Favorable and Unfavorable Target Expectancies and Social Information Processing

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The certainty engendered by expectancies and the degree to which relevant information is subsequently processed should differ depending on the expectancy’s favorability. Consistent with this proposal, the results of Experiment 1 indicated that favorable expectancies elicited more testing of the expectancy than did unfavorable expectancies and engendered greater memory performance overall. In Experiment 2 these findings were replicated, and results also showed that unfavorable expectancies led to attentional decrements in impression formation whereas favorable expectancies did not. In Experiment 3 comparable results were obtained using information (traits) that has been shown to induce confirmatory processing. Also, participants indicated that they were more cognitively engaged with the impression task when they held favorable rather than unfavorable expectancies. Finally, the findings of Experiment 4 showed that participants who held favorable expectancies did not show primacy effects in judgment, whereas participants who held unfavorable expectancies did.

Before meeting someone, people often have expectancies concerning what this person will be like. They might have been told by a colleague that the person is good and honest or that the person is antisocial and unreliable. This prior knowledge may then influence how information about this person is processed by shaping perceptions, by affecting how available information is elaborated and stored, and by influencing how information is subsequently used in judgment (e.g., Hamilton, Sherman, & Ruvolo, 1990; Snyder & Swann, 1978; Stephan, 1985). In general, the use of expectancies is thought to simplify how people process information, whereas the absence of such expectancies is thought to facilitate more systematic and careful information processing (e.g., Brewer, 1988; Fiske & Neuberg, 1990; Macrae, Milne, & Bodenhausen, 1994). In the present research we argue that even in the presence of expectancies, subsequent information processing can be systematic if the expectancies characterize the target favorably.

Examining the effects of the favorability of expectancies on social cognition is important, because the evaluative dimension is used so often in representing and responding to objects in the social world (e.g., Bargh, Chaiken, Govender, & Pratto, 1992; Gage & Cronbach, 1955; Jones & Gerard, 1967; Osgood, Suci, & Tannenbaum, 1957; Tagiuri, 1952; Zajonc, 1980). Although there is little research that has systematically compared the effects of favorable and unfavorable expectancies about a target on information processing, some available research reviewed in this article suggests that people process information in distinct ways, depending on whether the target about whom they are learning is expected to be favorable or unfavorable.

In the person perception literature, various information-processing outcomes have been linked to the occurrence of systematic or limited information processing. For example, more systematic forms of information processing lead to better memory than when processing is more limited (e.g., Craik & Lockhart, 1972; Hamilton, Katz, & Leirer, 1980; Srull, 1981). Systematic processing has also been shown to affect the extent to which people rely on cues such as primacy in rendering judgments about a target (Kruglanski & Freund, 1983; Tetlock, 1983). The question we address is, What are the consequences for how people process information about others when they expect them to be favorable or unfavorable and are then presented with additional information about them?

A Social Understanding Framework

Recently it has been proposed that people understand others’ positive and negative behaviors in very different ways and that this is a function of people’s implicit understanding of the meaning of positive and negative conduct in social environments (Ybarra, 1999b; Ybarra & Stephan, 1996, 1999). The structure of social environments is such that socially desirable behavior is typically prescribed so that people, communities, and societies can coexist successfully and with minimal conflict (cf. Thibaut & Kelley, 1959). A basic law with universal social value that guides the operation of any social system is conformity to norms (Monane, 1967). As a consequence, positive behavior tends to be enacted as people adhere to social norms and abide by social pressure (Hovland, 1961). Hence, positive behavior, although having the potential to say something about people’s dispositions, is likely to be perceived as being guided by situational demands (cf. Jones & Davis, 1965; Kelley, 1967; Lienhardt, 1964). In contrast, negative behavior breaks with the social code and often represents a desire to not conform to social prescriptions or an inability to do so. Compared with positive behavior, negative behavior says a great

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deal about the dispositional qualities of people (Berard, 1998; Reeder & Coover, 1986).

Ybarra and Stephan (1999) reviewed research in the person perception and impression formation literatures consistent with this model of social understanding. In addition, a variety of their research supports the framework. For example, research on misanthropic person memory has demonstrated that the recall of behaviors that have been explained with either dispositional or situational attributions depends on the valence of the behaviors (Ybarra, 1999a; Ybarra & Stephan, 1996; Ybarra, Stephan, & Schaberg, in press). In this research, it has been found that people recall best two types of behavior–attribution combinations, negative behaviors that are dispositionally attributed and positive behaviors that are situationally attributed. Negative behaviors that are dispositionally attributed and positive behaviors that are dispositionally attributed are not recalled as well.

In their work on behavior prediction as a function of attributional tendencies, Ybarra and Stephan (1999) have shown that people who had a dispositional orientation (had accessible information that suggested behavior is the result of dispositional factors) predicted more negative behavior from a target than did people with a situational orientation (had accessible information that suggested people's behavior is the result of situational factors). Further, people with a situational orientation predicted more positive behavior from a target than did people with a dispositional orientation. Another study showed that background information describing dispositional causes for behavior facilitated the encoding of negative behaviors to a greater degree than did background information describing situational influences on behavior. In contrast, background information describing situational influences on behavior facilitated the encoding of positive behaviors to a greater degree than did background information describing dispositional causes. These findings suggest that people have implicit causal theories regarding the meaning of positive and negative behaviors, theories that facilitate the encoding of behavior–attribution information that is consistent with them and that can be relied on for predicting behavior in targets.

