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The persuasive impact of source credibility is examined in two situations. A highly credible source was more effective than a moderately credible source when the communication recommended buying a product, an advocacy which message recipients viewed unfavorably. The moderately credible source was more persuasive when the message advocated leasing the product, a position subjects generally supported. These findings are interpreted in terms of cognitive response theory. Practical implications of the research are suggested.

The Persuasive Effects of Source Credibility in Buy and Lease Situations

Communication strategists frequently use highly credible individuals as spokespersons for their advocacy. Lawyers recruit expert and trustworthy witnesses to support their clients' positions. Politicians seek highly regarded individuals and groups to endorse their programs and candidacies. Advertisers hire people of high integrity to sponsor their products and services. These strategies are predicated on the belief that highly credible sources are more persuasive than those of lower credibility.

Extant research provides qualified support for the belief that highly credible sources enhance persuasion, indicating that this effect is obtained only under certain conditions. Sternthal, Dholakia, and Leavitt (1978) categorized subjects on the basis of their favorability toward the position advocated in a communication. Subjects then were presented a persuasive message attributed to either a highly credible or moderately credible source. The highly credible communicator was found to be more persuasive than the moderately credible source among subjects opposed to the advocacy. In contrast, the less credible source was more influential for subjects favor-

ing the message position. This pattern of effects also has been observed in other investigations (Bock and Saine 1975; Dean, Austin, and Watts 1971).

The persuasive effect of source credibility can be anticipated by invoking cognitive response theory (Greenwald 1968). According to this theory, social influence depends on the favorability of thoughts or object-attribute associations available in memory at the time of judgment. Two types of thoughts may be available: message and own. Message thoughts are representations of the information presented in an appeal and, thus, are likely to support the communication advocacy. Own thoughts are object-attribute associations an individual has previously stored in memory that are relevant to the appeal but not represented directly in the message. These thoughts may support or counter the position taken in a communication.

A source's credibility is believed to mediate influence by affecting own-thought activation. A highly credible source is expected to inhibit own-thought activation, whereas a less credible communicator is likely to stimulate such activation. When people oppose a message advocacy, a highly credible source, who inhibits counterargumentation, induces greater persuasion than a less credible source who facilitates counterargumentation. In contrast, when message recipients favor the position advanced in a message, a highly credible source inhibits the activation of support arguments and thus is not as persuasive as a less credible source who facilitates support argument activation.

Our study provides additional evidence pertaining to the conditions under which a highly credible source en-

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hances and inhibits persuasion. A 2×2 factorial design was employed. The favorability of the message recipients' initial disposition was manipulated by using a situational variable. Research participants were presented a message that advocated either leasing or buying a high technology product. Consumers of high technology products were expected to be more favorably predisposed toward leasing because it was likely to involve fewer financial risks than buying. Specifically, leasing minimizes the risks associated with (1) obsolescence or style change, (2) incorrect product selection, (3) maintaining, fixing, and moving the product, and (4) sporadic use (Berry and Maricle 1973).

The other variable manipulated was the credibility of the individual to whom the message was attributed. For some subjects, the message was attributed to a highly credible source. For others, a less credible communicator served as the spokesperson. After the message presentation, measures were administered to determine the subjects' attitudes and intentions, and the extent to which the subjects' thoughts mediated the effects of source credibility and situation on persuasion. In addition, subjects responded to questions designed to check the adequacy of the experimental manipulations. If the cognitive response view is correct, the highly credible source will be more persuasive in the buy condition, and the less credible source will be more persuasive in the lease condition.

Several features of our experiment are particularly noteworthy. By use of a marketing situation, the study provides a test of the robustness of cognitive response theory in predicting the persuasive effects of credibility. Moreover, our test is more rigorous than that of Sternthal et al. (1978) in that subjects are assigned randomly to the favorable and unfavorable predisposition conditions rather than being allowed to self-select favorability treatments. Finally, the choice of lease and buy to operationalize initial opinion has practical implications. The incidence of leasing activity for consumer goods has increased dramatically in recent years (Obenberger and Brown 1976). As leasing becomes a more prevalent alternative to outright ownership of the product, consumers will be frequently confronted with evaluating specific marketing communications in a buy-or-lease situation. Our research enables strategists to anticipate consumer reactions to such appeals.

