Social Capital and Global Health Indicators: What Trusting Relationships Tell Us About the Global Burden of Disease

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INTRODUCTION

Background
- The global burden of disease has become increasingly complicated
  - High rates of suicide, drug and alcohol related death and disease, and organ system diseases have gained attention in life insurance industries
  - Medical technology and spending have not been able mitigate the surge of disease
  - Causes of these illnesses are not well understood
- The influence of social dynamics on health are becoming more understood
  - Social capital has been shown to positively impact physical health at individual and community levels
  - Though social capital has been identified as a key determinant to public health, few operationalized variables have been explored in similar contexts
  - The World Health Organization has called for more research in this area (WHO, 2013)
- Additional gaps in the literature include:
  - Self-reported, single-item measurements for health and social capital
  - Lack of evidence from randomized studies and cross-nationally
  - Minimal review of relationship to disease states

Research Question
- To what extent does social capital relate to global health indicators?

METHODS

Data Source:
- Secondary data analysis of cross-sectional data
  - World Values Survey (WVS) wave 1: 2010-2014
  - World Bank Databank (WBD): 2010

Sample
- 55 Countries: Representative of all regions, economic, and political models
  - Aggregated individual WVS data (n=98,566) to country level
  - Referenced to national level rather than individual, self-reported health indicators

Independent Variables
- Social Capital Operationalizations by Subconstructs
  - Trust
  - Group
  - Civic
  - Linking

Dependent Variables
- Global Health Indicators WVS
  - Life expectancy at birth, death rates

Operational Definitions
- Societal trust: (1) per 1000 population
- Cronbach’s Alpha
  - Social trust rate (per 1000 inhabitants)
- Internal consistency attributed to informal poisoning (per 100 inhabitants)
- Infant mortality rate (per 1000 live births)
- Percentage Data (% of total)
- Count Data
- Linking: (a) personal, (b) community levels

Statistical Methods
- GLM Regression
- Negative Binomial Regression – Event Data
- Beta Regression – Longitudinal

RESULTS

Regression models revealed that global health indicators are related to social capital subconstructs in different ways, see in the Results Table.

For prevalence of overweight, diabetes and smoking along with non-communicable disease mortality, group social capital correlated with improved health.

For non-communicable disease, however, also showed an increase with civic social capital.

For all other indicators, social capital was associated with declining health indicators.

CONCEPT MAP

EXAMPLE COMPARISON MAPS

GROUP SOCIAL CAPITAL

GLOBAL SMOKING PREVALENCE

CONCLUSIONS

Limitations of Study
- Cross-sectional data does not allow for causation to be inferred

Ecological fallacy: inherent problem with social capital and collective health

- Diverse sampling of countries around the world
- Extensive components of social capital measurement

- Social capital relates to global health indicators both positively and negatively
- Non-communicable disease mortality, group social capital correlated with increased prevalence
- For all other indicators, social capital was associated with declining health indicators

REFERENCES

ACKNOWLEDGMENTS

ADDITIONAL INFORMATION

- Thank you for your curiosity in this research!
- Follow this website: ORCID to find more information on this topic including:
  - Abstract
  - Formal written sections
  - References
  - Additional visuals
  - Country list

- And reflections on the research process