

[3] Exploring Cybercrime Disruption through Laboratory Experiments

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Reviews Phase 1

Review 1

Time: Jun 08, 12:47

Overall evaluation: 3 (strong accept)

This is a well-written paper that describes possible effects of interventions in dark-markets based on lab experiments. The paper describes how the experiments were set up to mimic the context of a dark-market without letting the subjects know they were in that context. Two well-known interventions were studied: slander and Sybil attack.

The paper presents the findings from the experiments in a clear way, and describes an analysis of the result. This is all presented in a way that gives much food for thought and possible followups in future theoretical experiments as well as possible law enforcement actions.

It was a pleasure to read this article. It has a clear structure, and contains just the right amount of information.

My only slight point of critique is that the paper mentions "avoiding ethical pitfalls" in passing, without discussing them further. This is in the paragraph "no specific reference was made to this setting or replicating cybercrime".

Reviewer's confidence: 3 (medium)

Review 2

Time: Jun 10, 12:11

Overall evaluation: 1 (weak accept)

This is an interesting paper and a relevant topic. Although the paper feels a bit underdeveloped, the authors clearly state that it's an 'position paper' which give the reader a good idea of what to expect. Therefore, I think the presented case study it 'good enough'.

I have one major concern, as this is a 'position paper' I do expect to get a thorough literature review and a (possible) even more thorough evaluation of the case study including all the pros and cons. The authors want to use this case study to show the cybercrime field that social lab experiments can be of added value. I agree with this, however the authors seems to be biased in showing the pros of this method. Of added value would be to discuss the cons more thorough in the last part of the paper (and – if possible based on experience with social lab experiments on other topics – offer a solution for the cons). At the very least, I would expect to see a more extensive review of the literature about 'trust on online meeting markets', both criminal and non-criminal. This is important because the authors use a simplified version of an online market in their experiment. We need to know how limited their version was. Literature shows that many factors are related to building a reliable reputation, both on the market itself ** e.g. closed markets versus open markets, screening processes, the role of admins / how active admins are, rules and regulations / dispute rules / reporting systems, member status, type of review and/or rating system *** as well as outside the market (social function of for example some subreddits and other places where trust on markets is discussed). These

issues are now overlooked and this has implications for how serious we can take this position paper. Again: I think the authors cover a very relevant topic and I agree with the core idea to conduct social lab experiments. So I would urge to authors to add the relevant literature and have a more extensive discussion section.

Reviewer's confidence: 4 (high)

Rebuttal Letter

Many thanks to the reviewers for their helpful comments. We do not have major substantive points of rebuttal, but our main question is one of format.

Reviewer 1's comments were very positive and the one suggestion can be easily actioned. So there is no need for rebuttal on this review.

Reviewer 2's comments are reasonable in relation to a paper in general, and we have no substantive disagreements. But we wanted to clarify what the PC's expectations of a position paper are. The submission instructions on the website are:

"Position papers of around 4 pages in length should present new open and interesting questions that the community should address or open questions that past research papers have not yet addressed".

Based on this, and in general, our understanding of a position paper is a broad one. While one approach could involve an extensive review of the literature, we view our contribution as a methodological one. We believe this is also a valid approach one can take in a position paper. Given we only have 4 pages to work with, it is most valuable to focus on the experiment's methods. If we add in much more extensive literature review/discussion, this would lead to us cutting very core parts of the paper instead.

If the PC and Reviewer 2 could resolve this question of format, that would be much appreciated. We are already at 4 pages, so do not have room to add any additional material. If there is some latitude on this, we suggest adding 1-2 additional paragraphs, providing a high-level outline across the points that Reviewer 2 made.

Reviews Phase 2

Review 3

Time: Jun 29, 17:17

Overall evaluation: 2 (accept)

The first two reviewers seem to have accepted this paper and I don't see any reason not to: it adopts an interesting new approach to solve a nagging problem, which is assessing the effectiveness of various types of police interventions. My only comment would be more of a question that could be addressed in the concluding paragraphs: would an Agent-Based Modeling approach also be of interest to

complement/augment this lab experiment approach? I see many similarities in terms of benefits. I realize space is already constrained, as position papers are limited to 4 pages.

Reviewer's confidence: 4 (high)

Review 4

Time: Jun 30, 11:35

Overall evaluation: 2 (accept)

This was a decent paper with a good knowledge of the key literature and some interesting points. The methodological approach was interesting and innovative (though some of this lab-style work has been done in simulation by security economists before, see many WEIS papers). It would have been nice to see more discussion of the limitations of the paper - particularly the factors and forces which would be absent in a lab setting but which might be important, such as shared culture, friendships, the development of group identity, structural factors, and strain,.

Reviewer's confidence: 5 (expert)