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# Individual Determinants of Media Choice for Deception

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## ABSTRACT

Recent research has found that deceivers are extremely difficult to detect in computer-mediated work settings. However, it is unclear which individuals are likely to use computer systems for deception in these settings. This study looked at how 172 upper-level business students' political skill, social skill, and tendency to use impression management was related to their deception media choice in a business scenario. We found that most individuals preferred e-mail and face-to-face media to the phone for deception. However, the individuals with high social skill, individuals with high political skill, and individuals with a tendency to use impression management predominately chose the phone and face-to-face methods for deception. These findings imply that organizations do need to be aware of deception in e-mail communications; however, they also need to be aware of deception in phone and face-to-face settings, since this deception will likely be coming from individuals that are skilled deceivers.

## Keywords

Deception, Computer-Mediated Communication, Social-Skill, Political Skill, Impression Management, Media Choice

## INTRODUCTION

Recent research has highlighted the importance of deception in business settings. Deception, which is a message knowingly transmitted by an individual to foster a false belief or conclusion in others (Buller & Burgoon, 1996), has been found in interview (Challenger, 1997) and reporting (Bishop, 2004) settings, and it is certainly present in many other business settings. One trend that has a large influence on deception in these settings is the increased use of computer-mediated communication. Computer-mediated communication (such as e-mail) filters many cues to deception, potentially making it easier for individuals to deceive. However, it is unclear if different types of individuals choose different media for deception. This study investigates how individuals' social skill, political skill, and their tendency to use impression management are related to their media choice for deception.

## LITERATURE AND HYPOTHESES

Researchers have investigated deception and lying in traditional settings for many years (DePaulo et al., 2003). Studies found that, on average, individuals are able to detect about 35% of the lies which with they are confronted (Levine, McCornack, & Park, 1999).

However, more and more communication in modern business settings uses information systems, and electronic communication affects deception. Many cues to deception are vision and audio based, like gestures and audio pitch (DePaulo et al., 2003), and media such as e-mail don't allow the transmission of these cues (Daft & Lengel, 1986).

Recent research has investigated deception in computer-mediated business settings such as interviews, decision-making groups, and negotiations. These studies found that individuals were only able to detect between 3% and 8% percent of the lies with which they were confronted (George, Marett, & Tilley, 2008; Giordano, Stoner, Brouer, & George, 2007; Giordano & Tilley, 2006). Although these studies revealed that, if present, deception is a major problem in computer-mediated settings, they did not investigate which individuals are likely to deceive using electronic media.

An initial study on this topic was recently conducted (Carlson & George, 2004). This study looked at individuals' media choice for deception in two different business scenarios, a high-risk scenario, and a low-risk scenario. The high risk scenario was particularly interesting, because it involved lying to a friend and being deceptive in a way that would likely negatively affect the company. For the scenario, 30% of respondents chose telephone, 11% chose memo, 15% chose e-mail, 39% chose face-to-face, 2.5% chose letter, and 2.5% chose voice mail as the media they would use to communicate the deception. When memo is integrated with e-mail (as it probably should be since most memos are now delivered using e-mail), it becomes clear that a similar number of individuals chose e-mail, phone, and face-to-face methods for deception. While this was an interesting finding, the study did not look at individual differences between the participants, which likely had an influence on media choice.

A first individual difference that closely relates to deception is political skill. Political skill is defined as: "The ability to effectively understand others at work, and to use such knowledge to influence others to act in ways that enhance one's personal and/or organizational objectives" (Ferris et al., 2005). Political skill consists of four sub-skills: social astuteness, interpersonal influence, networking ability, and apparent sincerity (Ferris et al., 2005). Social astuteness is the ability to identify with others to obtain things by presenting one's behavior in the best possible light. Socially astute individuals should be able to read situations and people, and use that

information to attempt to influence others. Interpersonal influence is the ability to adapt and calibrate one's behavior to situations to get particular responses from others in order to achieve personal goals. Networking is the ability to develop and use diverse networks of people. Individuals who score high in networking ability are often highly skilled negotiators. Apparent sincerity is the ability to appear as though one possesses high levels of integrity, authenticity, sincerity, and genuineness.

Politically skilled individuals are able to change their behavior to different situational demands and consistently appear genuine and sincere. This leads to feelings of trust and support from those around them. It also allows them to use influence over others effectively. Also, politically skilled individuals can adjust their behavior toward others in ways that elicit favorable reactions (Ferris et al., 2005). These skills likely allow deceptive individuals to appear honest, even if they are leaking cues to deception. Deceptive individuals with these skills would want to communicate in more intimate and real-time communication settings since they could appear honest, and so that they could use their influence tactics.

H1A: Political skill will be related to media choice for deception.

H1B: Face-to-face and telephone will be the dominant media choices for individuals with high political skill.