Social Understanding and Target Expectancies

A framework in which negative behavior is readily understood in terms of people's dispositions, whereas positive behavior is more likely to be understood in terms of situational causes, may have implications for how people process information about social targets for whom they hold favorable or unfavorable expectancies. Because negative behavior tends to be understood in terms of dispositions (e.g., Rothbart & Park, 1986; Reeder & Spires, 1983; Wyer & Gordon, 1982, Experiment 2), this understanding might engender a sense of certainty in the perceiver; that is, to know a person's negative behavior is to "know" the person's dispositions. However, because positive behavior also tends to be understood in terms of situational demands, such an understanding may engender little certainty in the perceiver because there is a sense in which the person's qualities are not truly known (cf. Reeder & Brewer, 1979; Reeder & Coover, 1986; Berard, 1998). Having positive expectations about a target might thus induce uncertainty about such targets or at least fail to reduce the inherent uncertainty associated with perceiving others (cf. Gollwitzer & Moskowitz, 1996; Heider, 1944; Jones & Gerard, 1967).

Support for the occurrence of certainty and uncertainty as a function of a target's favorability was obtained by Rothbart and Park (1986; also see Briscoe, Woodyard, & Shaw, 1967; Reeder & Coover, 1986) in their research on the confirmability and disconfirmability of trait concepts. These investigators had participants respond to various traits by having them indicate how easy it was to imagine behaviors that would confirm (or disconfirm) the trait under consideration and also having them answer two other closely related questions. A central finding of the study indicated that people believe it takes very little information to infer that a target is unfavorable (possesses negative traits), but much more information is required to infer that a target is favorable (possesses positive traits). It appears that perceivers assume that information underlying unfavorable depictions is valid. In contrast, perceivers appear to assume that information underlying favorable depictions is less than valid.

Additional support for the idea that people's certainty or uncertainty about targets depends on the targets' favorability comes from social judgment research. Lingle and Ostrom (1979, Experiments 2 and 3) had participants judge whether different targets would be suitable for various occupations. In all of the conditions, participants were presented with job-relevant and job-irrelevant information about a job applicant. In some conditions participants learned about a favorable target, but in other conditions they learned about an unfavorable target. Participants were then asked to indicate as quickly as possible whether the target was suitable for a specific occupation. The participants' response times were shown to depend on the favorability of the target. In general, it took people longer to make judgments for favorable targets than for unfavorable targets. Related research by Yzerbyt and Leyens (1991) has also shown that when making decisions about different targets, people requested more information about favorable targets than unfavorable targets. Because longer response times when making judgments and the need for additional information indicate greater uncertainty, these findings are consistent with the idea that people are less certain about favorable than unfavorable targets.

Being uncertain about events or persons leads people to engage in more systematic information processing (Belmore, 1987; Kruglanski, 1989; Stangor & Ruble, 1989; see Gollwitzer & Moskowitz, 1996, for a review). For example, Schul, Burnstein, and Bardi (1996) have shown that when people prepare themselves to cope with potentially tainted or invalid information, they process the information systematically. People who have no reason to question the information, in contrast, process it in a more limited

1 It is important to note that the effects obtained by Lingle and Ostrom (1979) occurred in the domain of skill. It is typically assumed that in the skill or ability domain, as opposed to the morality domain, positive behavior is reflective of underlying dispositions (Reeder & Brewer, 1979; Skowronska & Carlson, 1987, 1989). On the one hand, these findings suggest that in general there is a tendency to not take at face value positive person information, whether related to ability or morality. On the other hand, it may be that if a behavior in the skill domain is directly observed by a perceiver, then a quick and certain dispositional judgment will be made. In the domain of morality, drawing dispositional judgments for positive behavior may still be less likely because morals are more hidden than are abilities. With regard to the present conceptualization, what is important is that there is a general tendency to be uncertain about positive dispositions compared with negative ones.
fashion. If it is the case that people are less certain about favorable than unfavorable targets, these findings suggest that favorable targets should induce a more systematic approach to information processing than will unfavorable targets.

In the current experiment, people were given favorable or unfavorable personality expectancies about a target and were then presented with behavioral information that was consistent or inconsistent with those expectancies. Various studies have shown that behaviors that are inconsistent with expectancies are remembered better than consistent behaviors (e.g., Hastie & Kumar, 1979; Srull, 1981). Expectancy-inconsistent information tends to be better remembered than consistent information, because perceivers attempt to reconcile the inconsistencies among the behaviors. They do this by comparing the inconsistent behaviors with other behaviors in memory (Srull, 1981; Srull, Lichtenstein, & Rothbart, 1985) and by trying to explain why such behaviors occurred (Hastie, 1984). As a result, the expectancy-inconsistent behaviors are deeply processed and establish many associative links to other information in memory, which facilitate their subsequent recall (cf. Hastie & Kumar, 1979; Srull, 1981). In addition, the multiple retrieval paths created as people reconcile inconsistencies help to yield greater memory performance overall (Srull, 1981; Srull et al., 1985).

According to the present conceptualization, the tendency toward incongruity encoding should differ as a function of target favorability. Uncertainty about a target should induce people to more actively test their expectancies by allocating more attention to inconsistencies. As Bruner, Goodnow, and Austin (1956; also see Bruner, 1957) observed, the inability to categorize a target produces tension that keeps search behavior active. Greater certainty, on the other hand, should reduce the need for such tests (cf. Belmore, 1987; Stangor & Ruble, 1989). Consequently, it was expected that incongruity encoding would be more active for a favorable target versus an unfavorable target, as people are likely to more vigorously test expectancies about which they are uncertain. These hypotheses are in line with the meta-analytic results obtained by Stangor and McMillan (1992), who found that weak expectancies (expectancies for which people should be more uncertain) tend to yield greater incongruity encoding effects, whereas strong expectancies (expectancies for which people should have greater certainty) do not tend to yield incongruity encoding effects and may even direct the perceivers toward confirmatory processing. We examined these hypotheses in Experiment 1.

