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# How Troublesome are Stereotypes in International Business?

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## **Abstract**

Substantial concern has been raised in international business writing that national stereotypes bias perception of employees, customers, and others. That concern is certainly supported by findings in person perception research. But some constraints of that research, such as the provision of incomplete information and uninteresting stimuli may well have caused an overestimation of the impact of stereotypes in business situations. This research shows that the impact of stereotypes is likely less than previously thought. When current diagnostic information is available, that information is used, leading to unbiased assessments. Only when information is limited are stereotype-biased judgments generated. A second experiment further shows that people feel more confident in assessments based on current information than in those where information is limited. These relatively optimistic findings suggest methods that managers can use to overcome national stereotype bias in international business situations.

## **Keywords**

research, business, international, information, stereotypes, assessments

## **Disciplines**

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## **Comments**

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## WORKING PAPER SERIES

# How Troublesome are Stereotypes in International Business

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Working Paper 95 - 03



## **How Troublesome Are Stereotypes in International Business?**

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## **How Troublesome Are Stereotypes in International Business?**

(abstract)

Substantial concern has been raised in international business writing that national stereotypes bias perception of employees, customers, and others. That concern is certainly supported by findings in person perception research. But some constraints of that research, such as the provision of incomplete information and uninteresting stimuli may well have caused an overestimation of the impact of stereotypes in business situations. This research shows that the impact of stereotypes is likely less than previously thought. When current diagnostic information is available, that information is used, leading to unbiased assessments. Only when information is limited are stereotype-biased judgments generated. A second experiment further shows that people feel more confident in assessments based on current information than in those where information is limited. These relatively optimistic findings suggest methods that managers can use to overcome national stereotype bias in international business situations.

### **How Troublesome Are Stereotypes in International Business?**

The expansion of multinational corporations has led to an increase in cross-national business interactions in which people are clearly labeled by nationality. Product design teams include engineers from French, German, and Japanese subsidiaries; Mexican manufacturers sell to Swiss companies. Popular writing in international business indicates that this national identification is likely to lead to biased perception. Adler (1991), for example, warns of a tendency to reinterpret incoming information to make it more stereotype consistent. Lane and DiStefano (1992, p.22) worry that managers might discount creative input from managers of countries associated with negative stereotypes -- interpreting their ideas as "primitive" or "lazy."

That concern is certainly bolstered by research in psychology. Diehl and Jonas (1991) found that people do stereotype national groups. Further, stereotypes based on ethnicity (Bodenhausen & Wyer, 1985), sexual orientation (Weissbach & Zagon, 1975), and socio-economic status (Darley & Gross, 1983), among others, have been shown to bias evaluation of individuals associated with those stereotyped groups.

Yet there is reason to believe that the impact of national stereotypes in international business is not that critical. One reason is that information availability is very different in experimental settings and business environments. Stimuli in much of the existing research were intentionally designed to be ambiguous or incomplete. Darley and Gross (1983), for example, asked undergraduates to judge a child's academic performance, but the evidence given was entirely non-diagnostic. The child's socio-economic status was the only information provided that had any diagnostic value. So, it is not entirely surprising that undergraduates forced to make a decision used socio-economic status in their judgments. Stereotypes, in the experimental situations, then, might simply act as a default, used when no other information is available.

Though Bodenhausen and Wyer (1985) concluded that stereotypes are judgmental heuristics, their results are actually consistent with the default process. In that study, participants placed harsher penalties on those who had stereotype consistent transgressions than on those with stereotype inconsistent transgressions. The conclusion was that participants used the stereotype information to determine reasons for the transgression -- reasons that were not given in the case file. Rather than being a judgmental heuristic then, the stereotype acted as a source of inference, when more diagnostic data was not made available.

Since management activities are often ambiguous and difficult to assess, managers may use stereotype-based expectations during judgments. Yet diagnostic information on a range of attributes is provided in most managerial interactions. The compensation literature, for example,

stresses both the obstacles to employee assessment resulting from incomplete information and the ability to assess using available, objective performance information for judgment (DeLucca, 1993; Milkovich and Newman, 1992). In cases where more diagnostic information is available, the impact of stereotypes may be less or even nothing at all.

