Internalizing disorders are common and debilitating problems for young people, and it is important to understand the factors that contribute to their development. In this study, sources of commonality among mother-reported separation anxiety disorder (SAD) and self-reported depression (DEP) and generalized anxiety disorder (GAD) were studied in a population-based sample of 4,320 female twins. The relationship of self-reported neuroticism to each of the three internalizing disorders was also examined. Structural equation modeling (SEM) was conducted to parse the causes of neuroticism, SAD, DEP and GAD into additive genetic (A), shared environmental (C) and nonshared environmental (E) effects. SEM was also conducted to parse sources of covariation among the four phenotypes into A, C, and E effects.

All four outcomes were positively and significantly associated with one other. Genetic and nonshared environmental factors were important in the development of all four outcomes, whereas shared environmental influences were only significant for SAD. Covariation among the phenotypes was due primarily to additive genetic and nonshared environmental effects. These results suggest a common underlying genetic liability may explain comorbidity among internalizing disorders and their association with neuroticism. These findings suggest that future work on comorbidity may include searches for specific genotypes that predispose to depression, anxiety and neuroticism.