**Method**

**Design and participants.** Twenty-four participants received course credit for their participation. They were randomly distributed to conditions in which they learned about either a favorable or an unfavorable target and were presented with behavioral information that was expectancy consistent and expectancy inconsistent. Thus, the design of the study was a 2 (expectancy: favorable vs. unfavorable) × 2 (behaviors: consistent vs. inconsistent) mixed-design, in which the latter factor varied within participants. The students were run in noninteracting groups of 4–6.

**Targets and behavioral information.** The participants were given information about the favorability of the target in the form of trait expectancies. Students were told that the person about whom they would be learning was much more honest (or dishonest) and friendly (or unfriendly) than average. Participants were then presented with 24 behavior statements, with half of the behavioral information being consistent and half inconsistent with the target expectancies (see Ybarra & Stephan, 1996, for pilot tests). For example, behaviors consistent with the favorable expectancies (i.e., honest and friendly) included "He was the first to ask the new employee over for dinner" and "He gave back the extra change he received at the supermarket." These behaviors were inconsistent with the unfavorable expectancies. Behaviors inconsistent with the favorable expectancies (i.e., dishonest and unfriendly) included "He didn't want to go out after work with his colleagues" and "He flattered people at the party by telling them favorable lies." These behaviors were consistent with the unfavorable expectancies. The stimuli were combined in booklets that corresponded to one of four randomization schemes. Each scheme was constrained so that one behavior from each of the four categories appeared once in each of six blocks.

**Procedure.** The participants were recruited to take part in a study on social information processing. Once at the lab, participants were given brief instructions for the impression formation task. After reading through the preliminary instructions, participants were presented with an information sheet that described the target as favorable or unfavorable through the induction of trait expectancies, and then participants proceeded with the impression formation task. The experimenter paced them through the behavioral information at 6-s intervals as they progressively developed their impressions. When the behavior presentation was completed, participants worked on an interpolated task for 5 min (labeling a map of the United States) to eliminate working memory influences on recall. Following the interpolated task, they were presented with a "surprise" recall task in which they were asked to list as many of the behaviors as they could. They were given 6 min for this task. After completing the recall task, the participants were completely debriefed.

**Results**

A judge, unaware of the experimental conditions, credited participants with recalling an item if their reproductions captured the gist of the originally presented behavior items (Hastie & Kumar, 1979; Srull, 1981). Participants' recall was submitted to a 2 (expectancy: favorable vs. unfavorable) × 2 (behaviors: consistent vs. inconsistent) mixed-design analysis of variance (ANOVA); the latter factor varied within participants. The results of the experiment are presented in Table 1.

It was suggested that uncertainty about a target should induce people to process information more systematically and to more actively test their expectancies by allocating more attention to inconsistencies, whereas greater certainty should reduce the amount of processing and the need for such tests of the expectancy (Belmore, 1987; Stangor & Ruble, 1989; cf. Bruner et al., 1956). Consequently, it was expected that participants would show greater recall of expectancy-inconsistent behaviors for the favorable targets than for the unfavorable targets. The analysis revealed a reliable interaction of expectancy and behavior type, F(1,

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<tr>
<th>Target</th>
<th>Favorable</th>
<th>Unfavorable</th>
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<tr>
<td>Expectancy-consistent</td>
<td>5.29</td>
<td>5.33</td>
</tr>
<tr>
<td>Expectancy-inconsistent</td>
<td>5.71</td>
<td>3.67</td>
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EXPECTANCY FAVORABILITY

22) = 8.06, p < .009. Consistent with the proposed asymmetry in testing favorable and unfavorable target expectancies, participants who held favorable target expectancies recalled more expectancy-inconsistent behaviors than did participants who held unfavorable expectancies, F(1, 22) = 12.39, p < .002. Expectancy-consistent behaviors were recalled at equivalent levels regardless of the valence of participants' expectancies, F(1, 22) = 1.00. In addition, participants who held favorable expectancies recalled more information (M = 11.00) than did participants who held unfavorable target expectancies (M = 9.00), F(1, 22) = 4.31, p < .02. No other effects were reliable.

Discussion

The findings of Experiment 1 suggest that a target expectancy's favorability influences how behavioral information is processed. Even though participants in all of the conditions were presented with the same behavioral information, the findings showed that favorable expectancies engendered greater incongruity encoding and better memory performance than unfavorable target expectancies. The findings support the proposal that people are more systematic in their information processing when they hold favorable rather than unfavorable target expectancies and that they are more likely to test favorable than unfavorable expectancies, presumably because they are more uncertain when they are learning about a favorable target compared with an unfavorable target.

Experiment 2

Previous research in person memory has shown that efforts to test expectancies are attenuated when the expectancy comprises multiple traits. For example, Hamilton, Driscoll, and Worth (1989, Experiment 1) found that when participants were given expectancies composed of three traits, their memory for the expectancy-consistent and -inconsistent behaviors tended to be equivalent, but when they were provided with only a single trait expectancy (Experiment 2), their memory favored expectancy-consistent information. In Experiment 1 of the current research, participants were provided with multitrait expectancies (e.g., honest and friendly or dishonest and unfriendly). It could thus be argued that the use of multitrait expectancies did not provide an adequate test of the proposed asymmetry in expectancy testing because it impaired the incongruity encoding process. To address this potential concern, we conducted an experiment in which participants were given expectancies composed of a single trait. In so doing, incongruity encoding would be allowed to emerge as a general process across expectancy conditions.

