

Figure A1. In order to evaluate X chromosome dosage effects utilizing trend analysis, linear, quadratic, and cubic effects were evaluated utilizing ANOVA. Panels (a) - (f) demonstrate the groups means for +0X, +1X, +2X, and + 3X on the following dependent variables: (a) WASI Estimated-VIQ; (b) WASI Estimated-PIQ; (c) CCC-2 Structural Language score; (d) CCC-2 Pragmatic Language Score; (e) CCC-2 Social Interaction Difference Index; and (f) total raw score on the SRS. No statistically significant cubic effects were found for any of the variables. Estimated VIQ and PIQ could be described best by a linear effect only, such that each additional X chromosome resulted in decreased performance. For all other variables, significant quadratic effects were found, suggesting a more complex relationship between increasing X-chromosome dosage and the language/social phenotypes.

Figure A1: ANOVA analysis of the evaluation of X chromosome dosage effects

