Results

Figure 1 displays familial resemblance for exercise as a function of family relationship. Figure 2 shows the contribution of genetic and shared environmental factors to this familial resemblance. Results confirm the influence of genetic factors throughout the life span with broad sense heritability ranging from 37% to 41% in total volume of exercise (22-26% A, 15% D). Engaging in team-based, competitive, externally paced activities (e.g. soccer) is ~15% more heritable than engaging in non-competitive, solitary activities (e.g. jogging).

Conclusion

In young adults, genetics and environmental factors unique to one member of the family are the main sources of variation in volume and type of exercise behaviour. In middle-age, the environment shared by spouses plays an additional role and causes substantial spouse resemblance in exercise behaviour.