

**APPENDIX TABLE 1. Comparison between Decomposition of Change method and Westoff method in evaluating relationship between contraceptive use and abortion**

Characteristic	Decomposition of Change	Westoff
<b>Data requirements</b>		
Pregnancy history/contraceptive use	Yes; any length of time is acceptable, but five years is preferable	Yes; one year
Month-by-month marital status/marital history	Yes	No (but can use data if available)
Current risk of unintended pregnancy	No	Yes
<b>Data that can improve methodology</b>		
Pregnancy intendedness at time of conception	Yes	Yes
<b>Analysis</b>		
No. of subgroups analyzed	3	5
Decomposition of abortion rate	$\sum_{i=1}^3 \frac{\text{woman-month}_i}{\text{all woman-months}} * \frac{a_i}{\text{woman-month}_i}$	$\frac{\sum_{i=1}^5 a_i}{\text{all woman-months}}$
Statistical power	More (larger sample size)	Less (uses shorter study intervals because of need for data on current unintended pregnancy risk)
Disaggregation by population characteristics	Yes	No
<b>Applicability to public health analyses</b>		
Quantifies proportion of abortion decline contributed by increased contraceptive use	Yes	No
Results can be used to estimate changes in abortion rate under different scenarios	Yes	Yes; allows for more detailed as assumptions about nonusers than decomposition method does
<b>Limitations</b>		
Abortion underreporting and misclassification	Yes	Yes
Recall bias	Yes	Yes
Assumptions about women's present status	No	Yes