Call to Claim Your Prize: Perceived Benefits Drive the Likelihood of Contact in a Mass Marketing Scam

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Abstract

Mass Marketing scams (MMS) affect millions of individuals across the globe, burdening them financially, socially, and physically. However, little work has been done investigating the individual differences that lead to vulnerability to MMS. In a preliminary study, "hot" and "cold" versions of a hypothetical but realistic solicitation were presented to 364 adults, who, after reviewing one of these letters, reported their likelihood of contacting an "activation number" to receive a monetary prize. Participants also completed a questionnaire with items referring to their perceived benefits and risks to responding to the letter, demographics, and decision making style. Preliminary analysis revealed that response rates were highest in the cold vs. hot condition, and perceived benefits was the greatest predictor. No age effects were seen. Further investigation is needed to understand the individual differences that lead to vulnerability to MMS.

Rationale

- Mass marketing scams (MMS) cost consumers billions of dollars worldwide. For example, the cost to the United Kingdom alone is suggested to be £3.5 billion. Advance-fee fraud schemes employ basic principles of persuasion to induce compliance with a small request. Potential victims are typically asked to provide some contact information by way of a phone number or email for the possibility of receiving a prize.
  - We developed materials based on a review of the structure and content of a sample of advance-fee scam solicitations obtained from the Postal Inspector's office in Los Angeles.
- Older adults typically experience declines with deliberative decision making, and thus rely on more affective processes (Strough, Bruine de Bruin, & Peters, 2015). We hypothesized that if we made a "hot" fraudulent letter with graphics and colors, older adults would be more responsive to this letter than young adults.
- Need for cognition (Cacioppo & Petty, 1982) may contribute to different decision making styles. Additionally, need for cognition may decline with age (Soubelet & Salthouse, 2016). We hypothesized that there may be an inverse relationship between intent to respond and NFC scores.
- This experiment was a 2 (Age: older adult, young adult) x 2 (Letter: hot, cold) x 2 (activation fee: no fee, $100 fee) between groups design. We also collected information regarding the participants' perception of the potential benefits and risks of the solicitation as both a quantitative rating and a qualitative statement, as well as demographic information.

Method

- Read one of the 4 solicitations (hot with no activation fee, hot with $100 fee, cold with no activation fee, or cold with $100 fee).
- Rate "how likely are you to contact the activation number" on a 7 point Likert scale.
- Make quantitative ratings of risks and benefits on a 10-point Likert scale.
- Complete two qualitative statements:
  1. In your opinion, what are the benefits of responding to this letter?
  2. In your opinion, what would be the risks to responding to this letter
- Need for Cognition (Cacioppo & Petty, 1982): 18-item regarding preferences about the act of thinking.
- Demographics: Participants were asked their age, gender, ethnicity, income, employment status, education, and marital status.

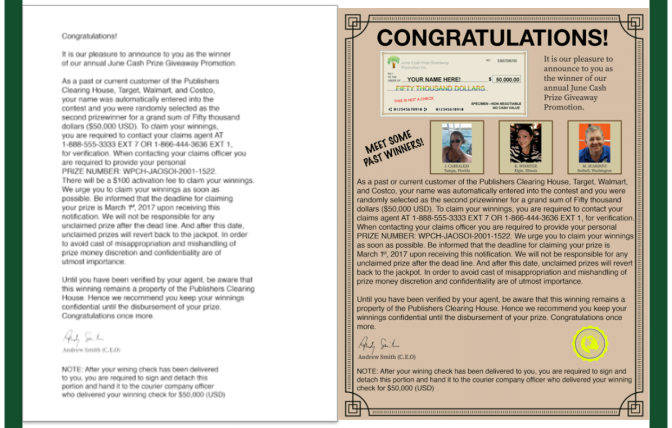

Figure 1a and b. a) Example letter given to participants in the cold condition b) Example letter given to participants in the hot condition.

Table 1. Hierarchical regression model with NFC, education, and assessment of both risk and benefit predicting intent to comply.

Step	Predictor	R^2	R^2 Change	B	SE B	Beta
1	NFC	0.01	-	-0.35*	0.16	-0.12*
2	NFC	0.03	0.01	-0.29	0.16	-0.09
	Education			-0.21*	0.10	-0.12*
3	NFC	0.67	.64	-0.11	0.10	-0.04
	Education			-0.06	0.06	-0.03
	Benefit			0.65***	0.04	0.65***
	Risk			-0.32***	0.05	-0.24***

*p<.05; **p<.01; ***p<.001

Table 2. Regression model with rating of benefit and of risk predicting intent to comply.

Predictor	R^2	B	SE B	Beta
Benefit	0.65	0.62***	0.04	0.61***
Risk		-0.38***	0.05	-0.28***

*p<.05; **p<.01; ***p<.001

Descriptive Statistics of our Sample (n = 364 total)

	Younger Adult (n = 187)	Older Adult (n = 177)
Mean Age	37.52 years	65.56 years
Female	34%	64%
Male	66%	36%
White	76%	90%
Hispanic or Latino	.04%	.01%
Black or African American	.08%	.05%
Native American or American Indian	.01%	0%
Asian/Pacific Islander	.07%	.02
Unemployed	14%	56%
Student	2%	0%
Part-Time Employed	10%	24%
Full-Time Employed	74%	20%

Results

- Overall, we found a high level of intent to comply in our sample with 38.46% indicating some willingness (15.11% somewhat likely, 10.16% likely, 13.19% very likely) to call the contact number in order to "activate" the winnings.
- Age had no significant relationship to intent to comply or risk or benefit assessments. In fact, none of the demographic variables were significant.
- There was a significant main effect of condition such that those who viewed the cold letter were more likely to report that they would call the contact number ($F = 4.18$, $p = 0.04$). There was no main effect of age or significant interaction.
- While Need for Cognition was a significant predictor of intent to comply, it ceased being significant once education was added to the model.
- Overall, risk and benefit assessment were the strongest predictors of intent to comply.

Conclusions and Future Directions

- Contrary to research in elder financial exploitation, older adults were not more likely than younger adults to indicate interest in complying with a MMS letter. However, it is important to note that age was treated as a categorical rather than continuous variable so more nuanced relationships could not be explored.
- Need for cognition was not a significant predictor of intent to comply. In the future, more cognitive factors should be explored.
- Interest in elder fraud research is growing. In fact, recently the CDC classified FE as a public health issue (Guida & Temple-West, 2017).
- There may be different risk factors depending on the type of fraud. For example, age is a critical factor in investment fraud. Additionally, telephone calls seem to be a preferred mode of communication for investment fraud (Shadel & Pak, 2017). Our MMS paradigm was modeled off scams primarily delivered via postal service. Thus, not only is the nature of MMS/sweepstakes schemes different from investment fraud, other important factors may contribute to differences in risk factors. It is important that future research addresses differences in fraud schemes rather than generalizing across types of scams.