Re: significance of correlation affected by sample size?

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- *From*: Bruce Weaver <bweaver@xxxxxxxxxxx>
- *Date*: Wed, 23 Nov 2005 12:41:44 +0000

2046 wrote:

> Hi,
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> I have read that the sample size can affect the significance of
> correlation. Can someone explain why is this so? Thanks.

The SE of r = SE(r) = SQRT[(1−r^2)/(n−2)]. The significance of r is tested with a t−test.

t = (r−0)/SE(r)

So, as n gets larger, SE(r) gets smaller, t gets larger, and p gets smaller.

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