Another important individual difference related to deception is social skill. Social skill has both emotional and social dimensions (Riggio, 1986). The emotional dimensions include emotional expressivity, emotional sensitivity, and emotional control. The social dimensions include social expressivity, social sensitivity, and social control. Individuals that are high in emotional expressivity, emotional sensitivity, and emotional control are able to inspire others by their ability to transmit feelings, attend to and accurately interpret the subtle emotional cues of others, as well as accurately show emotions. Individuals with social expressivity, social sensitivity, and social control skills are usually tactful, and they can be adept in guiding the direction and content of communication (Riggio, 1986).

Individuals with social skills are confident in their ability to communicate effectively, but they may not have the ability to influence others as do politically skilled individuals. However, socially skilled individuals will also likely want to carry on a real-time conversation when they are deceptive, so that they can better direct the flow and direction of the conversation.

H2A: Social skill will be related to media choice for deception.

H2B: Face-to-Face and telephone will be the dominant media choice for individuals with high social skill

Yet another important individual characteristic related to deception is the use of impression management.

Impression management is a process in which individuals try to influence the image that others hold of them (Rosenfeld, Giacalone, & Riordan, 1995). Individuals use impression management to try to maintain their own identities while projecting a different identity to others (Wayne & Liden, 1995). Researchers have developed a taxonomy for understanding impression management (Jones & Pittman, 1982). Their impression management techniques in this taxonomy include self-promotion, ingratiation, exemplification, intimidation, and supplication. Individuals that use these techniques tend to point out their abilities and accomplishments, attempt to increase their likeability, self sacrifice to increase others' perceptions of their dedication, make others aware of power and punishment capabilities, and express weakness or failures with the goal of being perceived as needy.

Individuals that use impression management are trying to control others' opinions of them. Since individuals that often use impression management are comfortable with behavior that is similar to deception, they will likely choose a communication method that is similar to what they use for their impression management. While it is unclear how most of this behavior usually happens, this behavior should affect media choice.

H3: Use of impression management will be related to media choice for deception.

## METHOD

Data was collected to test the hypotheses by distributing surveys to upper-level business students at a large university in the US. The surveys contained established scales that measured the participants' social skill (Riggio, 1986), political skill (Ferris et al., 2005), tendency to use impression management (Jones, 1990), and experience with electronic messaging, for control purposes (Carlson & Zmud, 1999).

The surveys contained a high-risk deception scenario that was used in another study (Carlson & George, 2004). The scenario was considered high risk because it concerned deception that could negatively affect a business and it was communicated to a friend. The scenario asked the participant to pretend that they worked in the contracting department of an automotive manufacturer. They were asked by their supervisor to be deceptive about a defective automotive product. The supervisor asked them to communicate to a friend in another department that there was no problem with the part, and that the problem was probably the result of improper maintenance. Participants were also told that they knew that the part was incorrectly specified in a previous order, but that the problem was fixed, and the parts currently being delivered were fine. The scenario also described that there is a chance that the defective part could cause injury to users. The scenario ended by describing that they did not want to make the department look bad, and that they were in no position to argue with their supervisor nor to refuse to carry out this task. Lastly, they were instructed that it was

up to them to decide how they communicated this message, and that it was clearly important that they were believed.

At the end of the scenario, the participants were asked to choose with which communication media they would choose to be deceptive: face-to-face, e-mail, or phone. The study in which the scenario was developed also allowed participants to choose memo, letter, voice mail, and video conferencing (Carlson & George, 2004). However, very few participants chose letter, voice mail, and video conferencing, so those choices were eliminated in this study. Also, since memos are primarily distributed using e-mail in modern business settings, that category was also eliminated.

## RESULTS

In the study, we looked at 172 upper-level business students. The average age of the participants was 21.05, and 83 of the participants were female (89 were male). Overall, 69 respondents choose face-to-face, 29 chose telephone, and 74 chose e-mail.

The Pearson's correlation matrix was examined to identify potential problems associated with multicollinearity between the independent variables. See the correlations in Table 1. None of the correlations approached the 0.8 threshold, indicating that multicollinearity among research variables is not a concern. Scale reliabilities were also checked, and three items were removed from the social skills scale, and one item was removed from the experience scale. The resulting alphas were all adequate: political skill (alpha = .89), social skill (alpha = .71), impression management (alpha = .88), and electronic messaging experience (alpha = .84).

Box's M was used to identify any potential problems associated with equity of covariances. Box's M tests the hypothesis that the covariance matrices are equally populated across groups. In the current study, the Box's M was not significant ( $p = 0.776$ ) indicating that equity of covariances is not a concern. We also checked to see if participants' experience with electronic messaging had a relationship with media choice, for control purposes, and we found that it did not ( $p = 0.954$ ).

Individual hypotheses were tested using discriminant analysis and ANOVA. Discriminant analysis is the appropriate technique to use when the dependant variable (in this case, media choice) is categorical and independent variables are interval. Discriminant analysis derives a variate to represent the linear combination of multiple independent variables that will discriminate between pre-defined groups. Weights are set for the variate weights for each variable, such that the between-group variance relative to the within-group variance is maximized. These variates allow for classification. The discriminant function used in the current study is:  $Z_{\text{media}} = a + W1(\text{IM}) + W2(\text{SS}) + W3(\text{PS}) + W4(\text{exp})$ . One-way ANOVAs (and Scheffe comparisons across media) were

also conducted to compare characteristics of the groups based on the group means of the independent variables.