In addition to modifying the expectancy with which participants were provided, we made two other changes to the procedure. First, in addition to learning expectancy-consistent and -inconsistent behavioral information about the target, participants were also provided with neutral behavioral information. This was done to further examine people's propensity to test or confirm an expectancy. Specifically, expectancy-neutral behaviors should be irrelevant to either process, so participants should be less likely to process them differentially as a function of expectancy favorability. Further, neutral behaviors should be the most poorly remembered, as previous person memory research has shown (e.g., Hastie & Kumar, 1979; Srull, 1981). Finally, to further assess the proposal that people are more uncertain about a target when they hold favorable expectancies and more certain about a target when they hold unfavorable expectancies, we categorized participants' recall by whether it was learned early or late in the presentation. It was expected that the greater certainty engendered by an expectancy, the more likely participants would show attention decrements over the course of the impression (Jones & Goethals, 1972).

Method

Design and participants. Fifty participants, who received course credit for their participation, were randomly distributed to conditions under which they learned about either a favorable or an unfavorable target and were then presented with behavioral information that was consistent, inconsistent, or neutral with respect to the expectancy. Thus, the design of the study was a 2 (expectancy: favorable vs. unfavorable) × 3 (behaviors: consistent, inconsistent, neutral) mixed design, in which the latter factor varied within participants. The students were run in noninteracting groups of 4–6.

Manipulations and procedure. For the target expectancies, participants were presented with the same descriptions used in Experiment 1. However, in this experiment the favorable expectancy only consisted of the trait honest, whereas the unfavorable expectancy only consisted of the trait dishonest. Participants were then presented with 21 behavior statements, one third of which were consistent, one third were inconsistent, and one third were neutral with respect to the expectancy. The expectancy-consistent and -inconsistent behaviors were taken from those used in Experiment 1, with the addition of 1 consistent and I inconsistent behavior taken from the Hastie (1977) behavior lists. The 7 neutral behaviors neither confirmed nor disconfirmed the expectancy and were also taken from Hastie (1977). Examples of the neutral behaviors included "He rode the elevator to the third floor" and "He ordered a cheeseburger for lunch." The stimuli were combined in booklets that corresponded to one of three randomization schemes. Each scheme was constrained so that one behavior from each of the three categories appeared once in each of seven blocks. The remaining aspects of the procedure were the same as those of Experiment 1.

Results

The same recall-scoring procedure used in Experiment 1 was used in this experiment. It was expected, similar to the previous experiment, that participants would be more likely to test a favorable than an unfavorable expectancy, resulting in greater expectancy-inconsistent recall in the former case than in the latter case. Because expectancy-neutral behaviors are less relevant, if not irrelevant, to testing an expectancy, it was expected that there would be no difference in participants' recall of neutral behaviors as a function of expectancy condition. The recall data were submitted to a 2 (expectancy: favorable vs. unfavorable) × 3 (behaviors: consistent, inconsistent, neutral) mixed-design ANOVA, in which the latter factor varied within participants. The results of the experiment are presented in Table 2. The analysis yielded a main effect for type of behavior recalled, F(2, 47) = 9.69, p < .0003. Consistent with previous research (Hastie & Kumar, 1979; Srull, 1981), neutral behaviors (M = 4.84) were recalled to a lesser extent than expectancy-consistent behaviors (M = 6.00), F(1, 49) = 7.55, p < .008, and expectancy-inconsistent behaviors (M = 6.66), F(1, 49) = 17.67, p < .0001. Of greater interest, the interaction of expectancy and type of behavior recalled emerged as a reliable effect, F(2, 47) = 7.51, p < .001. Similar to the findings obtained in Experiment 1,
Table 2

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<tr>
<th>Behaviors</th>
<th>Favorable</th>
<th>Unfavorable</th>
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<tbody>
<tr>
<td>Expectancy-consistent</td>
<td>2.90</td>
<td>3.10</td>
</tr>
<tr>
<td>Expectancy-inconsistent</td>
<td>3.96</td>
<td>2.70</td>
</tr>
<tr>
<td>Neutral</td>
<td>2.52</td>
<td>2.32</td>
</tr>
<tr>
<td>Overall recall</td>
<td>9.38</td>
<td>8.12</td>
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participants who held a favorable expectancy recalled more expectancy-inconsistent behaviors than did participants who held an unfavorable expectancy, \(F(1, 48) = 16.43, p < .0002\). However, the expectancy-consistent behaviors were recalled at statistically equivalent levels for the favorable and unfavorable expectancies, \(F(1, 48) < 1.00\). Neutral behaviors were also recalled to a similar extent for the favorable and unfavorable expectancies, \(F(1, 48) < 1.00\). Also replicating Experiment 1, participants who held favorable expectancies about the target recalled more behaviors (\(M = 9.38\)) than did participants who held unfavorable expectancies about the target (\(M = 8.12\), \(F(1, 48) = 3.21, p < .04\), one-tailed.

If people are more uncertain about favorable than unfavorable targets, it was expected that participants who held favorable expectancies would not show attention decrements over the course of the impression, whereas participants who held unfavorable expectancies would. To examine this hypothesis, we classified participants’ recall as primacy or recency recall. The behaviors recalled from the first three blocks of the presentation were classified as primacy recall, whereas behaviors from the last three blocks of the presentation were classified as recency recall. Block 4, which fell between the first three and last three blocks, was classified as neither primacy nor recency and removed from the analysis. Recall for Block 4 was slightly higher for the favorable (\(M = 1.24\)) than for the unfavorable expectancies (\(M = 1.06\)).

