The effects of source likeability and need for cognition on advertising effectiveness under explicit persuasion

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While there is evidence that an endorser’s likeability plays a determining role in the advertising effectiveness of explicit persuasive appeals, this paper examines the impact of the need for cognition (NFC) as a moderator of this relationship. We find that this effect holds, as predicted, for individuals with lower NFC, but not for those with higher NFC. Furthermore, the effects of explicit persuasion and the endorser’s likeability on evaluations of products or services by lower-NFC consumers were found to be mediated by the attribution of self-interest. In contrast, advertising effectiveness for higher-NFC consumers was predictable only by the valence of their cognitive responses to the product.

In research on communicator credibility, it has been argued that a definite intention to persuade others evokes distrust in the communicator’s motives (e.g., Hovland et al., 1953), or feelings of reactance that lead to decreased message acceptance (Brehm and Brehm, 1981). An explicit order to execute a certain behavior can be perceived as a restriction on one’s freedom to choose. Explicit persuasive appeals are best understood as an advertiser’s direct attempt - for example, via overt verbal statements - to convince consumers to execute the desired behavior, or to adopt the desired attitude (e.g., to buy or consume the product or service being advertised).

However, Reinhard et al. (2006) recently argued that explicit persuasion might actually increase the effectiveness of advertising efforts if the communicator is perceived as possessing desirable or positive traits such as physical attractiveness or likeability (see also Mills and Aronson, 1965; Mills, 1966). The authors maintained that consumers would automatically form a favorable first impression of a likeable salesperson during an initial encounter, and an unfavorable first impression in case of a dislikeable salesperson, an assumption that is in line with research on person perception (e.g., Fiske and Neuberg, 1990). The authors further argued that when consumers were confronted with the salesperson’s explicit intent to influence their views about an advertised product, this intent would be subsequently assessed in the light of their first impression, attributing more/less self-interest
to the salesperson as a consequence of the first impression. In this case, the inferences about the salesperson's motives (i.e., degree of self-interest in promoting the product) based on the salient likeability cue should be highly accessible, and these inferences are likely to guide consumer responses (Friestad and Wright, 1994). Consumers might use persuasion knowledge to arrive at a judgment about the salesperson's self-interest in promoting the product, that is, they might infer motives underlying his or her persuasion attempt that are more or less geared to achieving own ends (e.g., a commission). The findings of Reinhard et al. (2006) supported these conjectures, indicating that likeable salespeople were more influential when they explicitly stated their desire to influence consumers' views about an advertised product (i.e., Apple "eMac"). In contrast, dislikeable salespeople were better off avoiding explicit attempts at persuasion. These effects were mediated by the self-interest attributed to the salesperson. While likeable salespersons were seen as acting in their own interest to a lesser degree when their desire to influence was explicit rather than implicit, the reverse was true for dislikeable salespersons.

Research has thus shown that the impact of explicit persuasion on advertising effectiveness can depend on advertiser's characteristics such as likeability (Reinhard et al., 2006; see also Mills and Aronson, 1965; Mills, 1966). The present paper examines the boundary conditions of these effects in consumers in an effort to get a clearer picture of the conditions in which explicit persuasion works best. Building on the basic tenets of the Elaboration Likelihood Model (ELM; Petty and Cacioppo, 1986; Petty and Wegener, 1999), we suggest that those consumers who lack the cognitive motivation to engage in effortful processing of advertising messages should be especially susceptible to being affected by explicit persuasion from likeable sources. This idea is based on research showing that peripheral cues such as likeability exert their influence predominantly among individuals of low motivation or low cognitive capacity (e.g., Petty and Wegener, 1999). Findings have shown that cognitive motivation is influenced by situational constraints (e.g., personal relevance or distraction) as well as individual differences (e.g., need for cognition, NFC; e.g., Petty and Cacioppo, 1986; Petty and Wegener, 1999). Because the present paper focuses on individual differences, we now turn to the literature on NFC before outlining our detailed hypotheses on the moderating influence of NFC in explicit persuasion.

**The role of need for cognition in persuasion**

Basically, the ELM posits that people can arrive at an attitudinal judgment either by using all issue-relevant information (i.e., systematic processing), or by relying on easy judgmental rules such as "I agree with people I like" and other heuristics (i.e., peripheral processing; e.g., Petty and Wegener, 1999). While in the former case people need high motivation and high cognitive ability to deliberately assess and weight the arguments delivered in a message, people with lower motivation and/or lower cognitive ability/capacity use the peripheral route, a processing mode that is less cognitively demanding (Haughtvedt et al., 1992).

