

## **Direct and Indirect Paths leading to Contraceptive Use in Urban Africa**

*An application to Burkina Faso, Ghana, Morocco, and Senegal*

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### **Abstract**

**BACKGROUND:** Direct and indirect paths leading to contraceptive use in the capital cities of four African countries are examined by way of structural modelling.

**OBJECTIVES:** The research has two objectives: (i) to consider the *hierarchical ordering* of causal relationships among the individual factors involved in the use of contraception (ii) to test two main *indirect pathways* leading from woman's education to contraceptive use that have been proposed in the literature.

**METHODS:** Data are drawn from DHS conducted in Burkina Faso, Ghana, Morocco, and Senegal. The methodology is based on recursive structural models represented by directed acyclic graphs.

**RESULTS:** The study has highlighted a union-reproductive path showing that the effect of female education on contraceptive use is the reverse of what was expected. On the contrary, the analysis leads to rejecting the socio-cultural path, as this latter model is falsified by the data.

**CONCLUSION:** The union-reproductive path can be considered as structural, since the relations between variables are significant and are similar for all countries and age groups considered. On the other hand, the socio-cultural path is not confirmed by the data.

From a methodological point of view, the advantage of a recursive decomposition of the multivariate distribution – represented by a DAG - is that it allows researchers to propose an explanatory mechanism for the data generating process, composed of various sub-mechanisms, subsuming in particular the distinction between mediators and confounding variables.