That idea, that stereotypes may have varying effect depending on the availability of alternative information, is consistent with the assertions of Brewer (1988), Fiske and Neuberg (1990), and Beike and Sherman (1994). They point out that impression formation may involve more than one process. People might simultaneously use stereotype-based expectations and available information to form an impression. To investigate that possibility, the first experiment was designed to investigate the impact of information availability on stereotyping during impression formation.

### **Expectations and Impression Formation**

Expectation's effect on the evaluation of individuals has been a fertile area for research. Numerous studies have found that expectations, in the form of stereotypes, bias evaluation of traits, intellectual capability, and culpability (Weissbach and Zagon, 1978; Darley and Gross, 1983; Bodenhausen and Wyer, 1985). Several effects appear to underlie the bias. For example, people tend to overestimate instances of stereotype consistent behavior when exposed to information about members of a stereotyped group (Hamilton and Rose, 1980). Bodenhausen (1988) argues that stereotype consistent information is processed more extensively than is inconsistent information. Slusher and Anderson (1987) found that people confused imagined prototypic members of stereotyped groups with real information about real group members, thereby oversupporting stereotype-consistent assessments.

All of those processes, however, require that the person making the judgment use category-based processing -- that is, the category (i.e. stereotype) becomes the basis of the assessment process. As Brewer (1988) points out, that process is not universally used. Rather, impression formation processes lie on a continuum from category-based processes to individuating (ie. based on the target's individual attributes) processes (Fiske and Neuberg, 1990). Interest in the target person and importance of the decision, for example, induce more individuating processes.

Impression formation research rarely reflects complex, realistic situations of the kind that might induce individuating processes (Wyer and Carlston, 1994) . Experimental designs rarely induce substantial interest in the target among participants, in part because cover stories often suggest that the objective is to test a rating form or procedure rather than a judgment of the

target person (cf. Darley and Gross, 1983). Neither do they typically provide sufficient information about the target person to induce an individuating impression formation process (Fiske and Neuberg, 1990).

On the other hand, typical business situations often provide managers with several long-term incentives that encourage interest in colleagues, customers, etc. The need to remain a viable member of a work group alone requires some sensitivity to other members. Current concern with total quality management and customer satisfaction, though sometimes superficial, stresses continuous responsiveness to the work environment. Less category-based and more individuating impression formation processes are likely to arise in business situations.

While stereotypes and other forms of categorization are often seen as mechanisms for reducing cognitive complexity (Allport, 1954; Cantor and Mischel, 1979; Cohen, 1981), there is also some evidence that cognitive busyness can reduce the propensity to stereotype. Gilbert and Hixon (1991), for example, found evidence that task complexity impedes stereotyping because cognitive overload occurs. In that study, participants who were kept cognitively busy focused on the task at hand rather than activate a stereotype about the person leading the task. It is possible, then, that the simplicity of traditional experimental stimuli noted by Wyer and Carlston (1994) might actually induce a stronger stereotype bias than would a more realistic, complex business environment.

Research on impression formation and cognition, then, suggests that stereotyping might be less likely to occur in management environments than in typical experimental settings. Richer information, greater interest in the target person, and situational complexity are likely to lead to more individuating assessments rather than category-based, or stereotypic, assessments. From this comes a central thesis of this research -- stereotype bias occurs less when information is rich and where diagnostic information is available to participants. In the absence of diagnostic information, stereotype bias is still expected to occur.

### **Experiment One**

This experiment is a within-subjects design. Participants were asked to assess eleven dimensions (eg. happiness, warmth, beauty) of commercials that were purported to have originated in each of three countries. The amount of diagnostic information provided by the commercials varied across the eleven attributes and across the three sets of commercials that were viewed by participants. It was therefore possible to test whether peoples' use of stereotypes would vary within a single type of assessment depending on the amount of diagnostic information available.