NFC was defined by Cacioppo and Petty (1982) as an individual's tendency to engage in and enjoy effortful cognitive endeavors. Individuals with higher NFC tend to invest and enjoy cognitive efforts more than lower-NFC individuals: they take greater pleasure in difficult tasks, are more inclined to search for new information (Cacioppo et al., 1996), and are more likely to be persuaded by strong arguments (e.g., Cacioppo et al., 1983; Priester and Petty, 1995). Individuals with lower NFC generally avoid expending much cognitive effort and are therefore more likely to base their attitudes (e.g., product evaluations) on peripheral cues like a salesperson's attractiveness (Haughtvedt et al., 1992). In addition, there is evidence in the advertising domain that lower-NFC consumers tend to recall less information and generate fewer product-relevant
cognitions (Kassin et al., 1990; Lassiter et al., 1991).

NFC appears to be an important individual factor determining consumer involvement (Petty and Wegener, 1998), with less-involved consumers relying more strongly on peripheral cues than more-involved consumers. It follows from this that consumer involvement might also have an impact on the effectiveness of explicit persuasive appeals. As outlined above, explicit persuasive appeals are capable of increasing the likelihood that consumers will purchase an advertised product, but only if likeable salespersons endorse it (Reinhard et al., 2006). This finding is interesting, given that explicit persuasive appeals seem counter-productive to advertising efforts in any case, since they activate cognitions about a salesperson’s ulterior motives, such as self-interest (e.g., Hovland et al., 1953). This is in accord with findings showing that persuasion knowledge can easily guide consumer responses if underlying persuasion motives (i.e., the desire to sell products) as well as knowledge specific to these motives (i.e., tactics to achieve a persuasion goal) are accessible. By contrast, if persuasion motives and respective knowledge are less accessible, the use of persuasion knowledge demands more cognitive effort and capacity (Campbell and Kirmani, 2000).

This reasoning is reflected in findings pertaining to explicit persuasion showing that explicit persuasive appeals render ulterior motives accessible, which subsequently guide consumer responses (Reinhard et al., 2006). However, attributions to self-interest are lessened when explicit claims are made by likeable salespersons. This suggests that it is not only specific knowledge about persuasion motives that is relevant for persuasion knowledge in guiding consumers’ responses, but also unspecific, stereotype-based knowledge about how likeable persons typically behave (i.e., they normally act less selfishly). Although the ELM posits that variables (such as physical attractiveness) can play multiple roles, likeability often functions as a peripheral cue in the attitude formation process (e.g., Petty and Wegener, 1999). Only in cases when the cue is relevant for judging, for example, a product’s merits (e.g., an attractive person uses a beauty product), might the cue itself serve as an argument and thus affect those people whose elaboration likelihood is not constrained (e.g., Petty and Cacioppo, 1984). In addition, any variable can (1) determine the extent of elaboration, leading people to invest more (i.e., increasing the elaboration likelihood) or less (i.e., decreasing elaboration likelihood) thought in the judgmental process, or (2) produce biases in the elaboration (e.g., Petty and Wegener, 1999). Because prior research on explicit persuasion (Reinhard et al., 2006; Messner et al., 2008) did not show such effects, we suggest that those consumers who lack the cognitive motivation to process advertising appeals in a content-driven manner (e.g., those who are lower in NFC) should be more inclined to use the endorser’s likeability as a peripheral cue and let their judgments follow simple inferences pushed by this cue under explicit persuasion. In contrast, consumers who are inclined to process advertising messages effortfully (e.g., those who are higher in NFC) should base their judgments on the presented product attributes and the cognitive responses that come to mind with respect to these attributes (e.g., Lassiter et al., 1991).

Thus, it is expected that the tendency to use the salesperson’s likeability to temper attributions of self-interest behind the explicit persuasive appeal that will subsequently affect advertising effectiveness will vary with the consumer’s NFC. Although explicit persuasive attempts do activate persuasion motives also in consumers with higher NFC, those consumers do not use this particular information. Instead, they should process advertising messages in a manner based on product attributes, and not engage in an attributional process.

H1a: Overall advertising is expected to be more effective under explicit than implicit persuasion when the endorser is highly likeable, whereas the reverse is expected when the endorser is not highly likeable.
H1b: For consumers with lower NFC, advertising is expected to be more effective under explicit than implicit persuasion when the endorser is highly likeable, whereas the reverse is expected when the endorser is not highly likeable. However, we expect likeable endorsers to be more effective than dislikeable endorsers across the persuasive intent conditions.

H1c: For consumers with higher NFC, advertising effectiveness is expected to be independent of the explicitness of the persuasive intent and endorser’s likeability.

