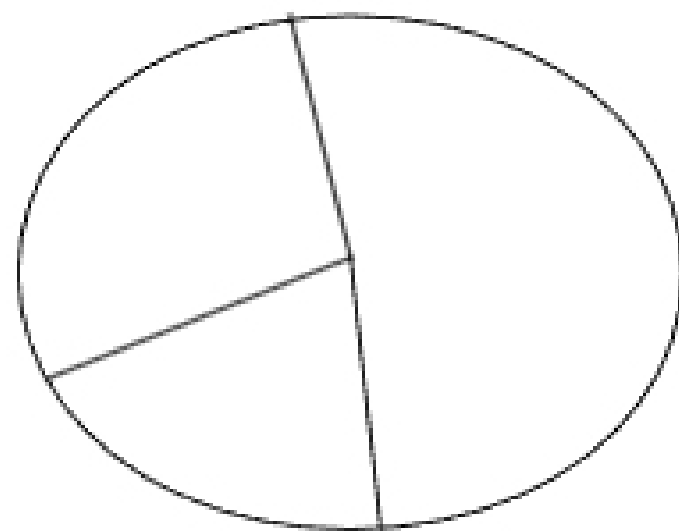


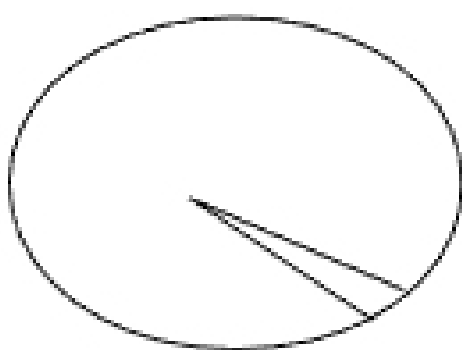
An important concept to know in psychology:

“Variance Accounted For”

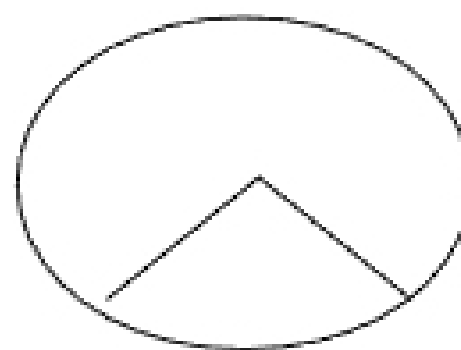
e.g., behavior: athlete’s ability to run competitively



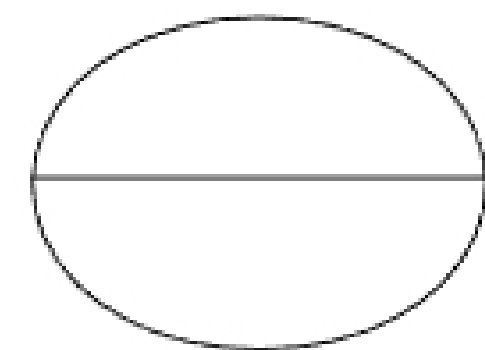
Mixture is the key question: moving to another example, greater aggressiveness among males could reflect following mixture of genetic and environmental factors:



OR

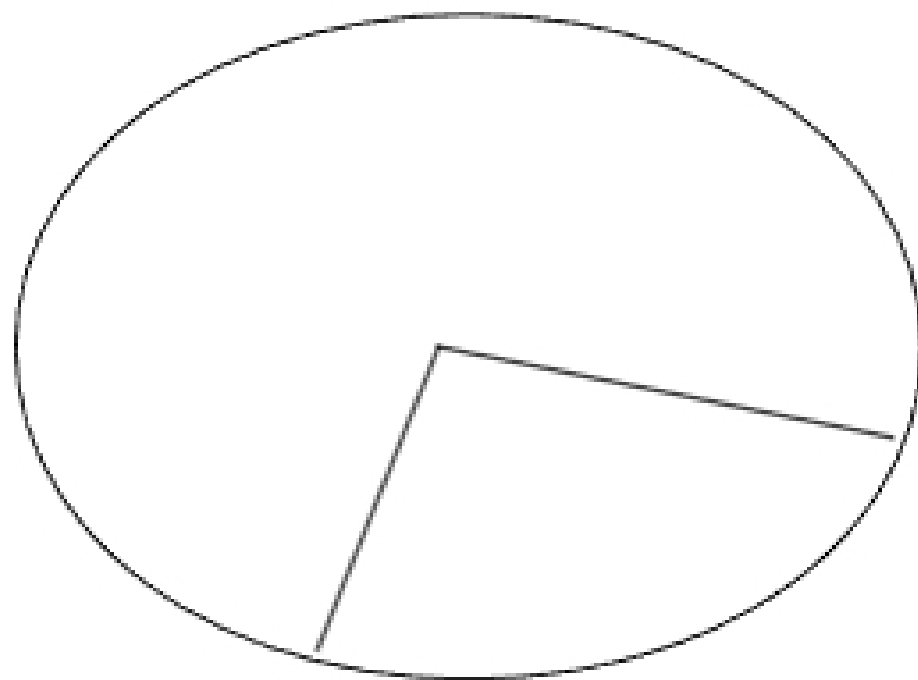


OR



Correlations and variance accounted for:

Suppose that a good measure of aggressive personality is correlated .50 with a good behavioral measure of aggression. This would mean:



Equation: $(r)^2 =$ variance accounted for.

Another way of framing the same ideas: multiple regression approach:

$$\text{Behavior} = w(a) + w(b)$$

Has advantage of easily modeling interactions.

$$\text{Behavior} = w(a) + w(b) + \mathbf{w(a \times b)}$$

“a x b” represents the *interaction* of two variables. That is, how two factors might “work together” to influence behavior.