**Materials** - Three television commercials from each of four companies were chosen (Coca-Cola, Ford, Hall's Lozenges, and Exxon). International commercials were chosen to reduce the likelihood of prior viewing. Four companies were chosen to ensure exposure to several attributes (e.g. Coke is happy, Exxon is technical). Commercial selection was based on ease with which nationality cues could be removed. There was no intentional screening for amount of diagnostic information provided on the various attributes. Rather, it was assumed that the amount of information varied, and that variation was checked in pre-test one.

The twelve commercials were edited to remove any cues of nationality and sound. Next the commercials were spliced together to form three sets. Each set contained one commercial from each company. The ordering of the twelve commercials remained constant throughout the experiment. For clarification, Figure 1 lists the order of the commercials. Three sets of commercials were needed because of the within subjects nature of the design. Participants had to assess commercials that they were led to believe were from different countries in order to test (through a comparison across country cues) how much of an effect country cue (stereotype) had on their assessment.

Television commercials were selected to satisfy the requirement that the stimulus be a reasonable experimental analog of an international business interaction. A key characteristic of those situations is the amount and variety of information that is conveyed. Personal and emotional information, business content, and information on managerial style are some of the types of data transmitted during business interactions. Financial pressures often reduce the time available for cross-national interaction; so, fast-paced information is also common. The experiment also needed to induce a relatively high level of interest because, as noted above, that is both a common characteristic of business interactions and also a likely determinant of the process of impression formation.

Traditional written dossiers (Bodenhausen, 1988; Bodenhausen and Lichtenstein, 1987) or simple self-introductions via videotape (e.g. Weissbach and Zagon, 1978) would not have been adequate. Simulated business situations could not be used either because language differences eliminated comparability. Further, it was unlikely participants would become adequately interested in a simulated business situation.

Television commercials, on the other hand, are generally information rich as they tell a product story and induce emotion. Time limits require them to be relatively fast paced. Further, recent trends in advertising have led to commercials that are more visual and less text dependent. As a result, it was possible to eliminate language and national cues without overly

diminishing information content. Further, the participants, undergraduate business students, were expected to be interested in seeing new and foreign commercials.

Perhaps the most valuable aspect of commercials as a proxy for business situations is the common use of persuasion. As Rosenblatt, Cheatham, and Watt (1977) point out, business communication includes not only facts, such as instructions and plans, but also persuasion -- an effort to get others to do as we, or the organization, desires. Commercials, in their attempt to persuade consumers to purchase, are similarly based.

**Stereotype Manipulation** - National origin stereotypes were used in this study. Three European countries -- Germany, France, and Italy -- were chosen because racial cues in the commercials could not be eliminated and typical caucasian actors were reasonably presented as being from all of those countries. Because stereotype activation does not always occur in busy situations (Gilbert and Hixon, 1991), a triple country-of-origin cue was used to ensure activation. Participants were told the country-of-origin, they were asked to write the country name on the top of their survey page, and then they saw the country name for five seconds on the videotape. All cues were given after viewing in the pre-test, as described below, and before viewing in the final experiment.

With three sets of commercials and three countries, there were six possible orderings of purported country-of-origin. Only the country cue was varied, the order of the actual commercials remained constant. As further explanation, Figure 2 provides a list of the six orderings as they were used in the study.

**Pre-test One** - It was hypothesized that stereotype-based expectations are used when current diagnostic information is insufficient to form an opinion. We would therefore expect that the clarity and strength of current information to determine the extent to which bias persists. This pre-test was designed to identify the level of clarity and strength of each attribute in each set of commercials.

For that, 26 undergraduates were shown the commercials with no country-of-origin signal. After each set of commercials, participants were asked to rate each dimension on a five point Likert-type scale anchored by "very vivid" and "not at all vivid." The word vivid has been given a specific meaning in the social psychology literature (cf. McKelvie, 1994), but it was selected for use here due to its common meaning, "producing a strong or clear impression on the senses" (Websters, 1981). Since the participants in this study were members of an introductory management course given in an agricultural economics department, it was thought unlikely that they would be familiar with the technical meaning of the term and that they would respond to the common meaning instead.