Previous research has found that information learned earlier in a presentation receives more attention and is better remembered than information learned later in a list (Anderson & Hubert, 1963; Belmore, 1987; Hendrick & Costantini, 1970; Stewart, 1965). For the unfavorable target, participant memory for the behaviors learned later in the list (\(M = 2.90\)) was reliably less than participant memory for the behaviors learned in the first part of the list (\(M = 4.16\), \(F(1, 24) = 11.61, p < .002\). However, for the favorable target, although participant memory for later learned behaviors was less (\(M = 3.60\)) than for earlier learned behaviors (\(M = 4.50\)), the memory difference did not reach conventional levels of significance, \(F(1, 24) = 3.22, p < .085\). Thus, participants who held unfavorable target expectancies showed a reliable attention decrement over the course of their impressions, whereas participants who held favorable expectancies did not.

Discussion

Experiment 2 was conducted to address a potential concern with regard to the nature of the expectancies used in Experiment 1. Even after the number of traits composing the expectancies with which participants were presented was reduced, the findings of Experiment 2 replicated those of Experiment 1. Favorable target expectancies resulted in greater incongruity encoding and overall memory than did unfavorable target expectancies. In addition to the replication of the previous experiment, analysis of participants’ memory for behaviors learned early or later in the presentation indicated that there was a reliable decrement in memory from early to later learned information for participants who held unfavorable expectancies, but this was not the case for participants who held favorable expectancies. Taken as a whole, these three indexes converge in further support of the present conceptualization suggesting that people are more uncertain about favorable than unfavorable targets, which leads them to test the expectancy and process information about the favorable targets in a systematic manner. In contrast, people appear to have greater certainty about unfavorable targets, which leads them to test their expectancies and process information relevant to unfavorable targets in a more limited fashion.

Experiment 3

The findings of Experiment 1 indicated that when using multi-trait expectancies, expectancies which have been shown to reduce incongruity encoding, participants showed greater incongruity encoding when they held favorable compared with unfavorable expectancies. This same asymmetry was obtained in Experiment 2 when the expectancies were altered to induce more incongruity encoding or testing of the expectancies. To further examine the efficacy of the current conceptualization, we conducted a third experiment using stimuli that have been shown to promote confirmatory processing. It was reasoned that if people are more apt to test favorable than unfavorable expectancies because they are more uncertain about the former than the latter, these different approaches to the information should remain regardless of the nature of the available information to be processed.

Previous research has shown that when people are presented with trait information instead of behavioral information to form their impressions of targets, they tend to show a memory advantage for expectancy-consistent information. Few person memory studies have used trait information, but a meta-analysis of person memory research has found evidence for the congruity-encoding tendency engendered by trait information (Stangor & McMillan, 1992). Although the explanation for the trait-congruity effect is not completely clear, one general idea is that traits, unlike behaviors, require less processing to extract the trait information. The trait implications of traits should be apparent! Because of this reduced elaboration, expectancy-inconsistent traits need not be deeply elaborated on to be understood, thus undermining the process by which expectancy-inconsistent information comes to enjoy an advantage in memory (Stangor & McMillan, 1992). It is not clear from this formulation, though, why expectancy-consistent traits should enjoy a memory advantage over expectancy-inconsistent traits.

According to the present analysis, the factor that determines whether people test some expectancies more than others is expectancy favorability. Although it cannot be denied that trait information differs from behavioral information, the present analysis should apply to trait information as well. Whether the information people subsequently process is composed of behaviors or traits, people’s uncertainty for favorable targets should not be assauged
by changing the form of the information they are asked to process. Thus, if it is people’s greater uncertainty about favorable versus unfavorable expectancies that is causing the asymmetry in the testing of the expectancies, participants should show greater incongruity encoding for favorable versus unfavorable targets, even when the information is composed of traits. However, if the asymmetry in incongruity encoding is in some manner linked to the nature of the stimulus information, it might be expected that processing trait information would eliminate incongruity encoding and, potentially, the processing differences between participants who hold favorable and unfavorable expectancies.

To provide further evidence for the current analysis, we also assessed how cognitively engaged participants were with the impression formation task. It is posited in the present conceptualization that people’s greater uncertainty when they hold favorable rather than unfavorable expectancies leads them to more systematically process information in the former set of conditions. This is reflected in the various dependent measures assessed in the previous two experiments. It was thus expected that if people are indeed more uncertain about favorable than unfavorable targets, they would judge themselves to be more engaged in the information-processing task in the former than in the latter condition.

Method

Design and participants. Thirty-eight participants were given course credit for their participation and were randomly distributed to conditions in which they learned about either a favorable or an unfavorable target. They were then presented with expectancy-consistent and —inconsistent traits to form their impressions. Thus, the design of the study was a 2 (expectancy: favorable vs. unfavorable) × 2 (traits: consistent vs. inconsistent) mixed design, in which the latter factor varied within participants. All of the students were run in noninteracting groups of 4–6.

Manipulations and procedure. The same single-trait target expectancies (honest or dishonest) used in Experiment 2 were used in this experiment. Participants were then presented with 14 traits, half of which were consistent and half of which were inconsistent with the expectancies. Interspersed throughout the list of the expectancy-consistent and inconsistent traits were an additional 7 filler traits. Examples of the traits consistent with the favorable expectancy (and thus inconsistent with the unfavorable expectancy) included principled, ethical, and moral. Examples of the traits inconsistent with the favorable expectancy (and thus consistent with the unfavorable expectancy) included corrupt, conniving, and fraudulent. Examples of the filler traits included mild, healthy, and calm. Judgments of the traits’ consistency with the expectancies were collected in a pilot test (n = 10) using a scale that ranged from 1 (very inconsistent) to 9 (very consistent). These responses were submitted to a 2 (expectancy: favorable vs. unfavorable) × 2 (traits: consistent vs. inconsistent) mixed design ANOVA, in which the latter factor varied within participants. The analysis yielded a main effect for consistency, F(1, 8) = 154.53, p < .0001. Participants judged the expectancy-consistent traits to be consistent (M = 7.81) and the expectancy-inconsistent traits to be inconsistent (M = 1.60) regardless of the expectancy. No other effects were reliable.

