Research does not support the adage 'boys will be boys'
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"As a rule, there were no prototypically boyish boys or girlish girls. For instance, boys who were very boyish in terms of personality were not more likely to be very boyish also in terms of their values, school grades, educational track or cognitive profile," says Postdoctoral Researcher Ville Ilmarinen from the Swedish School of Social Science, University of Helsinki.

"At the level of the individual, some boys will be very boyish in more ways than one, but there are no general population-level trends that would give credence to the 'boys will be boys' phrase. Boys can be very boyish in certain areas, such as their grades, but not at all in other areas, such as personality, values or cognitive performance. In addition, there are plenty of boys whose grades are not particularly boyish."

To determine the girlishness and boyishness of different domains, the gender diagnosticity approach was utilized.

Gender is most clearly seen in grades

The biggest gender difference was observed in school-leaving grades. Based on the grades, it was possible to predict the gender of individuals with an accuracy of 77.5%. Merely guessing would only give a probability of 50%.

In other areas, the predictive power was 60-70%. The descending order of accuracy was: personality, values, optional subjects, cognitive ability and applications for secondary education.

"We also found that boys had more variation in how boyish or girlish their values, cognitive ability and grades were. This means that two randomly selected boys would be more different in terms of how boyish they were in these areas, with two randomly selected girls being more similar in the extent to which they were girlish," Ilmarinen says.
The findings show that the areas or domains that one is investigating matter when making inferences about femininity and masculinity, since these are largely unique to individual domains.

"At the same time, it was clarifying to see that the biggest gender differences are in grade profiles, not in personality or cognitive ability."

Based on the results, the average girl and the average boy take rather different paths in comprehensive school, at least on the basis of their grades. However, there were also boyish girls and girlish boys in this domain, as in all other domains.

**Extensive data enabled the diverse examination of gender differences**

Previously, femininity and masculinity across various areas has not been investigated much. Now, a dataset well suited to such examination was available.

"This study included measures from different domains of life, and had a large and representative sample at important stage of life," Ilmarinen says.

The sample encompassed a little over 4,000 adolescents who had completed their basic education in a large Finnish city. Their personality and values were measured, and they were subjected to a cognitive test battery of nine separate tests. In addition, data on their grades (school-leaving certificate for basic education), optional subjects in lower secondary school and applications for upper secondary education were obtained.

"Our results can contribute to the discussion on the genderedness of educational paths, as well as to the more general discussion on what is considered gender-normative and non-normative"

The study also aims to develop methods for both calculating femininity–masculinity correlations and integrating them into gender differences research. The gender diagnosticity approach was updated to employ predictive methods based on machine learning.


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