Welcome to week 4.

This week, we will focus on the variance-covariance matrix.

In particular, we will look at how to test whether

the covariance matrix and set of variables fits a certain pattern.

We'll then use that approach to check if maybe our variables,

which might be correlated with each other,

might be more easily explained by relatively small number of uncorrelated factors.

Then I'll give you an overview of something called structural equation models,

which generalises this idea and give us a very flexible way to represent

relationships among large numbers of variables in a substantively meaningful fashion.

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