The stimuli were combined in booklets that corresponded to one of three randomization schemes. Each scheme was constrained so that one trait from each of the three categories appeared once in each of seven blocks. The remaining aspects of the procedure were the same as those of Experiment 1, save for a judgment task that was presented to participants after they completed the surprise recall task. For this task, participants were asked to indicate how “engaged” they had been with the impression formation task and how “boring” they had found the task to be. These judgments were made on 7-point scales anchored by 1 (not at all) and 7 (very much). Participants were then debriefed, given credit, and thanked for their participation.

Results

Recall of the traits was scored using a strict criterion. Participants had to recall the trait verbatim to be given credit for recalling it. It was expected, similar to the previous experiments, that participants would be more likely to test a favorable than an unfavorable expectancy, resulting in greater expectancy-inconsistent recall in the former than in the latter condition. The trait-recall data were submitted to a 2 (expectancy: favorable vs. unfavorable) × 2 (traits: consistent vs. inconsistent) mixed-design ANOVA, in which the latter factor varied within participants. The results of the experiment are presented in Table 3. The analysis yielded the interaction of expectancy and type of traits recalled, F(1, 36) = 12.71, p < .001. Similar to the findings obtained in Experiments 1 and 2 for behavioral information, participants who held a favorable expectancy recalled more expectancy-inconsistent traits than did participants who held an unfavorable expectancy, F(1, 36) = 18.88, p < .0001. However, the expectancy-consistent traits were recalled at statistically equivalent levels for the favorable and unfavorable expectancies, F(1, 36) < 1.00. Also replicating Experiments 1 and 2, participants who held favorable target expectancies recalled more traits (M = 5.16) than did participants who held unfavorable target expectancies (M = 3.74), F(1, 36) = 7.33, p < .01.

Previously reviewed research is consistent with the notion that people are more uncertain about favorable than unfavorable targets. For example, Lingle and Ostrom (1979, Experiments 2 and 3) found that it took people longer to make a decision about a favorable target than an unfavorable target. Other research by Yzerbyt and Leyens (1991) showed that people requested more information before making a decision about a favorable target than an unfavorable target. In both of these examples, people appear to be more cognitively engaged when processing information about the favorable target compared with the unfavorable target.

In line with the above findings, if people are more uncertain when they hold favorable expectancies compared with when they hold unfavorable expectancies and are thus processing information more systematically in the former than in the latter conditions, it would be expected that participants who held favorable expectancies would be more cognitively engaged with the impression task than would participants who held unfavorable expectancies. To examine this hypothesis, we added together participants’ responses to the two questions (“To what extent did you find the task of forming an impression of John to engage your interest?” and “To what extent did you find the task of forming an impression of John...
to be boring?”) after reverse scoring the latter item. The two items were highly correlated, $r(37) = .76$. Thus, the greater the score, the more cognitively engaged participants judged themselves to be with the impression task. Consistent with the hypothesis, the analysis revealed a difference between expectancy conditions, $F(1, 36) = 4.26, p < .04$. Participants who held favorable expectancies ($M = 7.89$) judged themselves to be more engaged with the impression task than did participants who held unfavorable expectancies ($M = 6.05$).

Discussion

Experiment 3 was conducted to examine the efficacy of the present conceptualization by testing it under conditions in which congruity encoding has been shown to predominate. First, no overall congruity effect was found, as opposed to what was suggested by previous research (e.g., Stangor & McMillan, 1992). However, even when participants were asked to process trait information, an asymmetry in testing the expectancies emerged. Expectancy-inconsistent recall predominated when participants held favorable rather than unfavorable expectancies. These findings are conceptually equivalent to those obtained in Experiments 1 and 2. Further, the findings suggest that the present conceptualization provides a more general framework for bringing together disparate person memory findings. Specifically, although previous research (e.g., Stangor & McMillan, 1992) has shown that behaviors tend to lead to incongruity encoding when people possess simple but not complex expectancies (Hamilton et al., 1989) and that the processing of traits tends to lead to incongruity encoding, the present findings suggest that regardless of the multitrait nature of the expectancies and the nature of the information that is processed, what seems to play a major role in determining how people process information is the favorability of their expectancies.

Additional results from the experiment indicated that participants who held favorable expectancies were more cognitively engaged with the impression task than were participants who held unfavorable expectancies. Together, these findings add to the evidence indicating that people are more apt to process information systematically when they hold favorable rather than unfavorable expectancies, because they are more uncertain about favorable than unfavorable targets.

Experiment 4

The goal of Experiment 4 was to provide further evidence for the present conceptualization by using an order effects paradigm. People’s judgments can be influenced by the nature of the information first received about a target. Specifically, people’s impressions of targets tend to be positive when the first items processed about the target are positive in valence but negative when the first items processed are negative in valence (e.g., Asch, 1946). An important determinant of such primacy effects is the extent to which people process information about a target. For example, Kruglanski and colleagues (Freund, Kruglanski, & Shpitzajzen, 1985; Heaton & Kruglanski, 1991; Kruglanski & Freund, 1983; also see Tetlock, 1983) have reasoned that if people limit their information processing (i.e., freeze on a hypothesis), they are likely to use the first pieces of information about a target as cues on which to base subsequent judgments. However, if people have not frozen on a hypothesis regarding the nature of the target, they are less likely to rely on cues such as those provided by primacy information and instead are likely to elaborate and consider more of the available information. Kruglanski and colleagues have found considerable support for their model: People who have frozen on a hypothesis tend to show primacy in their impression judgments, whereas perceivers who have not frozen on a hypothesis show attenuated or no primacy effects in judgment (Freund et al., 1985; Heaton & Kruglanski, 1991; Kruglanski & Freund, 1983).