For consumers who do not invest much cognitive effort in assessing product quality, the peripheral cue of endorser’s likeability is expected to matter, because it should function as a shortcut to adjust to the common belief that salespeople are driven by self-interested motives (e.g., Rule et al., 1985). In contrast, persuasion knowledge should be activated also in higher-NFC consumers, especially when explicit appeals are present, but their judgments are less likely to be guided by simple inferences based on salesperson’s likeability (Lassiter et al., 1991; Petty and Wegener, 1999).

H2a: Consumers with lower NFC are expected to attribute a persuasion attempt less to self-interest when the endorser is highly likeable and the intent is explicit rather than implicit, while the reverse will be true for a less likeable endorser.

H2b: Consumers with higher NFC are expected to attribute the endorser’s recommendations to self-interest more when the intent to persuade is explicit rather than implicit, irrespective of endorser’s likeability.

The attribution of self-interest is expected to be the mechanism through which explicit persuasive appeals affect advertising effectiveness only for consumers with lower NFC. However, according to the cognitive response approach (Greenwald, 1968; Petty et al., 1981), consumers with higher NFC should evaluate a product based on the issue-relevant thoughts generated when exposed to a persuasive message.

H3a: Attributions of self-interest will mediate the effect of the endorser’s likeability and explicit persuasion on advertising effectiveness only for consumers lower in NFC.

H3b: Advertising effectiveness regarding higher-NFC consumers will be predictable by the valence of the cognitive responses about the advertised product.

These three hypotheses were tested in a print advertising study described below.

**Print advertising experiment**

Participants were randomly assigned to the experimental conditions of endorser’s likeability (dislikeable vs. control condition vs. likeable) and persuasive intent (implicit vs. explicit). In addition, participants were divided into categories of lower (below the median) and higher (above the median) NFC, resulting in a $2 \times 3 \times 2$ between-subjects factorial design.

**Participants**

Fifty-nine male and sixty-nine female students at a German university volunteered as research participants. Students were paid two Euro for their participation.

**Stimulus materials**

Two parallel versions of a print ad for a digital camera were produced. In both versions, a fictitious brand name (Mexus) was placed at the top of the ad. The left half of the ad showed the face of a male person. A picture of the digital camera, with the fictitious name Mexus W-1450 QZ Movie, and information about the camera (The new Mexus W-1450 QZ Movie: A
compact camera with 4.0 megapixels, 10× continuous digital zoom, and MPEG4 movie function) were placed in the lower right half. In the explicit persuasive intent condition, the following statement by the endorser was printed in the upper right half: ‘‘I want to persuade you to buy this camera. This camera is unique.’’ In the implicit persuasive intent condition, only the last sentence of the statement (‘‘This camera is unique.’’) appeared in print.

Before participants were presented with one version of the ad, their liking for the endorser was manipulated by asking them to read the text of an alleged radio interview with the endorser. This likeability manipulation was successfully pretested. In the dislikeable endorser condition, a section was included in which the endorser bragged about his very expensive new car (BMW). In the likeable endorser condition, however, the endorser talked about his new bicycle. In the control condition (neutral liking condition), participants were not shown the interview at all.

**Procedure**

Participants first filled out the German version of the NFC scale (Bless et al., 1994), which contains thirty-three items such as ‘‘I prefer my life to be filled with puzzles that I must solve.’’ (α = 0.90). They were then asked to read one version of the interviews described above. Afterwards, they were shown one version of the ad. Finally, participants had to answer questions about the campaign. At the end, all participants were thoroughly debriefed and thanked for their participation.

**Dependent measures**

Participants’ product attitudes were inferred from responses to 11 Likert-type items (scale of 1 (strongly disagree) to 7 (strongly agree)). Participants indicated their agreement with items concerning both individual features and global favorableness (e.g., ‘‘The Mexus W-1450 QZ Movie digital camera is a very good camera’’; α = 0.91). Next, three items assessed participants’ purchase intention regarding the Mexus digital camera (e.g., ‘‘The next digital camera I will buy will be a Mexus W-1450 QZ Movie’’; α = 0.85). Furthermore, five items assessed participants’ attitudes toward the company (α = 0.95; see Pope and Voges, 1998; modified corporate image scale presented by Javalgi et al., 1994). Next, participants indicated the degree to which self-interest accounted for the endorser’s promotion of the Mexus digital camera (e.g., ‘‘The endorser had a high self-interest in promoting the Mexus W-1450 QZ Movie’’; α = 0.91).