METHOD

The communications presented in the study described a microcomputer of the type designed to keep track of household accounts, pay bills, and provide entertainment through electronic games, in addition to having business applications. The microcomputer is a durable consumer product that could be realistically leased or purchased for personal use. The communications were featured in a 2×2 factorial design, with two levels of source credibility (high and moderate) and two levels of the con-

sumer situation (buy and lease).¹ The success of these manipulations was checked by administering measures of perceived credibility and financial risk associated with buying or leasing. The critical dependent variables were subjects' attitudes toward the product and their behavioral intentions. Measures of support arguments and counterarguments were included to check the mediation postulated by cognitive response theory.

Subjects

The subjects were 200 businessmen from the Phoenix, Arizona, metropolitan area. They participated in groups ranging from 15 to 25 people. All subjects were full-time managers for local business firms. Their ages ranged from 22 to 60 years, the average age being 36 years. Ninety-three percent had some college background and 48% had completed some graduate work. College-educated consumers with business backgrounds have been found to be a significant target market for personal microcomputers (Benson 1978; Schwartz 1979).

Procedure

Subjects were given a test booklet entitled "Consumer Opinion Survey" and were informed that they were to evaluate an advertisement for a specific brand of microcomputer. They were asked to assume a role in which they were about to acquire a microcomputer and were placed in either the intended lease (favorable own thoughts) or intended purchase (unfavorable own thoughts) condition. Once subjects had been oriented to the role-playing situation, they were instructed to read a one-page advertisement featuring a testimonial for the fictitious microcomputer, called RIGEL-1. This testimonial was attributed to either a high or a moderate credibility source, whose brief biography was provided immediately prior to exposure to the message.

The advertisement featured a black-and-white photograph of the product. The body copy presented the testimonial of a Mr. Charles Townsend who described the functions and uses of the product. Mr. Townsend also stated that he used the RIGEL-1 for his personal computing needs, and offered his opinion that it was the best personal computing system on the market. After exposure to the advertisement, subjects completed the dependent measures.

Independent Variables

Source credibility was varied through the description of the communicator presented at the outset of the mes-

¹A third independent variable, the duration-of-outcomes time horizon (Wright and Weitz 1977), was originally included in the study. It consisted of a time dimension (1 year or 3 years) that specified the length of time the consumer would be committed to use the product. The time dimension was intended to give the subject some idea of the useful life of the product. A longer perceived commitment time was expected to be viewed as more risky than a shorter period. The manipulation produced no significant results.

sage. In the high credibility condition, the source was described as an individual having a degree from a leading business school, as a prominent small business consultant with extensive microcomputer experience, and as an expert in the microcomputer field whose advice was widely sought by business, government, and consumer groups. His credibility was augmented by describing him as an open-minded individual who had been critical of microcomputer manufacturers. The moderate credibility source was described as the owner of a computer store that sold the advertised product line and as being very interested in the sales and profit potential of the personal microcomputer. He was further described as having conducted sales-training seminars on microcomputers and as being firmly convinced that, with the proper sales approach, every household could be sold a microcomputer.

In pretesting of the source credibility inductions, the high credibility source was perceived to be significantly more trustworthy and expert than the moderate credibility source (high credibility: $\bar{X} = 34.21$, S.D. = 4.28, $n = 26$; moderate credibility: $\bar{X} = 24.18$, S.D. = 4.71, $n = 26$; $t = 8.04$, d.f. = 50, $p < .001$). The moderate credibility source produced a mean credibility rating that was not significantly different from the midpoint of the scale ($t < 1$).²

The manipulation of the dimensions of the buy-or-lease situation was presented in the role-playing instructions. The favorability of the subjects' own thoughts was operationalized by use of the buy-or-lease situational variable. The buy situation was intended to evoke unfavorable own thoughts, whereas the lease situation was expected to elicit favorable thoughts toward the subject of advocacy. Subjects were given the following instructions for the buy (lease) condition.

1. Place yourself in the following purchase (lease) situation.
2. You are in the process of shopping for a microcomputer for use in your home. As an integral part of this process, you have been seeking information on competing brands.
3. After considering your financial position, you feel that you can afford a home microcomputer and you have decided that it is in your best interests to purchase (lease) one, but you have not decided on the specific brand or model.

The buy condition was augmented by informing the subjects of the rapid technological change in the microcomputer industry, that they may not be able to sell or trade the unit at a later date because of potential obsolescence, and that all maintenance and repair costs beyond the customary 90-day warranty would be assumed by the consumer. This information was intended to enforce the relatively unfavorable features of the buy situation.

