
Subject: Re: does principle component=Factor analysis?

Posted by [Jean H.](#) on Thu, 27 Mar 2008 19:23:22 GMT

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> I guess Coyote got bored waiting for the mailman to show
> up with the next Girls Gone Wild video from Netflix, but
> he tells me he spent the whole morning researching this
> extensively on the Web. The answer, apparently is
> "Yeah, sorta."

>

> Cheers,

>

> David

Factor analysis is a statistical method used to explain variability among observed random variables in terms of fewer unobserved random variables called factors. The observed variables are modeled as linear combinations of the factors, plus "error" terms. The information gained about the interdependencies can be used later to reduce the set of variables in a dataset. Factor analysis originated in psychometrics, and is used in behavioral sciences, social sciences, marketing, product management, operations research, and other applied sciences that deal with large quantities of data.

Factor analysis is often confused with principal components analysis. The two methods are related, but distinct, though factor analysis becomes essentially equivalent to principal components analysis if the "errors" in the factor analysis model are assumed to all have the same variance.

http://en.wikipedia.org/wiki/Factor_analysis
