



142 | 7 | 2
Views | CrossRef citations to date | Altmetric

Articles

Manifest Variable Granger Causality Models for Developmental Research: A Taxonomy

Alexander von Eye  & Wolfgang Wiedermann

Pages 183-195 | Published online: 20 Mar 2015

 Cite this article  <https://doi.org/10.1080/10888691.2014.1001512>



Sample our
Behavioral Sciences
Journals



>> **Sign in here** to start your access
to the latest two volumes for 14 days

 Full Article

 Figures & data

 References

 Citations

 Metrics

 Reprints & Permissions

Read this article

 Share

Abstract

Granger models are popular when it comes to testing hypotheses that relate series of measures causally to each other. In this article, we propose a taxonomy of Granger causality models. The taxonomy results from crossing the four variables Order of Lag, Type of (Contemporaneous) Effect, Direction of Effect, and Segment of Dependent Series Targeted. Among the uses of such a taxonomy are that existing models can be embedded in the context of possible other models, new models can be derived, models can be compared, and the relation of statistical models to theories of causality can be specified. Sample models are depicted, and parameters of interest are indicated. For two new models, empirical data examples are provided from research on the development of aggression in adolescents.

Notes

- ¹In this article, we follow the tradition that cells are labeled by row number–column number (in this order).
- ²Note that the same conceptual framework as counterfactual causality is used in Rubin's ([1977](#)) approach to statistically investigating causal hypotheses. This approach is considered among the most influential existing statistical approaches to causality testing.

Related research

People also read

Recommended articles

Cited by
7

Information for

[Authors](#)

[R&D professionals](#)

[Editors](#)

[Librarians](#)

[Societies](#)

Opportunities

[Reprints and e-prints](#)

[Advertising solutions](#)

[Accelerated publication](#)

[Corporate access solutions](#)

Open access

[Overview](#)

[Open journals](#)

[Open Select](#)

[Dove Medical Press](#)

[F1000Research](#)

Help and information

[Help and contact](#)

[Newsroom](#)

[All journals](#)

[Books](#)

Keep up to date

Register to receive personalised research and resources by email



Sign me up



Copyright © 2025 Informa UK Limited [Privacy policy](#) [Cookies](#) [Terms & conditions](#)

[Accessibility](#)

 Taylor and Francis Group

Registered in England & Wales No. 01072954
5 Howick Place | London | SW1P 1WG