Additional information was provided to emphasize the more favorable attributes of the lease agreement. At the end of the lease, the microcomputer could be returned to the leasing company, all maintenance and repair costs would be covered, the consumer could terminate the lease agreement, and the microcomputer could be exchanged for more advanced models.

Dependent Variables

The subjects initially indicated their attitudes and intentions toward the product advocated in the communication. The attitude measure consisted of eight seven-point semantic differential scales. The adjective pairs were derived from actual microcomputer advertisements. A large number of items were initially pretested and submitted to a principal components factor analysis (varimax rotation). The eight items chosen for use in the study had factor loadings of .50 or greater on the first factor which was labeled "product evaluation." This factor accounted for 72.5% of the variance. The scale items were: easy to use/difficult to use, educational/not educational, distinctive/ordinary, fun/not fun, good/bad, convenient/not convenient, useful/not useful, and reliable/unreliable. Responses on each of the eight scales were summed to form an overall score for each subject. As a further check, the attitude responses in the study were factor analyzed to test the hypothesis that the eight scales were unidimensional. This was confirmed. All eight scales had factor loadings of .50 or higher on the one factor that was found. Coefficient alpha was also computed (Cronbach 1951) and supported the high reliability of the items ($\alpha = .78$).

The attitude measure was followed by a seven-point Likert-type scale that provided a measure of behavioral intentions. Subjects were asked: "Would you like to receive a visit, at your convenience, from a RIGEL-1 sales representative?" This question was thought to be a reasonable measure of behavioral intentions because it represented a desire to obtain additional information about the product and to meet face-to-face with a company representative in a selling environment. Because the subjects in the sample were all business executives, a favorable response to this measure would constitute a commitment of valuable executive time for further evaluation of the product.

The attitude and intentions measures were followed by two source evaluation measures. This procedure is similar to that used by Sternthal et al. (1978). The first set of scales measured the subject's perception of the trustworthiness and expertise of the source. Six seven-point semantic differential scales were used. The adjectives were: trustworthy/not trustworthy, good/bad, open-minded/close-minded, trained/untrained, experienced/not experienced, and expert/not expert. The items were derived from Berlo, Lemert, and Mertz (1969-70) and loaded highly on those authors' safety and qualification factors which are analogous to the trustworthy and expert dimensions first identified by Hovland, Janis, and

²The source credibility scales are discussed in the description of the dependent variables.

Kelley (1953). The internal consistency of this scale was high ($\alpha = .78$).

Subjects also rated the source on a nonequivalent attractiveness dimension. Whereas subjects should perceive a difference between the high and moderate credibility sources on the combined trustworthiness-and-expertise dimension, they should not perceive a difference on the attractiveness dimension because it was not manipulated (Dholakia and Sternthal 1977). If the subjects were responding to the demand character of the experiment, a systematic source effect should be observed on the nonequivalent scales. The items used were: attractive/unattractive, dynamic/not dynamic, and aggressive/not aggressive. The items were highly inter-related ($\alpha = .80$).

The subjects' perceptions of financial risk were collected as a manipulation check on the buy-and-lease inductions. As the perception of risk increases, consumers should become less favorable toward the object of advocacy. A high level of risk should correspond with unfavorable own thoughts, whereas a low level of risk would be indicative of favorable own thoughts. Subjects responded on a seven-point Likert-type scale to the question, "How risky do you feel the decision to acquire the RIGEL-1 microcomputer would be financially?" A higher score on this measure indicated a lower level of risk.

Support and counterarguments were measured by asking the subjects to list all their thoughts about the microcomputer. Three minutes was given for the subjects to write their responses in the boxes provided. At the end of this time, they were asked to go back and categorize each thought as favorable or unfavorable to the acquisition of the microcomputer. Thoughts that were neither favorable nor unfavorable were given a neutral designation. Thoughts labeled as favorable to the acquisition of the product were summed to form the subjects' support argument score. Thoughts unfavorable to the product were summed to yield a counterarguments score. In each case, the number of thoughts composed the index.

