APPENDIX: GENETIC FACTORS IN ALCOHOLIC BEVERAGE PREFERENCE

Genetic factors in alcoholic beverage preference in Dutch twins

Jenny H.D.A. van Beek, Jacqueline M. Vink, Maureen H.M. de Moor, Melkje Bartels, Lot M. Geels, Gonneke Willemsen, & Dorret I. Boomsma
Department of Biological Psychology, VU University Amsterdam, the Netherlands

Introduction
Alcohol beverage preference has been associated with risk of alcohol-use disorders (Friedberg-Mazzei et al., 2005) and related problems (Honert, 1990).

Aim of the study
To examine to what extent genetic differences can explain differences in alcoholic beverage preference.

Methods
Participants
Twins registered with the Netherlands Twin Register (N=6474) divided into two age cohorts:
- Young: 310 complete MZ male, 229 DZ male, 443 MZ female, 392 DZ female and 64 DZ opposite-sex twin pairs aged 16-25
- Old: 142 complete MZ male, 92 DZ male, 527 MZ female, 226 DZ female and 202 DZ opposite-sex twin pairs aged 26-40

Measures
Survey questions about alcoholic beverage preference (wine, beer, spirits)

Data analysis
- Calculation of vertical concordance rates and relative risks (RR) in complete twin pairs for five beverage groups, separately for young and old twins.
- Testing of significant differences in RR's with Taylor series 95% confidence intervals using Epilinfo (http://www.cdc.gov/epiinfo)

Results
- Beverage preference (Fig. 1a-b) similar for complete and incomplete twin pairs.
- Probable concordance rates and RR's shown in Figures 2-8. Significant differences in RR's indicate genetic as well as environmental influences on preference.

Discussion
The question to be addressed in the future is how the heritability can be estimated for beverage preference that was assessed as a dichotomous variable.

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