

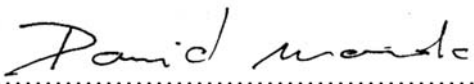
Running head: Willing to be scammed: how self-control impacts  
Internet scam compliance

Willing to be scammed:  
How self-control impacts Internet scam compliance

Submitted by David Modic to the University of Exeter  
as a thesis for the degree of  
Doctor of Philosophy in Psychology  
In September 2012

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### **Abstract**

At any given moment in time, there are people complying with fraudulent requests (i.e. scams) on the Internet. While the incidence rates are low (between five and ten percent of the population becoming victims on a yearly basis), the financial and emotional consequences can be high. In this Thesis we composed a unified theory of which factors made individuals more likely to comply with scams and what psychological mechanisms are unwittingly employed by con-men to make their (illegitimate marketing) offers more enticing. The strongest overall predictor of scam compliance (i.e. the extent to which an individual is likely to comply with fraudulent requests) was the level of self-control, regardless of the observed stage of a scam.

On the basis of previous research, we postulated and have empirically shown that falling for a scam is a 3-stage process (i.e. assessing a scam to be plausible - plausibility, responding to scammers - responded and, finally, losing utility to them – lost out). Taking this paradigm into account, we analysed the three stages in separate investigations and tested the viability of various psychological factors that play a role in them.

We hypothesized that attitudes towards risky choices would play a role in finding an Internet scam plausible and thus started our investigation by transferring one of the classic economic psychological theories (i.e. Prospect Theory) into a virtual setting and demonstrated that risk preferences remain unchanged between concrete and virtual settings. Our investigation showed that attitudes towards risk are similar across virtual and concrete domains, but did not yield a reliable psychometric scale measuring risk preferences. As a corollary, in Chapter 3, we investigated psychological mechanisms that influence risky preferences as applied to all three stages of scam compliance.

The empirical investigation in Chapter 3 of the present Thesis focused on social psychological mechanisms of persuasion. A scale of susceptibility to persuasion was developed, validated and then applied to the phenomena of scam compliance in two studies. Four reliable factors contributing to susceptibility to persuasion emerged: influence of authority, social influence, self-control and the need for consistency. The susceptibility to persuasion scale was then used to predict overall lifetime (study 1) and time-limited (study 2) scam compliance across the three stages of scams. Social Influence weakly predicted the plausibility stage in study 1, while strongly predicting the response stage in study 2. The need for consistency strongly predicted response stages in both studies. While compliance with requests from authorities did not predict responses to any of the stages in study 1, it weakly predicted the plausibility of a scam and strongly predicted responding to it in study 2. Weak self-control was a significant predictor of losing funds in study 1 and a strong predictor of responding to scams in study 2. As lack of self-control (as a personality trait) emerged as one of the significant predictors of scam compliance, this led us to infer that there were other personality traits that would contribute to understanding scam compliance. That became the topic of Chapter 4 of the present Thesis.

In Chapter 4, we used the five factor model of personality, a brief self-control scale and the UPPS impulsive behaviour scale to measure the impact of personality traits on scam compliance in the response stage. Results showed that extraversion, openness, self-control, premeditation, sensation seeking and (negative) urgency had an influence on the response rates to fraudulent offers. Lack of self-control (as a personality trait) again emerged as a strong predictor of overall scam compliance, which led us to infer that self-control as a cognitive state would also contribute to measuring scam compliance in general and in specific types of fraud. The investigation reported in Chapter 3 showed fraudulent Internet auctions to be an effective scam. As a

consequence of these two findings, in Chapter 5, we investigated the impact of self-regulatory fatigue on compliance with fraudulent Internet auctions.

In the empirical investigation in Chapter 5 180 respondents in two groups were exposed to a cognitive task designed to be ego-depleting and then to a constructed fraudulent Internet auction. They were asked a series of questions concerned with the likelihood of them purchasing a desired item (i.e. the third stage of a scam) and its appeal to them. We found no evidence that lowered self-control (as a state) had any impact on the appeal of fraudulent offer or the likelihood of purchasing it. We also demonstrated that the perception of risk in the fraudulent Internet auctions is most strongly influenced by the feedback mechanisms and the sellers' ability to use correct English.

In the conclusion to the present Thesis we discussed the implications of our empirical investigations and constructed a fictional fraudulent offer that would be effective according to our research. It should, for example, be based on the advance fee schemes and should be delivered over the Internet to reach the most potential victims. Once we had created an outline of an effective scam, we used that as our starting point to suggest mechanisms that would be effective in resisting it. For example, individuals could employ heuristics in a better way or conduct reality checks; and software toolkits that would help in resisting scams could be developed on the basis of our findings. We also discussed future research directions (obtaining larger samples, focusing on specific types of scams and specific populations; and others) and general implications of our findings.

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