Consistent with the work on lay epistemics (Kruglanski, 1989), Jones and Goethals (1972), in reviewing the order effects literature, found that if a person is committed to an initial characterization of a target, that person is more likely to show primacy effects and assimilate subsequent information toward his or her judgment. However, the more unstable the characterization of the target, the less pressure there will be toward primacy. Consistent with the present conceptualization, both of these observations converge to suggest that if people are uncertain about favorable targets, they should avoid closure because they have an unstable characterization (as provided in the expectancy information) for such a target. Thus, it would be expected that people who hold favorable expectancies for targets would not show primacy effects in judgments. In contrast, if people are more certain about their unfavorable expectancies for targets, they should seek closure because they should be committed to the initial characterization of the target. As a consequence, it would be expected that people who hold unfavorable expectancies would show primacy effects in judgment. Experiment 4 was conducted to test these hypotheses.

Method

Design and participants. Forty-four students participated in the experiment and were randomly distributed to conditions in which they learned about either a favorable or an unfavorable target. All of the participants received the same positive and negative behavioral information. However, half of the participants learned the positive behavioral information about the target first, whereas the other half learned the negative behavioral information first. Thus, the design of the experiment was a 2 (expectancy: favorable vs. unfavorable) × 2 (primacy information: positive vs. negative) between-participants factorial. All of the students were given course credit for their participation and were run in noninteracting groups of 4–6.

Manipulation of target favorability. The expectancy manipulation for the target person’s favorability involved reading a brief description about the target. The description read as follows:

You will be presented with a list of behaviors. Each of these behaviors was performed by the same person. The person you will be learning about is basically a good [bad] person. People who know this person have a very favorable [unfavorable] impression of him. They find this person to be pleasant [unpleasant], never offensive [offensive], competent [incompetent], capable [incapable], and upright [corrupt].

Behavioral information and primacy manipulation. The behavioral information presented to participants consisted of 20 behaviors taken from Hastie (1977). Similar to other research (e.g., Heaton & Kruglanski, 1991), half of the behaviors were positive and half were negative. The behaviors were related to five trait categories (i.e., cynical, intelligent, honest, friendly, conscientious). For example, for the trait category cynical, the negative behaviors included “He ridiculed the idealistic boy scouts” and “He looked for ulterior motives in the charity.” Examples of the positive
behaviors included "He bought the old-fashioned dance records" and "He was depressed by the sad play." Two additional filler behaviors were given at the beginning of the presentation, and two were given at the end of the presentation. The behaviors were collected in booklets. Primacy was manipulated such that some participants first received all of the positive behaviors about the target then the negative behaviors, whereas the other participants first received the negative behaviors then the positive behaviors. Within both halves of the behavior presentation, the behaviors conformed to one of four randomization schemes so that the different behaviors occurred in different blocks during the presentation.

Procedure. Participants were recruited to take part in a study on social information processing. Participants were given brief instructions for the impression-formation task. After they read through the preliminary instructions, students were presented with the target favorability expectancy manipulation. Once they read through the target favorability induction, participants proceeded to form their impressions by reading through booklets that contained the different behaviors, turning pages at 8-s intervals. After completing the impression-formation task, participants rendered judgments of the target's personality. The judgments were composed of five trait ratings that were related to the categories of information presented in the behavioral stimuli (i.e., cynical, intelligent, honest, friendly, conscientious). The scale participants used to make the judgments ran from 1 (not at all) to 7 (very) for the five trait categories. After rendering their impression judgments, participants were completely debriefed.

Results

A composite score of the five trait judgments was calculated for each participant, and reverse scoring was used where necessary (higher numbers indicated greater favorability). Despite the variety of trait dimensions being judged, the score was relatively coherent (Cronbach's α = .61). The composite score was then submitted to a 2 (expectancy: favorable vs. unfavorable) × 2 (primacy information: positive vs. negative) between-participants factorial ANOVA. The results of the experiment are presented in Table 4. The analysis yielded a main effect of primacy information, F(1, 40) = 9.07, p < .004. This effect indicates that the positive primacy information (M = 4.44) produced more favorable judgments than the negative primacy information (M = 3.81). The main effect for expectancy was marginally reliable, F(1, 40) = 3.20, p < .08, indicating that the positive expectancy condition (M = 4.31) yielded more favorable judgments than the negative expectancy condition (M = 3.94).

The main effects were qualified by the interaction of the two factors, F(1, 40) = 4.57, p < .03. When we compared the two conditions involving the unfavorable target, we found participants' judgments were significantly affected by the first pieces of information they processed. Participants who learned positive primacy information about the unfavorable target yielded more favorable judgments than did participants who learned negative primacy information about the unfavorable target, F(1, 20) = 21.30, p < .0002. Thus, participants learning about an unfavorable target used the available cues and yielded judgments in the direction of the favorability of the primacy information. In contrast, for participants learning about a favorable target, the judgments of participants who received negative primacy information did not differ from those of participants who received positive primacy information, F(1, 20) < 1.00. Participants who learned about a favorable target were not affected by the primacy information; that is, they did not make judgments in the direction of the favorability of the first pieces of information.