RESULTS

Manipulation Checks

Analysis initially focused on the adequacy of the experimental inductions. The responses to the six credibility items indicate that the subjects perceived the high credibility source ($\bar{X} = 33.11$, S.D. = 4.71) as being significantly more trustworthy and expert than the moderate credibility source ($\bar{X} = 23.56$, S.D. = 4.84; $t = 14.19$, d.f. = 198, $p < .001$). Moreover, treatment effects on the nonequivalent attractiveness measure are not significant. The high credibility source ($\bar{X} = 13.60$, S.D. = 2.66) was not perceived to be significantly more attractive than the moderate credibility source ($\bar{X} = 12.88$, S.D. = 4.04; $t = 1.49$, d.f. = 198, $p > .05$). Thus, the credibility manipulation was successful and its effects

are unlikely to be attributable to demand character. A check of the buy-or-lease induction indicates that it also was successful. The buy condition ($\bar{X} = 3.78$, S.D. = 1.56) was perceived as involving significantly more financial risk than the lease condition ($\bar{X} = 4.78$, S.D. = 1.39; $t = 4.76$, d.f. = 198, $p < .001$).

Attitude and Behavioral Intention

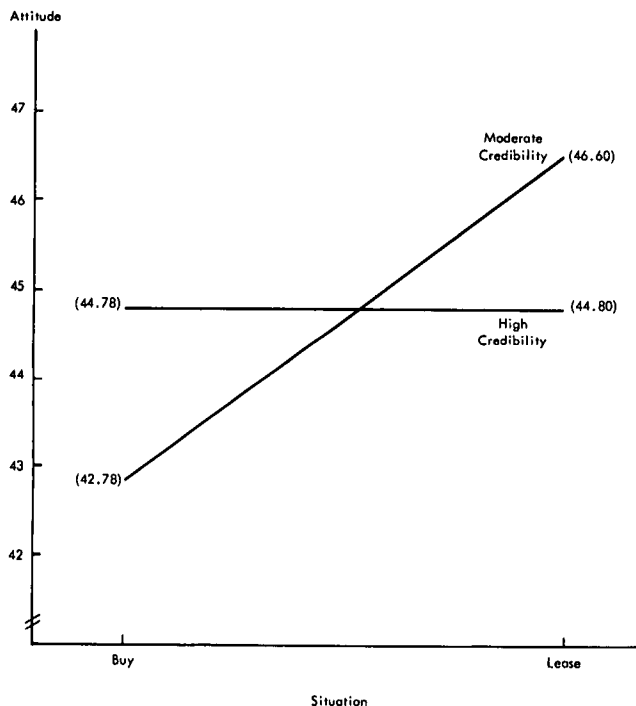
The mean attitude and behavioral intentions scores are reported in Table 1. The predicted source credibility \times situation interaction is found for both the attitude ($F = 5.40$, d.f. = 1, 196, $p < .02$) and intentions ($F = 3.75$, d.f. = 1, 196, $p < .05$) measures. To examine the effects of theoretical interest more closely, two contrasts were performed. For the buy condition, the high credibility source induced a significantly more favorable attitude toward the advocacy than the moderate credibility source ($t = 1.72$, d.f. = 98, $p < .05$). For the lease condition, the moderate credibility source was significantly more influential than the high credibility source ($t = 1.74$, d.f. = 98, $p < .05$). Figure 1 depicts the means for the attitude variable. The same general pattern of results is observed for the intentions measure. A source effect is found for the lease condition ($t = 2.41$, d.f. = 98, $p < .01$) but not for the buy condition ($t < .01$).

Although the main effects of independent variables are of systematic concern only when interactions are not significant (Keppel 1973), it is interesting to note that the situational variable main effect is significant for attitude ($F = 5.45$, d.f. = 1, 196, $p < .02$) and intentions ($F = 6.70$, d.f. = 1, 196, $p < .01$). In both cases, the lease condition produced higher attitude and intentions scores. The main effect for source credibility is not significant for attitude ($F < 1$) or intentions ($F = 2.08$, d.f. = 1, 196, $p = .15$).

Table 1
MEANS AND STANDARD DEVIATIONS FOR DEPENDENT
MEASURES CLASSIFIED BY TREATMENT GROUP
($n = 50$ per cell)

Situation	Dependent variable	Source credibility			
		High		Moderate	
		M	SD	M	SD
Buy	Attitude	44.78	5.32	42.78	6.26
	Intention	3.56	2.06	3.42	1.85
	Financial risk	3.94	1.53	3.62	1.59
	Support arguments	3.84	3.01	3.82	2.06
	Counterarguments	3.48	2.96	3.02	2.74
Lease	Attitude	44.80	5.36	46.60	4.95
	Intention	3.74	2.19	4.68	1.67
	Financial risk	4.98	1.39	4.58	1.38
	Support arguments	3.54	2.40	4.96	2.26
	Counterarguments	2.78	2.51	2.42	1.83