The attributes' vividness ratings varied across the three sets of commercials. Their average scores (across the three commercial sets) were as follows: exciting/calming (mean rating = 2.69), happy/sad (2.68), warm/cool (2.42), unusual/typical (2.38), technical/artistic (2.33), ugly/beautiful (2.27), humorous/dull (2.23), sensual/chaste (2.15), formal/informal (2.07), frightening/reassuring (1.87), cruel/kind (1.56).

**Pre-test Two - It was necessary** to determine whether the stimulus could induce a stereotype-based bias under any conditions. It was possible to check this through a manipulation of the time at which participants received the country-of-origin information because research in consumer behavior has shown that the memories of commercials reflect, to a great extent, the ambiguous information that is intentionally provided in many stereotype studies where biased judgments have been found (cf. Darley and Gross, 1983).

Keller (1993), for example, has pointed out that advertising information is stored in memory, though not all information is encoded. Relatively broad, summary information, such as emotional responses are remembered more than facts (Hertel, 1982). Specific, diagnostic information, which is hypothesized here to ameliorate the stereotyping effect, is less likely to be retained in memory. General affective and cognitive responses, along with some more specific information is retained instead. That advertising memory effect was used to test for potential for stereotyping.

A total of 256 undergraduate participants in groups of approximately forty participated in this pre-test. In groups of approximately forty, participants were shown the three sets of commercials. After viewing each set, purported country-of-origin (France, Germany, Italy in six possible orderings), was cued in three ways. The country name was shown on the videotape, the experimenter said the name of the country, and participants were asked to write the country name on the top of their survey form.

After the country cue, participants were asked to rate the commercials just viewed on the eleven semantic differential scales, measuring dimensions that are generally associated with human evaluation. Those dimensions were: happy/sad, warm/cool, ugly/beautiful, formal/casual, cruel/kind, unusual /typical, exciting /calming, technical/ artistic, sensual/chaste, frightening/reassuring, and humorous/dull. Those dimensions reflect a variety of stereotype attributes, including visual appearance, personality traits, behavior, and emotionality (Beike and Sherman, 1994). After all participants completed their ratings, the next set of commercials was shown, etc.

Purported country-of-origin was a statistically significant determinant of ratings ( $F(22, 1508) = 2.00, p < 0.01$ ). As the relative ordering of the three countries on the eleven dimensions

was not expected to be constant (i.e. France < Germany < Italy on warmth and artistry), pairwise comparisons were generated for each country pair on all eleven dimensions. On ten of the eleven dimensions, ratings for at least two countries differed at a statistically significant level ( $p < .05$ ). Ratings were not surprising, given knowledge of standard American stereotypes of the three countries. Participants led to believe that the commercials were from Germany, for example, rated them as more formal, more cruel, more technical, and less happy. Purportedly Italian commercials were warmer, more casual, more beautiful, and more artistic.

The commercials are clearly capable of inducing stereotypical assessment if participants' access to the information is limited. The main experiment provides country-of-origin information prior to viewing, when participants have access to information that was more vivid than that in memory. Then, it is possible to test if the stereotype bias remains, or if it is overwhelmed by the alternative information.

**Experiment** - A total of 233 undergraduates in groups of approximately forty participated in a rating of international commercials. The stimulus and procedure were essentially the same as those described in pre-test two, above, except participants were told purported country-of-origin prior to viewing the commercials.

Following viewing of a set commercials, participants were asked to rate the commercials on the eleven dimensions listed in the pre-tests. After all participants completed their ratings, the experimenter went through the cycle again for the second set of commercials, and then for the third set.

### **Results and Discussion**

The main hypothesis of this study was that new, diagnostic information would reduce the impact of stereotypes on assessments. In this study, that would mean that when adequate information is available from the commercials, participants will rate those commercials the same, regardless of the country that they were led to believe those commercials were from. To test, this, differences between individuals' ratings on the eleven attributes of for each pairing of commercial sets (ie. two different purported country-of-origins) were generated. For participant 1, for example, the difference between ratings of happy/sad for commercials thought to be from France and those thought to be from Germany was generated. For each person, thirty-three differences were generated (eleven attributes x three country pairings).