The results of the discriminant analysis are presented in Table 2. The Wilks' lambda of 0.822 ( $\chi^2 = 24.29$ ,  $p = 0.007$ ) indicates that the discriminate function does predict media choice at a rate significantly better than chance. Significance values of less than 0.05 indicate that the variable is a significant predictor of media choice. The Standardized Discriminant Coefficient represents the increase in the z-score for media choice for each one unit increase in the variate. The Fisher's linear classification coefficients for each IV are listed in Table 3. The coefficients give an indication as to how each IV impacts media choice.

Hypothesis 1A predicted that political skill would be related to media choice for deception, and this was supported ( $p = 0.046$ ). Hypothesis 1B predicted that those with high political skill would primarily choose face-to-face and telephone for deception, and this was supported by the means and Scheffe comparisons ( $F = 2.50$ ,  $p < 0.044$ ). Politically skilled individuals chose telephone and face-to-face over e-mail for deception (averages: face-to-face, 99.99; phone, 103.41; e-mail, 97.76). Hypothesis 2A predicted that social skill would be related to media choice for deception, and this hypothesis was supported ( $p < 0.001$ ). Hypothesis 2B predicted that those with high social skill would primarily choose face-to-face and telephone for deception, and this was supported by the means and Scheffe comparisons ( $F = 8.92$ ,  $p < 0.001$ ). Socially skilled individuals chose telephone and face-to-face over e-mail for deception (averages: face-to-face, 108.08; phone, 107.08; e-mail, 101.67). Hypothesis 3 predicted that impression management would be related to media choice for deception, and this was supported ( $p = 0.034$ ). While the analysis of means did not provide conclusive results for impression management, the means provided some indication that telephone was the preferred media for individuals that scored high on impression management (averages: face-to-face, 81.99, phone, 84.06, e-mail, 78.02). Political skill had the strongest impact on media choice, followed by social skill and impression management. While the coefficients were slightly different, the order of magnitude of impact for each IV was the same across all three media types.

	Media (DV)	IM	SS	PS	exp
Media (DV)	1	-.120	-.297	-.089	.065
IM		1	.017	.060	.040
SS			1	.487	.043
PS				1	.128
exp					1

**Table 1. Pearson's correlations between variables**

Variable	F-value	Significance	Standardized Discriminant Coefficient (W)
IM	3.489	0.034	.349
SS	8.421	<0.001	.858
PS	3.151	0.046	.103
exp	0.470	0.954	-.015

**Table 2. Discriminant Analysis Results**

Variable	Media		
	Face-to-Face	Telephone	E-Mail
IM	0.274	0.313	0.272
SS	1.262	1.261	1.180
PS	.168	.183	.168

**Table 3. Fisher's linear classification coefficients**

## DISCUSSION AND CONCLUSION

This study looked at individuals' media choice preferences for deception in a business setting. Specifically, we looked at how 172 upper-level business students' political skill, social skill, tendency to use impression management, and experience with e-mail was related to their deception media choice. The study participants were given a scenario and were asked how they would chose to communicate a deceptive message that was ordered by a superior and that would likely have a negative impact on the organization.

Overall, we found that most individuals preferred e-mail and face-to-face media to the phone for deception (69 respondents chose face-to-face, 29 chose telephone, and 74 chose e-mail). While this is different than a previous study that used the same scenario (Carlson & George,

2004), the participants in this study were different than in the previous study. The participants in this study were upper-level undergraduate business students, with an average age of 21. The participants in the other study were faculty and staff at a university. Although the average age of those participants was not reported, it was certainly significantly higher than 21. In the previous study, similar numbers of individuals chose e-mail (when combined with memo, as previously explained), phone, and face-to-face. The shift towards an e-mail preference in the current study likely reflects the younger generation's high level of comfort with this media. This finding could signal that more deception will be present in electronic communications in future years, as this generation of workers enters the workplace.

When testing the hypotheses, we found that individuals with high social skill, individuals with high political skill, and individuals that used impression management (although the finding was not conclusive with this variable) predominantly chose phone and face-to-face communication methods. This was expected since these are synchronous communication methods that allow these individuals to use their conversational skills, influence tactics, and impression management techniques. However, it was somewhat surprising that phone was a dominant media choice for these same individuals, especially since it was the least popular choice among all participants in the study. These results imply that much deception (of the type investigated in this study) will likely happen in e-mail or face-to-face settings. However, when deception does happen in phone conversations, it will come from the individuals that are the most skilled at deceiving. While businesses need to be aware of the fact that skilled deceivers will most likely use the phone or face-to-face methods for deception, they also should be aware that, overall, e-mail is one of the primary methods with which individuals will chose to deceive, and it will likely be very difficult to detect, regardless of the skill level of the deceiver. Businesses will likely have to use a mix of deception training programs, automated detection systems (as they become available), and policies that encourage individuals to use multiple communication methods to minimize the impact of deception in the future.

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