Figure 1
SIGNIFICANT INTERACTION EFFECTS OF SOURCE CREDIBILITY AND SITUATION ON ATTITUDE TOWARD PRODUCT



Support Arguments and Counterarguments

The predicted source \times situation interaction is found for the support arguments measure ($F = 4.22$, d.f. = 1, 196, $p < .04$). A source effect is found for the lease condition ($t = 4.30$, d.f. = 98, $p < .01$), indicating that the moderate credibility source generated significantly more support arguments in the lease condition than the high credibility source. This relationship is reversed but not significant in the buy condition ($t < 1$).

For the support arguments measure, the main effects for source credibility are significant ($F = 3.90$, d.f. = 1, 196, $p < .05$). The situational main effect is not significant ($F = 1.40$, d.f. = 1, 196, $p = .23$).

The results of ANOVA on counterarguments are not significant. The main effect for the situation is marginally significant ($F = 3.22$, d.f. = 1, 196, $p = .07$), indicating that the more restrictive and risky buy dimension of the situation did result in a greater number of counterarguments being generated than the less risky lease condition.

To determine whether support arguments mediate the effect of source credibility on persuasion, the effect of the treatments on the attitude measure was evaluated using the number of support arguments as a covariate (Sternthal et al. 1978; Wright 1980). The significant source \times situation interaction is maintained ($F = 4.01$,

d.f. = 1, 195, $p < .05$). Support argumentation, however, accounts for a substantial (22%) and significant portion of the explained attitude variance ($F = 4.78$, d.f. = 1, 195, $p < .03$).

DISCUSSION

The major finding of our study is that the effects of source credibility on attitude and behavioral intention are situationally dependent. These findings support cognitive response theory. The moderate credibility source evoked more favorable attitudes and behavioral intentions toward the product than the high credibility source in the lease condition. The lease dimension of the consumer situation represented favorable own thoughts toward acquiring the microcomputer. Cognitive response theory predicts that the lower credibility source will be more effective if own thoughts are favorable (Brock and Saine 1975; Dean et al. 1971; Sternthal et al. 1978). The less credible source is believed to facilitate the activation of favorable own thoughts which augment persuasion.

The high credibility source elicited more favorable attitudes and behavioral intentions in the buy condition which operationalized unfavorable own thoughts toward acquiring the microcomputer. This finding is consistent with the cognitive response prediction that a high credibility source is more persuasive than a less credible communicator if own thoughts are negative (Dean et al. 1971; McGinnies 1973; Sternthal et al. 1978). In this instance, the highly credible communicator is believed to inhibit own-thought activation and facilitate acceptance of message thoughts.

The findings for the support arguments measure are consistent with cognitive response theory. The moderate credibility source generated more support argumentation than the high credibility source in the lease condition. The reverse was true, though not statistically significant, in the buy condition. The results for the counterarguments measure are not supportive of cognitive response theory.

One possible explanation for the counterargument results is found in the recent research on thought accessibility (Wright 1980). Thought or response accessibility has been found to be influenced by such factors as the subject's pre-exposure to information about the topic of advocacy. Edell and Mitchell (1978) found that informed subjects produced more counterarguments than subjects who had been exposed to less information on the topic. In our study, the subjects were asked how familiar they were with computers. Their responses indicate that they lacked a high degree of familiarity with computers ($\bar{X} = 3.8$, S.D. = 2.98). The mean does not differ significantly from the midpoint of the seven-point scale ($t < 1$). The result of this limited pre-exposure to computers could be that the number and importance of the counterarguments generated were not sufficient to invoke the high credibility thought-blocking mechanism.

The results of the study are of particular interest to advertisers who depend on credible spokespersons to

convey their advertising messages. The results show that a highly expert and trustworthy spokesperson does not enhance persuasion in all situations. The high credibility source is more effective if individuals are unfavorably predisposed toward the advocacy and is a persuasive liability if the audience is favorably predisposed. If initial attitudes are likely to be unfavorable, as when the objective of the communication is to induce brand switching, use of a high credibility source would be warranted.

In contrast, the moderate credibility communicator is found to be more persuasive if initial attitudes are favorable. This finding does not imply the use of noncredible spokespersons. Rather, it suggests the use of a moderately credible source if the audience is likely to be favorably predisposed, as when the objective is to achieve purchase continuity or brand loyalty.

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