Differences in ratings across commercial sets does reflect actual variation in the attributes across the sets (i.e. commercial set one may really be happier than commercial set two). Differences should also reflect the extent of stereotype bias that occurs, however. Since all possible combinations of country-cues and commercial sets were used, it is possible to

separate those effects during analysis. Support for the hypothesis (ie. that stereotype bias will decrease with the availability of alternative information) will be found if the absolute value of the differences decrease as the amount of information provided by the commercials increases.

To test this, MANOVA was used with the difference scores as the dependent variable and the country combinations (i.e. France/Italy, France/Germany, and Germany/Italy) and set combinations (i.e. sets 1/2, sets 2/3, sets 3/1) as the class variables. The main independent variable was the average vividness rating (from pre-test one), by attribute (e.g. happy/sad), of the two commercial sets that were the source of the difference score.

The MANOVA equation was statistically significant overall [ $F(5,7670) = 8.34, p < .0001$ ]. As expected, the proxy variable denoting the commercial sets that were rated was statistically significant ( $F = 9.16, p < .0001$ ), indicating that there were differences in the attributes as portrayed in the three sets of commercials. The proxy variable denoting the country cues was also significant ( $F = 3.90, p < .02$ ), indicating that some bias continued to be induced by country cues. That conclusion can be drawn because, all other things equal, the difference between ratings when participants were told the commercials were from France and Italy, diverged from the difference between ratings when participants were told the commercials were from France and Germany. Since the country stereotypes differ, certain pairings generated greater differences in ratings than others. An example might be that on the sensual/chaste dimension, the difference between ratings with French and Italian cues was less than the difference between ratings with French and German cues. That finding was a necessary precursor to the main finding that vividness reduced country bias.

In fact, the variable of vividness was a statistically significant ( $F=15.57, p < .0001$ ) predictor of the difference between ratings. As vividness rose, the difference between ratings declined, indicating that country-cue induced bias was reduced as alternative information was provided. That finding supports the main hypothesis of the study -- when provided with current diagnostic information, people will use that information to form judgments and will not rely on stereotype based expectations.

To further illustrate the effect of stereotypes and information on ratings, a second analysis was done. In that analysis, participants' ratings of the eleven attributes for each of three commercial sets was used. Pairwise comparison of countries was done. Results are shown in Table 1. The results are generally consistent with standard American stereotypes of the three countries. Germans are seen as more formal, more technical, less sensual, and less humorous. Italians are seen as more beautiful, artistic, sensual, and unusual.

Statistically significant differences across country cued ratings arose on seven of eleven dimensions. Consistent with the finding that vividness reduces reliance on expectation-based information, three of the dimensions on which differences were not found are the dimensions identified as most vivid in pre-test two -- exciting/calming, happy/sad, and warm/cool. The fourth dimension in which there was no significant difference across countries (frightening/reassuring) was not rated as very vivid, suggesting that there may be something else occurring during the ratings that was not captured in the study.

The analysis of data generated in experiment one support the hypothesis that stereotypes act as defaults, coming into play when current information is insufficient to render a judgment. The impact of country-of-origin cues declined as the vividness of information provided rose. For the most vividly shown attributes, ratings did not show a statistically significant difference across countries. For all but one less vivid characteristic, however, the country-of-origin cue induced a ratings bias that is consistent with commonly held stereotypes of France, Germany, and Italy.

### **Confidence in Judgments**

After finding that assessment patterns differ with level of diagnostic information, it seems obvious to ask whether, at some level, people are aware of that difference. Do they realize that they are using current information in some cases and relying on stereotype-based information in others? In particular, we might expect less confidence in the stereotype-biased assessments because of an absence of directly relevant information. Confidence seems an interesting attribute to consider because it has been linked to action. That action might be that of a group making a decision (Sniezek, 1992) or a psychologist making a diagnosis (Oskamp, 1982).