**Manipulation checks**

Participants then judged the endorser on four items pertaining to likeability (‘‘very likeable, friendly, warm, and nice’’; α = 0.86). The first three items stem from Reysen’s likeability scale (2005). Participants had to answer three more items pertaining to the manipulation check for persuasive intent (α = 0.75): ‘‘The endorser had a strong interest in changing my attitudes towards the Mexus W-1450 QZ Movie.’’ In addition, cognitive responses were collected by asking participants to list all the thoughts that crossed their mind while reading the interview and looking at the ad. Two independent judges who were blind to the hypotheses evaluated the cognitive responses generated by participants via thought listing. Thoughts were classified as product-directed when they were directly related to the product or specific attributes of the product, or endorser-directed if they referred to the endorser or specific attributes of the endorser. Judges had a high inter-rater agreement (Cohen’s κ = 0.94).

**Results**

Because no effects of the sex of participants were found, the data were pooled over this variable in subsequent analyses.
Manipulation checks

First, participants reported that the endorser possessed a significantly stronger interest in changing their views in the explicit as compared to the implicit persuasive intent condition (5.08 vs. 3.65), $F(1, 116)=105.58$, $p<0.05$, $d=1.91$. No other effects were significant ($p>0.10$). Second, the main effect of the likeability manipulation was significant, $F(2, 116)=107.59$, $p<0.05$. The endorser was evaluated as significantly more likeable in the likeable condition ($M=4.62)$ than in the control condition ($M=3.15)$, $F(1, 116)=44.16$, $p<0.05$, $d=1.22$, and more likeable in the control condition than in the dislikeable condition ($M=3.15$), $F(1, 116)=67.39$, $p<0.05$, $d=1.51$. No other effects were significant ($p>0.18$).

Need for cognition

The NFC scores ($M=4.97$) were independent of the manipulations of persuasive intent and likeability, all $p>0.30$. We created two groups of participants: the 64 individuals with scores below the median formed the “lower-NFC group” ($M=4.43$), while the 64 with scores above the median formed the “higher NFC group” ($M=5.51$).

Indices of advertising effectiveness

Attitudes toward the product

The analysis revealed no significant two-way interaction of likeability $\times$ persuasive intent ($F(2, 116)=1.83$, $p=0.16$), but it did reveal the predicted three-way interaction of likeability $\times$ persuasive intent $\times$ NFC, $F(2, 116)=6.13$, $p<0.05$ (see Table 1). To confirm this finding, we also ran a regression analysis with likeability, persuasive intent, NFC (as a standardized continuous variable), the three two-way interaction terms, as well as the three-way interaction term to predict attitudes toward the product. As expected, the three-way interaction was again significant ($\beta=0.24$, $p<0.05$).

First, considering the lower-NFC group, the predicted likeability $\times$ persuasive intent interaction was significant ($F(2, 58)=11.35$, $p<0.05$). Specifically, in the dislikeable and in the control condition, a more positive attitude was found in the implicit than in the explicit persuasive intent condition (dislikeable: 4.92 vs. 3.91, $F(1, 58)=10.69$, $p<0.05$, $d=0.86$; control condition: 5.29 vs. 4.25, $F(1, 58)=12.42$, $p<0.05$, $d=0.93$). The reverse was true in the likeable condition: a more positive attitude was found in the explicit than in the implicit persuasive intent condition (6.41 vs. 5.68, $F(1, 58)=5.85$, $p<0.05$, $d=0.64$). These results confirmed H1b on product attitudes. Second, considering the higher-NFC group, no significant effects were found, all $p>0.12$, thereby providing evidence for H1c.

Parallel effects were found for participants’ purchase intention and evaluation of the company. All means are summarized in the lower sections of Table 1. For all of these indices of advertising effectiveness, the predicted three-way interaction reached significance (see Table 2). These results were also found in subsequent regression analyses. As can be seen in Table 3, evidence for H1b and H1c was also found: supplementary analyses yielded the predicted interaction of likeability $\times$ persuasive intent for participants with lower NFC, but not for persons with higher NFC, in regard to all indices of advertising effectiveness.

We also found support for H1a in a multivariate analysis of variance with attitude, purchase intention, and evaluation of the company as the dependent variables. The analysis revealed a significant interaction of likeability $\times$ persuasive intent, Wilks’ $\lambda=0.89$, multivariates $F(6, 230)=2.37$, $p<0.05$. As can
Table 1. Mean product attitudes, purchase intention, evaluations of the company, and self-interest as a function of sources’ persuasive intent and likeability, and participants’ need for cognition

