



Compliance with Mass Marketing Solicitation: The Role of Verbatim and Gist Processing

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Mass-Marketing Scams

- In 2019, mass-marketing scams (MMS) resulted in 1.7 million fraud complaints and \$765 million lost in the US alone¹.
- MMS can lead to long-term physical and/or emotional suffering among fraud victims².

Fuzzy-Trace Theory

- Verbatim representations of information encode objective, surface-level information (e.g., precise wordings and numbers)³.
- Gist representations of information reflect vague, subjective interpretations of the meaning of information (e.g., whether there is any risk involved)³.

Hypothesis

- Based on past research^{4,5}, we hypothesized that participants who engage in verbatim-based reasoning are more likely to fall for MMS than participants who engage in gist-based reasoning.

Methods & Results

MTurkers	Age _{Range}	M _{Age}	SD _{Age}	% female	% non-Hispanic White	M _{Education}	M _{Income}	Marital Status	Employment
N = 699	18 – 78	38.13	11.97	52%	73%	~ Associates Degree	~ \$25,000 - \$49,999	51% not married	33% no full-time job

Scam

Solicitation letter claiming participants have won a \$500,000 sweepstake prize and need to call an ‘activation number’.

Experimental Condition

Verbatim Condition (n = 352)

Focus on exact details of letter (e.g., prize money).

Gist Condition (n = 347)

Relay letter content in a few sentences, in your own words.

Outcome Measures	Scaling	Whole Sample	Verbatim Group	Gist Group	Group Comparison	Notes
Willingness to Call Number	1 - 7	3.65 (2.24)	3.78 (2.23)	3.52 (2.24)	$F(1, 697) = 2.69, p = .102, \eta_p^2 = .00$	F-tests are based on rank-based, nonparametric ANOVAs. Results did not change when controlling for variables that differed between groups (i.e., income, positive outcome focus, general outcome focus).
Perceived Risks	1 - 7	5.14 (1.75)	5.00 (1.83)	5.28 (1.65)	$F(1, 697) = 3.33, p = .068, \eta_p^2 = .01$	
Perceived Benefits	1 - 7	4.16 (2.26)	4.26 (2.26)	4.06 (2.27)	$F(1, 697) = 1.51, p = .220, \eta_p^2 = .00$	
Letter is Genuine: Yes	No, Yes	n = 178 (25%)	n = 101 (29%)	n = 77 (22%)	$X^2(1, N = 699) = 3.56, p = .059$	

Predicting Willingness to Call the ‘Activation Number’ (i.e., Likelihood to Fall for the Scam)

	β	R ²		β	R ²		β	R ²		β	R ²
Age	-.06	.01	Conservative	.09*	.05	Financial Knowledge	-.21***	.05	Specific Risk [Verbatim]	.28***	.09
Female	.00	.03	Decision Regret	.22***	.05	Financial Risk Tolerance	.20***	.04	Quantitative Risk [Verbatim]	.18***	.11
Non-White	.10**	.01	Positive Outcome Focus	.09*	.01	History of Financial Fraud: Yes	.05	.00			
No Full-Time Job	-.01	.00	Negative Outcome Focus	.14***	.02	Has Responded to Scam IRL: Yes	.39***	.99	Outcome Measures		
Education ^a	.02	.01	General Outcome Focus	.00	.00	Categorical Risk [Gist]	-.12**	.22	Perceived Risks	-.41***	.17
Income ^b	-.02	.00	Consideration of Future Outcomes	-.18***	.03	Global Risk [Gist]	-.16***	.05	Perceived Benefits	.74***	.55
Not Married	-.07	.00	Susceptibility to Scams	.34***	.20	Gist Principles [Gist]	.02	.00	Letter is Genuine: Yes	.48***	.23

Notes. Table represents separate regression analyses for each predictor variable. Variables marked in red predict willingness to call the activation number when all predictors are considered jointly ($Pseudo-R^2 = 1.00$ for model in which all predictors are considered jointly). In the table, R² reflects $Pseudo-R^2$ and can be understood as an index of model fit rather than explained variance.

Discussion

- Participants in the verbatim and gist condition did not differ in their assessment of the scam or their willingness to respond to the scam, possibly because the manipulation was not strong enough.
- Consistent with predictions based on Fuzzy-Trace Theory³ and past research^{4,5}, verbatim-based processing [gist-based processing] positively [negatively] predicted willingness to respond to the scam.
- Self-rated susceptibility and a past history of falling for scams predicted willingness to respond to the scam, even in the presence of other predictors. Thus, scam compliance is not easily deterred.
- Limitations:** Although results are consistent with past work⁶, MTurkers and online MMS might not be representative for other populations or other MMS. Participants only made hypothetical choices.

¹ FTC (2020). New FTC data shows that the FTC received nearly 1.7 million fraud reports, and FTC lawsuits returned \$232 million to consumers in 2019.

² Shichor, D., et al. (1996). Anger, disappointment, and disgust: Reactions of victims of a telephone investment scam. In C. Sumner, M. Isreal, M. O'Conner, & R. Sarre (Eds.), *International victimology: Selected papers from the 8th international symposium* (pp. 105–112). Australian Institute of Criminology.

³ Reyna, V. F. (2008). A theory of medical decision making and health: Fuzzy trace theory. *Medical Decision Making, 28*(6), 829–833.

⁴ Rivers, S. E., et al. (2008). Risk taking under the influence: A fuzzy-trace theory of emotion in adolescence. *Developmental Review, 28*(1), 107–144.

⁵ White, C. M., et al. (2015). Adolescents' and young adults' online risk taking: The role of gist and verbatim representations. *Risk Analysis, 35*(8), 1407–1422.

⁶ Modic, D., & Lea, S. E. G. (2013). Scam compliance and the psychology of persuasion. *SSRN Electronic Journal, 1*–34.

The authors have no conflicts of interest to declare.