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Subject: Control for age in models with HAZ or WAZ?  
Posted by [vega25](#) on Wed, 02 Apr 2014 15:47:55 GMT  
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The height- and weight-for-age z-scores (HAZ, and WAZ) available in the DHS's are essentially age-specific deviations from the median of the reference population right?

So my question is: do regression models using HAZ or WAZ as dependent variables need to still account for the age of the child? What would be the logic of doing so, or not doing so?

I have some thoughts but I am not sure if they're the correct way of thinking: the 2007 WHO standards calculated height-for-age separately for length during 0-24 months, and for height during 25-60 months. But they are essentially age-specific z-scores, and the DHS sample of children will have these measurements for children across different ages. So unless I am looking at a specific age-group, I should include dummies of the children's ages, or the children's age as a continuous variable, as controls in my regression models.

I'd be tremendously grateful for any help that people can give. Thank you!

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Subject: Re: Control for age in models with HAZ or WAZ?  
Posted by [Reduced-For\(u\)m](#) on Wed, 02 Apr 2014 17:44:17 GMT  
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The short answer is yes, you should control for age. You can get the intuition as to why this might be important by graphing mean HAZ by age-in-months. A linear adjustment may be insufficient.

The slightly longer answer is - it depends on the identifying variation in your regression as to whether or not it will matter much. I'm attaching an unpublished working paper that may or may not be relevant, but discusses one context in which the problem can come up.

#### File Attachments

1) [Use-Misuse-HAZ-DHS.pdf](#), downloaded 2426 times

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Subject: Re: Control for age in models with HAZ or WAZ?  
Posted by [vega25](#) on Fri, 04 Apr 2014 13:50:09 GMT  
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Terrific, thank you!

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