

A review of issues in gamified surveys / Florian Keusch & Chan Zhang

Abstract: The term 'gamification' is used for a wide variety of techniques aimed to increase respondent engagement while filling out Web surveys. Suggested approaches range from rephrasing questions to sound more game-like to embedding the entire survey into a game where respondent avatars adventure through a fantasy land while answering survey questions. So far, only few experimental studies regarding the influence of gamification on survey responding have been published in peer-reviewed journals. This paper systematically reviews the current research literature on gamification in surveys by first answering the question as to what gamification entails in the context of Web surveys by identifying relevant gamification elements. Next, the paper discusses how these elements could influence survey data quality using the Total Survey Error framework. Finally, a systematic review of empirical evidence on gamified surveys from published and unpublished studies is provided. While most studies found in our literature review reported a positive effect of using game elements, such as challenges, story/narrative, rewards, goals/objectives, and badges, on psychological outcomes among survey respondents (e.g., fun, interest, satisfaction), the influence of these elements on behavioral outcomes (e.g., completion and break-offs, item omission, satisficing, responses), and therefore survey quality, is more unclear. This paper informs survey researchers and practitioners of the current state of research on survey gamification and identifies potential areas for future research.

Measuring political knowledge in web-based surveys: An experimental validation of visual versus verbal instruments / Simon Munzert & Peter Selb

Abstract: Does the opportunity to deliver visual instead of verbal stimuli of political knowledge to respondents in web-based surveys make a difference in terms of data quality? For instance, does the presentation of visual knowledge items reduce cheating, that is, looking up the answer via the web? And do visual and verbal stimuli capture the same underlying construct? To test whether the use of visuals to measure political knowledge effectively makes a difference, we administer a question form experiment in an online survey of the German Longitudinal Election Study. Respondents are randomly assigned to one of two question formats—visual or verbal—and are asked to solve a set of eight questions on political leaders and their offices. The instruments are validated based on nonparametric item response theory and analyses of response latency. While there is no clear evidence for cheating behavior under either of the conditions, both instruments form strong knowledge scales. Results from a regression analysis indicate that the scales provide measures of closely related but not identical concepts.

Optimising campaigns for changing routine behaviours by using an empirically calibrated micro-simulation model / Robert Tobias & Hans-Joachim Mosler

Abstract: We used the model of prospective memory and habit development to derive recommendations for designing behaviour-change campaigns that used prompts or household visits as reminders. We followed an exemplary procedure comprising the calibration of the model, based on 48 time series gathered during a campaign promoting recycling habits and a systematic exploration of the solution space. For the parameter estimation, an algorithm was developed that worked at two levels. A higher-level algorithm optimised parameters that were set to equal values for all agents, whereas a lower-level algorithm estimated the values of agent-specific parameters for each agent separately, using the parameter values of the higher-level algorithm for the other parameters. The 300 different optimisation runs resulted in an excellent fit (R^2 up to 75%), but this could be reached with various parameter settings. The solution best suited for the investigation was selected, and the following characteristics were systematically varied: period between visits, number of follow-up visits, number of times that prompts were set up or refreshed, salience of the prompts and coverage of the prompts for situations in which the action should be performed. By using an indicator for quantifying campaign effects, the results of the simulation experiments were condensed into the following findings: Activities should focus on the first week of a campaign. Follow-up visits or refreshing of prompts should be done within four days after the initial visit. Later activities, such as additional visits or refreshing of prompts, bring little further effects. Investing heavily in the design of the prompts for improving their salience is only worthwhile in populations with a low commitment to perform the behaviour. Furthermore, covering more than 10% of the places where the target behaviour should be performed with prompts mostly does not lead to additional effects to make it worthwhile.