<table>
<thead>
<tr>
<th></th>
<th>Control</th>
<th>Likeable Source</th>
<th>Dislikeable Source</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Explicit</td>
<td>Implicit</td>
<td>Explicit</td>
</tr>
<tr>
<td>Intent</td>
<td>Intent</td>
<td>Intent</td>
<td>Intent</td>
</tr>
<tr>
<td><strong>Product attitudes</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low NFC</td>
<td>4.25a (0.39)</td>
<td>5.29b (0.86)</td>
<td>6.41c (0.22)</td>
</tr>
<tr>
<td>High NFC</td>
<td>5.01b (0.74)</td>
<td>5.25b (0.58)</td>
<td>4.66b (1.53)</td>
</tr>
<tr>
<td><strong>Purchase intention</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low NFC</td>
<td>5.05b (0.58)</td>
<td>5.33b (1.05)</td>
<td>6.91d (0.22)</td>
</tr>
<tr>
<td>High NFC</td>
<td>5.15b (1.55)</td>
<td>5.64b (0.82)</td>
<td>4.83b (1.29)</td>
</tr>
<tr>
<td><strong>Company evaluation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low NFC</td>
<td>4.52a (1.14)</td>
<td>5.22b (0.94)</td>
<td>6.53c (0.73)</td>
</tr>
<tr>
<td>High NFC</td>
<td>4.30b (1.02)</td>
<td>4.71b (0.96)</td>
<td>4.08b (0.52)</td>
</tr>
<tr>
<td><strong>Self-interest</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low NFC</td>
<td>5.52a (2.00)</td>
<td>4.22b (1.08)</td>
<td>3.27c (0.68)</td>
</tr>
<tr>
<td>High NFC</td>
<td>4.78ab (0.88)</td>
<td>3.94a (0.90)</td>
<td>5.37b (0.92)</td>
</tr>
</tbody>
</table>

Note. Participants per cell varied between nine and fourteen. Standard deviations in parentheses. Means for each dependent variable separate for each level of the likeability manipulation with unlike subscripts differ significantly at \(p < 0.05\).

Table 2. ANOVA results: indices of advertising effectiveness as a function of likeability, persuasive intent, and NFC

<table>
<thead>
<tr>
<th>Indices of advertising effectiveness</th>
<th>df</th>
<th>(F)</th>
<th>(p)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product attitudes</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persuasive intent (PI)</td>
<td>1</td>
<td>7.66</td>
<td>&lt; 0.05</td>
</tr>
<tr>
<td>Likeability (L)</td>
<td>2</td>
<td>11.27</td>
<td>&lt; 0.05</td>
</tr>
<tr>
<td>L × NFC</td>
<td>2</td>
<td>9.95</td>
<td>&lt; 0.05</td>
</tr>
<tr>
<td>PI × L × NFC</td>
<td>2</td>
<td>6.13</td>
<td>&lt; 0.05</td>
</tr>
<tr>
<td><strong>Purchase intention</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persuasive intent (PI)</td>
<td>1</td>
<td>5.47</td>
<td>&lt; 0.05</td>
</tr>
<tr>
<td>Likeability (L)</td>
<td>2</td>
<td>8.84</td>
<td>&lt; 0.05</td>
</tr>
<tr>
<td>L × PI</td>
<td>2</td>
<td>3.86</td>
<td>&lt; 0.05</td>
</tr>
<tr>
<td>L × NFC</td>
<td>2</td>
<td>9.85</td>
<td>&lt; 0.05</td>
</tr>
<tr>
<td>PI × L × NFC</td>
<td>2</td>
<td>4.59</td>
<td>&lt; 0.05</td>
</tr>
<tr>
<td><strong>Company evaluation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NFC</td>
<td>1</td>
<td>21.17</td>
<td>&lt; 0.05</td>
</tr>
<tr>
<td>Likeability (L)</td>
<td>2</td>
<td>5.51</td>
<td>&lt; 0.05</td>
</tr>
<tr>
<td>L × PI</td>
<td>2</td>
<td>3.90</td>
<td>&lt; 0.05</td>
</tr>
<tr>
<td>L × NFC</td>
<td>2</td>
<td>6.92</td>
<td>&lt; 0.05</td>
</tr>
<tr>
<td>PI × L × NFC</td>
<td>2</td>
<td>4.82</td>
<td>&lt; 0.05</td>
</tr>
</tbody>
</table>

Note: \(N = 128\) participants. Presented are only significant effects below the conventional level of \(p < 0.05\).

