# Subject: Statistical difference in median ages <br> Posted by kbietsch on Thu, 21 Dec 2017 21:36:34 GMT <br> View Forum Message <> Reply to Message 

Does anyone have a suggestion for a significance test to compare two median ages. For example, I want to see if the median age at first marriage has changed between two surveys.

A more complicated question: is there a way to test for a statistical difference in SMAM (Singulate mean age at marriage)?
Thanks!
Kristin

Subject: Re: Statistical difference in median ages<br>Posted by Reduced-For(u)m on Thu, 21 Dec 2017 21:53:42 GMT<br>View Forum Message <> Reply to Message

How about a quantile regression at the median, including both age-at-first-marraige AND an interaction of age-at-first-marriage with "second survey round"? Then the coefficient on the interaction gives you the difference between the two rounds and you can do a simple T-test (if the interaction coefficient is statistically significant, that's a test of the difference).

Another option would be a "seemingly unrelated regressions" version for quantiles... but looking online I'm not sure anyone has done that (or at least I don't see a Stata package for it). I'd say the interaction method above would be good - you could compare means using Seemingly Unrelated Regression (sureg/suest in Stata) by doing two separate regressions and testing the coefficients after...but it sounds like you want the median.