Governance models for the delivery of public services through the Web 2.0 Technologies. A political view in large Spanish municipalities / Manuel Pedro Rodríguez Bolívar

Abstract: The growing participation in social networking sites is altering the nature of social relations and changing the nature of political and public dialogue. This paper contributes to the current debate on Web 2.0 technologies and their implications for local governance through the identification of governance models to be adopted by local governments if Web 2.0 technologies are implemented for providing public services. Also this paper analyzes if political competition could be an attribute that could explain the governance models to be adopted by municipalities. To achieve this aim, an e-survey during the period May-July 2014 has been performed by policymakers responsible of strategies for e-government in Spanish municipalities. Findings indicate that policymakers are mainly prone to implement Web 2.0 technologies under the "Bureaucratic Model" framework, keeping the leading role in this implementation. Nonetheless, political competition seems to be essential to understand the findings of this paper. Thus, majority governments are prone to implement collaborative models of governance, whereas minority governments are in favor to implement non-collaborative models of governance.

“I Know God’s Got a Day 4 Me:” Violence, trauma and coping among gang- Involved Twitter users / Desmond U. Patton, Ninive Sanchez, Dale Fitch, Jamie Macbeth, & Patrick Leonard

Abstract: Trauma-based interventions are common in mental health practice and yet there is a gap in services because social media has created new ways of managing trauma. Practitioners identify treatments for traumatic experiences and are trained to implement evidence-based practices but there is limited research that uses social media as a data source. We use a case study to explore over 400 Twitter communications of a gang member in Chicago's Southside, Gakirah Barnes, who mourned the death of her friend on Twitter. We further explore how, following her own death, members of her Twitter network mourn her. We describe expressions of trauma that are difficult to uncover in traditional trauma-based services. We discuss practice and research implications regarding using Twitter to address trauma among gang-involved youth.

Community detection in political discussions on Twitter. An application of the retweet overlap network method to the Catalan process towards independence / Frederic Guerrero-Solé

Abstract: In November 9th 2014, the Catalan government called Catalan people to participate in a straw poll about the independence of Catalonia from Spain. This paper analyzes the use of Twitter between the 8th and the 10th November 2014. Drawing on a methodology developed by Guerrero-Solé, Corominas-Murtra and Lopez-Gonzalez (2014), this work examines the structure of the retweet overlap network (RON), formed by those users whose communities of retweeters have non-zero overlapping, to detect the community structure of the network. The results show a high polarization of the resulting network and prove that the RON is a reliable method to determinate network community structures and users’ political leaning in political discussions.

Reports and Communications

Approaching completeness: capturing a hashtagged Twitter conversation and its follow-on conversation / David Gunnarsson Lorentzen & Jan Nolin

Abstract: The aim of this paper is to engage with problems of sampling and completeness currently discussed within data science through the specific example of conversations in Twitter. Some of the difficulties involved in Twitter concern restrictions laid out by platform owners, restrictions that make it difficult for researchers to collect complete conversations. A contribution is made through the development of a method for collecting and analysing follow-on conversations around a set of hashtags. This was made possible through the simultaneous tracking of a set of hashtags and prominent participants in the conversation. The full set of tweets was compared to the subset of tweets including either of the selected hashtags. Including follow-on conversation increased the set of tweets by 56% and the set of tweeting users by 17%. It is also shown that different network analysis techniques and filtering options give different results with regards to prominent users.

How dangerous are virtual worlds really?: A research note on the Statecraft Simulation debate / Nilay Saiya

Abstract: This brief article weighs in on a pedagogical debate concerning the didactic usefulness of an online international relations computer simulation called Statecraft. In a 2014 article, Gustavo Carvalho, a teaching assistant at the University of Toronto, claimed, based on the results of a survey he administered to an international relations class that used Statecraft, that the simulation had little to offer students as a teaching tool. In a rebuttal, Statecraft creator Jonathan Keller took Carvalho to task for not employing the simulation properly, which biased his results. Whereas Carvalho only presented results for one class, the present analysis reports on survey responses of students over six different classes which used Statecraft from 2013-2014. The results call into question Carvalho's findings and suggest that the context and curriculum matter as much as the simulation itself when judging the pedagogical value of computer-mediated learning tools.