As predicted, the manipulations affected participants’ attributions of self-interest, which we assumed to have a mediating function, in the same way that they affected the indices of advertising effectiveness. In line with our predictions, the likeability × persuasive intent × NFC three-way interaction was significant, \(F(2, 116) = 12.78, p < 0.05\) (see fourth section of Table 1).³

³Some other effects reached significance, which were qualified by the predicted three-way interaction. Participants attributed the endorsement to self-interest more in the explicit persuasive intent condition than in the implicit persuasive intent condition (4.99 vs. 4.18, \(F(1, 116) = 20.95, p < 0.001\)). Furthermore, the interactions of likeability × persuasive intent (\(F(2, 116) = 5.85, p < 0.05\)) and likeability × NFC were significant (\(F(2, 116) = 5.82, p < 0.05\)).
For the lower-NFC group, as expected, the likeability/persuasive intent interaction was significant \((F(2, 58) = 18.57, p < 0.05)\). Specifically, in the dislikeable and in the control condition, the endorsement was attributed to self-interest less in the implicit than in the explicit persuasive intent condition (dislikeable: 4.07 vs. 6.10, \(F(1, 58) = 21.64, p < 0.05, d = 1.22\); control: 4.22 vs. 5.52, \(F(1, 58) = 9.73, p < 0.05, d = 0.82\)). The reverse was true in the likeable condition: self-interest was attributed to the endorser less in the explicit than in the implicit persuasive intent condition (3.27 vs. 4.67), \(F(1, 58) = 10.78, p < 0.05, d = 0.86\). For the higher-NFC group, only the anticipated main effect of persuasive intent was significant, \(F(1, 58) = 14.17, p < 0.05, d = 1.00\) (implicit: 4.05 vs. explicit: 5.00). All other effects were not significant, \(F < 1\).

**Cognitive responses**

Two independent judges who were blind to the hypotheses evaluated the cognitive responses generated by participants via thought listing. Thoughts were classified as product-directed when they were directly related to the product or specific attributes of the product, or endorser-directed if they referred to the endorser or specific attributes of the endorser. Positive (negative) thoughts were coded as such if they (1) included favorable (unfavorable) adjectives about product or endorser, or (2) the overall thought was identifiable as favorable (unfavorable) in nature about product or endorser. For example, the following thoughts were classified as positive and product-directed: “I believe that the camera is of good quality” and “The advertised camera has a lovely design”. The thoughts, “I found the endorser to be awful and disagreeable” and “The endorser is thinking only of his own advantage and all he wants to do is sell the camera” were classified as negative and endorser-directed. Idiosyncratic thoughts and thoughts unrelated to the categories product-directed and endorser-directed were discarded from the analyses. The two judges had a high inter-rater agreement (Cohen’s \(k = 0.94\)).

### Table 3. Supplementary ANOVA results: separate analyses for low versus high NFC groups as a function of likeability and persuasive intent

<table>
<thead>
<tr>
<th></th>
<th>Low NFC</th>
<th></th>
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<th>High NFC</th>
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<th></th>
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<tbody>
<tr>
<td></td>
<td>df</td>
<td>(F)</td>
<td>(p)</td>
<td>df</td>
<td>(F)</td>
<td>(p)</td>
</tr>
<tr>
<td><strong>Product attitudes</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Likeability × Persuasive Intent</td>
<td>2</td>
<td>11.35</td>
<td>&lt; 0.05</td>
<td>2</td>
<td>&lt; 1</td>
<td>&gt; 0.60</td>
</tr>
<tr>
<td><strong>Purchase intentions</strong></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Likeability × Persuasive Intent</td>
<td>2</td>
<td>12.34</td>
<td>&lt; 0.05</td>
<td>2</td>
<td>&lt; 1</td>
<td>&gt; 0.98</td>
</tr>
<tr>
<td><strong>Company evaluation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Likeability × Persuasive Intent</td>
<td>2</td>
<td>7.69</td>
<td>&lt; 0.05</td>
<td>2</td>
<td>&lt; 1</td>
<td>&gt; 0.90</td>
</tr>
</tbody>
</table>

*Note: \(n = 64\) participants per group. Only significant effects below the conventional level of \(p < .05\) are presented.*
No other effects were significant (product NFC reported more thoughts about the product attitude (M = 2.16) than about the endorser (M = 1.81), F(1, 116) = 4.63, p < 0.05, d = 0.41. Second, we found a significant interaction of NFC × product-directed versus endorser-directed thoughts, F(1, 116) = 19.91, p < 0.001. Participants with lower NFC reported more thoughts about the endorser (M = 2.00) than about the product (M = 1.64, F(1, 116) = 5.18, p < 0.05, d = 0.42). In contrast, participants higher in NFC reported more thoughts about the product (M = 2.69) than about the endorser (M = 1.63, F(1, 116) = 44.89, p < 0.05, d = 1.24). No other effects were significant (p > 0.08).

Valence of the thoughts about the product and the endorser
To test whether participants’ NFC influenced the valence of thoughts about the product or the endorser, the number of negative thoughts about the product (endorser) was subtracted from the number of positive thoughts about the product (endorser). We then analyzed both measures as a function of likeability, persuasive intent, and NFC, again using the type of valence as a repeated measure. The valence of the thoughts about the product was significantly more negative (M = -0.45) than the valence about the endorser (M = -0.13), F(1, 116) = 4.63, p < 0.05, d = 0.39. No other effects were significant (p > 0.13).

