can influence genetic inheritance as well. For instance, restricted mate selection due to belief systems or ethnic conflicts can enhance genetic differences between groups of people living in the same geographic area. Furthermore, flexibility programmed into the human genome can result in environmentally influenced behavior that in turn affects inheritance of genetically encoded behavioral traits.[11]

One thing that all of the researchers should keep in mind is that when identical twins who are reared apart are both found to whistle in the restroom, it is not just because they share the same genes. Genes in and of themselves do not make people whistle in the restroom or do they make people do anything at all. That is why