Confidence, though, is a complex construct, dependent in part on the accuracy of judgments (Schneider and Laurion, 1993; Fleet, et al., 1987), on peoples' dispositional characteristics (Wolfe and Grosch, 1990), and on the desirability of the judgment being made (Babad, et al., 1992). The determinant of particular interest here is information availability, which increases confidence through several mechanisms. Information can increase confidence by increasing the likelihood of accuracy (Sniezek, 1992). It may also affect confidence by providing people with implications that they would be reluctant to think through on their own (Tversky and Shafir, 1992). Even when the information is irrelevant, it can affect judgment and confidence (Bazerman, 1994).

In the first experiment, the amount of information provided varied across attributes and across commercial sets. When the amount of information was relatively high, participants used it and formed unbiased judgments. When there was little information, however, they relied on

stereotype-based expectations which led to biased assessments. The confidence literature suggests that the more vivid the information, the more confident participants should be. To test whether indeed confidence varied with information availability a second study was completed.

### **Experiment Two**

Twenty-six undergraduates participated in this rating of commercials. The same stimulus as in experiment one was used, an edited videotape of commercials. As noted in the second pretest for experiment one, information vividness varied across attributes within those commercials. That provided the manipulation of information vividness that was expected to affect confidence in the participants' feelings of confidence.

As in experiment one, purported country-of-origin was signaled first. Participants were then shown a set of commercials and asked to rate attributes of the commercials on semantic differential scales (e.g. happy/sad). In addition to those ratings, participants in this study were asked to indicate how confident they were in each rating immediately after each rating. For example, participants rated how happy/sad they felt the commercials were, then they rated how confident they were in that rating, then they rated how warm/cool the commercials were, then a confidence rating, etc. After all ratings for one set of commercials were completed, a second set of commercials with a different purported country-of-origin was shown and then rated.

### **Results and Discussion**

To test the impact of information vividness on confidence, the vividness ratings (pre-test one) were again used as measures of the amount of information provided. Using country pair and commercial sets as class variables (as explained in analysis of experiment one), a MANOVA procedure was used to test the impact of vividness on ratings of confidence. As expected, information vividness did affect rater confidence -- higher information attributes were assessed with significantly more confidence. Vividness had a statistically significant impact on confidence ( $F(2071,3) F=3.83 p < .01$ ). As expected, then, the more information that is made available to participants, the more confident they were in their judgments.

### **General Discussion**

This research was designed to learn if national stereotypes would have as great an impact on management perception as some international business writers had feared. Prior research on stereotypes was quite pessimistic on this topic, suggesting strongly that expectations based on stereotypes would bias perception. The results here are more optimistic. When people are provided with vivid, alternative information, they use that information. Only when there is insufficient diagnostic information does stereotype bias become apparent.

In business situations, where information relevant to assessments is often available, people are more likely to generate accurate assessments. Moreover, managers can help reduce the likelihood of national stereotype bias by encouraging the production of relevant information and assisting in its dissemination. Particular care should be taken to increase the availability of information on hard-to-observe factors, such as the reasoning that led to an action. As Bodenhausen and Wyer (1985) point out, people use stereotypes to infer reasons for behavior, and those inferences can be important determinants of judgments. If relevant information is provided, and so need not be inferred, stereotype bias should be reduced.

Because the bias reduction observed in this study occurs at the attribute level, total person perception may not always be substantially less biased. In particular, the information integration paradigm (Anderson, 1967, 1991) points out that attribute ratings form the building blocks for overall evaluation, but that evaluations of attributes are differentially weighted depending on their importance to the rater. A person might get a significant amount of information on some attributes and so, rate them in an unbiased manner, but if those attributes are relatively unimportant in the overall evaluation, then the overall evaluation may still primarily reflect biased assessments. Care must therefore be taken to identify the attributes of greatest importance to workers and focus on generating information on those attributes.