For participants with lower NFC, the valence of thoughts about either the product or the endorser was not significantly correlated with the product attitude (r = −0.09 and r = −0.06). But the valence of the thoughts about the product was significantly positively correlated with the product attitude for participants with higher NFC (r = 0.70), whereas the valence of the thoughts about the endorser was not significantly correlated with the product attitude (r = −0.08).

Mediation analysis
We conducted regression analyses (Baron and Kenny, 1986) to analyze whether attributed self-interest mediated the effects on (1) product attitudes, (2) purchase intentions, and (3) evaluations of the company only for consumers with lower NFC. Thus, we ran separate analyses for the lower- and higher-NFC groups to test H3a. The attribution of self-interest mediated the effects on the advertising effectiveness indices only for the lower-NFC group, providing support for H3a. To be more precise: in step one, the two-way interaction of likeability and persuasive intent predicted lower NFC participants’ judgments on all indices of advertising effectiveness ((1) β = −0.46, p < 0.05; (2) β = −0.59, p < 0.05; (3) β = −0.53, p < 0.05). In step two, the attributions of self-interest predicted participants’ judgments on the advertising effectiveness indices ((1) β = −0.77, p < 0.05; (2) β = −0.71, p < 0.05; (3) β = −0.66, p < 0.05). In step three, the relationship between the two-way interaction and the advertising effectiveness indices was reduced to nonsignificance (except for participants’ purchase intention, which was just partially mediated) when participants’ judgments were regressed on the two-way interaction and the attributions of self-interest ((1) β = −0.04, ns.; (2) β = −0.27, p < 0.05; (3) β = −0.18, ns). A reverse mediation was not found. In addition, Sobel’s test (Sobel, 1982) indicated that the mediator (attribution of self-interest) carries the influence of the two-way interaction on the prediction of the advertising effectiveness indices ((1) z = 4.82, p < 0.001; (2) z = 4.59, p < 0.001; (3) z = 4.15, p < 0.001).4

For the higher-NFC group, the advertising effectiveness indices could not be significantly predicted by likeability, persuasive intent, the interaction of likeability × persuasive intent, or the attributions of self-interest (all p > 0.14). The only significant predictor of product

4As hypothesized, the relationship between attributions of self-interest and the two-way interaction was still significant when the attributions of self-interest were alternatively regressed on the two-way interaction and participants’ judgments on the advertising effectiveness indices, ((1) β = 0.37, p < 0.05; (2) β = 0.35, p < 0.05; (3) β = 0.46, p < 0.005). In steps one and two, respectively, the two-way interaction predicted the attributions of self-interest (β = 0.71, p < 0.001), and the advertising indices predicted the attribution of self-interest ((1) β = −0.77, p < 0.001; (2) β = −0.71, p < 0.001; (3) β = −0.66, p < 0.001).
attitudes (and the other two measures) for the higher-NFC group was the valence of thoughts about the product ((1) $\beta = 0.70, p < 0.05$; (2) $\beta = 0.59, p < 0.05$; (3) $\beta = 0.52, p < 0.05$), providing support for H3b.

**Discussion**

In line with a large body of research, we have argued that the greater the consumer's cognitive motivation (e.g., higher NFC) to process the information delivered in a persuasive message effortfully, the smaller the influence of peripheral cues (i.e., likeability) on the consumer's evaluation (see e.g., Cacioppo et al., 1983; Petty and Cacioppo, 1986). Therefore, the tendency to consider the endorser's likeability to infer self-interest under explicit persuasion, which should in turn affect advertising effectiveness, was expected to hold true only for persons lower in NFC (H1b). Persons with higher NFC, in contrast, were expected to form judgments based on the quality of the product attributes delivered in the ad, but not on peripheral cues (H1c). These predictions were confirmed, resulting in the expected interaction of likeability \times persuasive intent \times NFC on all three measures indicating advertising effectiveness (H1b). Thus, we found evidence that explicit persuasive appeals promote advertising efforts only when consumers do not systematically process the product attributes delivered in the ad and, in addition, when the endorser is perceived as highly likeable. In addition, when the data was collapsed across participants' NFC, we were able to replicate prior findings by Reinhard et al. (2006). As was hypothesized in H1a, explicit persuasion was found to be more effective than merely highlighting product benefits for likeable endorsers, whereas the reverse effect was found for less likeable endorsers. As was shown by the multivariate analysis of variance, this was true across all advertising indices. However, subsequent analysis revealed that this was true for two out of three indices of advertising effectiveness (i.e., for purchase intention and brand evaluation, but not for product attitudes).