We also should consider that the national stereotypes used here are relatively weak. Country-of-origin research, which looks at assessments of products (e.g. cars) that are purportedly made in specific countries, has shown that national stereotypes are easily overwhelmed by other information (Thorelli, et al., 1988; Han and Terpstra, 1988). Race and gender stereotypes, which may be based on more extensive information, may be less easily overwhelmed. The basic effect shown here should remain, but the new information needed to counter stereotype bias may need to be stronger.

The second experiment found that there was higher confidence in the assessments for which more vivid information was available. Given the suggested link between confidence and action (Sniezek, 1992), the result suggests a rather optimistic possibility that, all other things equal, people would be less likely to act on stereotype-based judgments than on judgments based on current, diagnostic information. By studying confidence, and therefore bringing the literature a bit closer to action, we can address a weakness of the current literature pointed out by Wyer and Carlston (1994) -- limited attention given to behavior that results from impression formation. Still, without actual data on action, only very limited conclusions can be drawn.

To summarize, this work suggests that management activities can be arranged to reduce stereotype bias. By encouraging the exchange of information, particularly information on



personal attributes that are most relevant to overall assessments, more objectively accurate assessments can be reached. The results here suggests that individuals are rather rational decision-makers, when they have access to information that is relevant to their assessments they use it. When no current information is available, they search for other potentially relevant information and draw less confident inferences from that. When people are forced to make decisions, they use the information that they have. If we give them better information, they will respond with better assessments.

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**Figure 1**  
Commercials In Order, As Shown

	Order	Product	Commercial Title	Actual Country-of-Origin
<b>Set One:</b>	1	Halls	University	Peru
	2	Exxon	Esso Optima	U.K.
	3	Coke	The Kitchen	Argentina
	4	Ford	Cigar	Venezuela
<b>Set Two:</b>	5	Halls	Hunting	Greece
	6	Exxon	Development	Colombia
	7	Coke	Giant Can	Pattern*
	8	Ford	Melting Snow	Germany
<b>Set Three:</b>	9	Halls	Diver	Malaysia
	10	Exxon	Tiger Power	Sweden
	11	Coke	Sizzle	Spain
	12	Ford	Ninja	Brazil

\* A pattern commercial is created by Coca-Cola as the basis for adaptation by national subsidiaries. The pattern itself has no designated country-of-origin.

**Figure 2**  
 Manipulated Country-of-Origin Cues  
 by experimental group

<b>Commercial Group:</b>	<b>Purported Set:</b>	<b>Country-of-Origin</b>
One two three	one Germany Italy	France
Two two three	one Italy Germany	France
Three two three	one Italy France	Germany
Four two three	one France Italy	Germany
Five two three	one Germany France	Italy
Six two three	one France Germany	Italy

**Table 1**

Mean Ratings of Commercials' Attributes, by Country  
(rating done on five point semantic differential scales)

**Scale Anchors (1/5):**

	<b>France</b>	<b>Germany</b>	<b>Italy</b>
Happy/Sad	2.7	2.8	2.7
Warm/Cool	3.2	3.4	3.2
Ugly/Beautiful	4.8	4.6 <sup>*</sup>	4.8 <sup>G</sup>
Sensual/Chaste	3.3 <sup>G</sup>	3.6 <sup>F,I</sup>	3.2 <sup>G</sup>
Frightening/ Reassuring	4.5	4.6	4.5
Humorous/Dull	2.9 <sup>G</sup>	3.4 <sup>F</sup>	3.1
Formal/Informal	4.9 <sup>G</sup>	4.6 <sup>F,I</sup>	4.9 <sup>G</sup>
Cruel/Kind	4.9	4.8	4.8
Unusual/Typical	3.5 <sup>G</sup>	3.8 <sup>F,I</sup>	3.5 <sup>G</sup>
Exciting/Unexciting	3.1 <sup>G</sup>	3.4 <sup>F,I</sup>	3.1 <sup>G</sup>
Technical/Artistic	4.5	4.3 <sup>I</sup>	4.6 <sup>G</sup>

\*The initials following the means indicate statistically significant differences ( $p < .05$ ) between that mean and the mean of the country indicated by the initial. F= France, G= Germany, I = Italy.