The favorable effect of explicit appeals regarding consumers with lower NFC held true only when likeable endorsers recommended the product. Advertising effectiveness suffered equally negative consequences when explicit statements were made by an endorser of medium likeability (control condition) and by a dislikeable endorser. For consumers lower in NFC, only highly likeable people were seen as acting less self-interestedly when the explicit attempt to persuade was stated in print than when it was not. As a consequence of these attributions that follow stereotypic expectations about how likeable versus dislikeable people typically behave, the persuasive impact of the advertisement varied for these low-NFC consumers. The causal role of attributed self-interest was further supported by the mediational analyses conducted. The effects on two of three advertising effectiveness indices (except the partial mediation on the purchase intention measure) proved to be mediated by the attribution of self-interest, but only for consumers with lower NFC (H3a). It thus appears that explicit persuasive appeals can work as successful advertising strategy so long as customers do not have the motivation/capacity to elaborate advertising messages and likeable endorser are deployed.

Consumers with higher NFC, in contrast, do associate explicit claims with a stronger degree of self-interest, but do not use this information in evaluating the product or the company. Higher-NFC consumers did not engage in the less cognitively demanding inferential process shown by lower-NFC consumers. The only substantial predictor for the former group’s evaluations of product, company, ad, and the resulting likelihood of purchase was the proportion of favorable to unfavorable thoughts about the product (i.e., the valence of the cognitive responses) (H3a). This finding is consistent with research on the cognitive response approach (e.g., Petty et al., 1981).

**Conclusions and practical implications**

This paper provides further insights into the effects of explicit persuasion in advertising. In
addition to characteristics of the endorser or salesperson (e.g., likeability), attention must also be paid to characteristics of the customer (e.g., NFC) that render explicit persuasive appeals superior to implicit ones. If there is reason to assume that potential customers process advertising messages less effortfully, explicit persuasive appeals can benefit or hinder advertising effectiveness or sales performance. As our studies indicate, explicit attempts to persuade are beneficial in cases where a positive impression of the source is generated, for example, when the salesperson is perceived as highly likeable. Otherwise, advertisers are better off creating advertising messages without explicit persuasive appeals. In contrast, advertising effectiveness was found to be unaffected by explicit persuasive appeals when consumers have the cognitive motivation or ability to process the product attributes provided in the ad. In this case, the quality of the product and the advertising message itself are crucial in determining how favorably consumers evaluate the product. However, consumers are often inclined to put only a minimum of effort into the processing of advertising messages, and thus, to process general brand advertisements on TV or in print advertising fairly casually.

While the experiment reported here (in the context of general brand advertising) revealed that explicit persuasive appeals are associated with more or less self-interest based on endorser’s likeability and the consumer’s cognitive motivation, there may be advertising domains where altruistic motives play a more central role. In social marketing campaigns (e.g., energy conservation, cancer research), for example, an explicit persuasion attempt is unlikely to be attributed to self-interest (i.e., a commission) on the part of the endorser, and would therefore increase the impact of the message due to the attribution of altruistic motives. Thus, the kind of advertising campaign (general product/brand campaigns vs. social marketing campaigns) may determine the kind of motive (self-interest vs. altruism) imputed under explicit persuasion. Future research might examine the accuracy of these assumptions.

**Limitations**

Although the present research provides sound support for the hypothesized effects of consumer’s NFC on the effectiveness of explicit persuasive appeals, this research faces limitations common to many laboratory experiments. First, a student convenience sample was used here to show that explicit persuasion works best under conditions of lower NFC. Though the validity of generalizing the results to the entire population is often considered questionable, we believe that a homogeneous sample still warrants theory testing (Calder et al., 1981). Second, another limitation might be seen in the experimental stimulus used in this research. Students were presented with a single ad, preceded by information about the endorser to induce liking for him. Such an absence of advertising clutter - since clutter is usual in much consumer settings - combined with the processed endorser information might have heightened attention to the experimental stimulus even in the case of lower NFC. Although the use of a single ad allows for control over experimentally relevant variables, we call for future research that investigates the effects of explicit persuasion and NFC under more natural consumer processing conditions, such as advertising clutter. This being the case, the use of explicit persuasion may have to be stated even more blatantly (e.g., explicit intent to persuade incorporated in the ad’s headline) than in the stimulus ad used here, since clutter is likely to hinder much information from entering the consumer’s focal attention. The consequence, however, might be that under conditions of advertising clutter even persons with higher NFC might not have the opportunity to process advertising information in a deliberate fashion. Thus, evaluations of higher vs. lower NFC consumers might become similar in such cases, an idea that renders explicit persuasion even more interesting for practitioners.
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