Discussion

The findings of Experiment 4 parallel those of other researchers (Freund et al., 1985; Heaton & Kruglanski, 1991; Kruglanski & Freund, 1983), demonstrating that conditions under which people are not apt to systematically process information yield primacy effects in judgment, in contrast to the lack of primacy effects produced under conditions where information processing is more systematic. The findings are also in line with the observations of Jones and Goethals (1972), who suggested that when people are more certain about a target characterization they are more likely to show primacy effects in judgment than when they are uncertain of their characterization of the target. As a whole, the results of Experiment 4, along with those of the previous three experiments, indicate that favorable targets induce more systematic information processing than unfavorable targets, apparently because people are more uncertain about targets for whom they hold favorable versus unfavorable expectancies.

Our results in Experiment 4 bear a resemblance to the findings obtained by Schul and Burnstein (1998). These researchers found that participants who were uncertain about the descriptions of a target showed no primacy in judging the target, whereas participants who were certain about the descriptions of the target produced judgments in the direction of the primacy information. In terms of expectancy favorability, the findings of Experiment 4 are also consistent with the findings obtained by Carlson (1971), who found that when selecting potential job applicants, people showed primary effects for negatively but not positively described persons.

General Discussion

People's uncertainty about favorably described targets and certainty about unfavorably described targets is understandable given the structure of most social environments. People are seen as motivated to adapt to social demands (pressures, rewards, etc.; Homans, 1961), and conformity to social requirements is a socially valued principle that underlies the functioning of any social system (Monane, 1967). A favorable person's conduct, although having some potential for providing information about the person's dispositional qualities, may be more reflective of the social norms and pressures that encourage behaving favorably. The occurrence of negative behavior often reflects a violation of social conventions and thus provides a window to the true nature of a target's dispositional qualities (Jones & Davis, 1965; cf. Jones, Davis, & Gergen, 1961; Kanouse & Hanson, 1972; Kelley, 1967; Marston, 1976; Ybarra & Stephan, 1996, 1999). The present research suggests that this social understanding framework is useful in predict-

<p>| Table 4 |</p>
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<th>Composite Impression Judgments as a Function of Target Favorability and Primacy Information</th>
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ing how people process information about targets for whom they hold favorable and unfavorable expectancies. Target expectancies reflect behavioral tendencies, which appear to map onto people's implicit understanding of the occurrence of positive and negative conduct in social environments (Ybarra & Stephan, 1999).

The present findings appear to contrast with some of the ideas put forth by Gilbert (1991) on automatic believing. According to Gilbert's conceptualization, when people take information from the environment, their automatic response is to believe it, even if that information is false. Only subsequently, through a more controlled mechanism, can those items be rejected if necessary. However, because this more controlled mechanism depends on cognitive resources, if the person is under cognitive strain he or she will not be able to reject false information that had been previously processed.

The present research, along with previously reviewed research in person perception, suggests that automatic believing may not always characterize people's way of thinking about social targets (cf. Schul et al., 1996). If people believe everything about everybody, they should be equally certain about a target regardless of whether that target is expected to be favorable or unfavorable. However, the present research and that of Ybarra and Stephan (1999) indicate that people are more certain about unfavorable than favorable targets and their behavior. It seems unlikely that people automatically believe positive things about others, but they may be quite predisposed to quickly believe the negative things (cf. Rothbart & Park, 1986). Interestingly, research by Gilbert, Tafarodi, and Malone (1993) appears to be consistent with the current perspective. In this research (Experiment 1; also see Experiment 3), the investigators found that people's use of false positive information for judgments about a target was the same whether participants were under cognitive strain or not. According to Gilbert's (1991) model on automatic believing, cognitive strain should have inhibited people from rejecting this false information. In this particular case, the false positive information should have led to fewer negative judgments of the target. It appears that people did not automatically believe the positive information they were presented with (cf. Lingle & Ostrom, 1979; Yzerbyt & Leyens, 1991). Hence, although people appear to be predisposed to believe certain types of information (e.g., negative person information), they appear to be quite careful and even skeptical in their approach to favorable person information.

The current findings can be distinguished from recent research on target entitativity (hereafter referred to as coherence), which refers to the degree to which a target is perceived as having an essence and being a unified and integral entity (Campbell, 1958). Research in this area has shown that coherence affects the extent to which information is processed (Hamilton & Sherman, 1996). For example, high-coherence targets yield greater participant memory performance than lower coherent targets do. In addition, high-coherence targets also produce primary effects in information processing to a greater extent than low-coherence targets do (e.g., McConnell, Sherman, & Hamilton, 1997).

In the current research, favorable targets yielded greater participant memory performance than did unfavorable targets. However, unfavorable targets led to greater primacy effects in information processing. These results contrast with those obtained in the entitativity literature. In that research, the same target (high in coherence) led to both greater recall and greater primacy in information processing. One potential resolution to this discrepancy is to suggest that in the entitativity literature participants have expectancies only for the target's coherence (high or low) but not the target's personality. Thus, their impression formation is likely to be very bottom-up in terms of the target's personality. Under such conditions, a target with high coherence may be more likely to yield better participant memory performance and primacy effects. It would be of interest and potential theoretical significance to examine coherence effects when participants also hold favorable and unfavorable expectancies for the target.

The current analysis may be best suited to situations in which people hold preliminary rather than strong expectancies for a target. For example, if people have had the opportunity to further develop favorable expectancies and have come to trust the person, they may have little need to be uncertain about the subsequent information they receive. Interestingly, though, if people are prone to test favorable expectancies, they may be less likely to carry on future interactions with such targets if their additional efforts at testing the expectancies yield potentially disconfirming evidence. Previous research has shown that disconfirming evidence has a disproportionately damaging effect on positive compared with negative expectancies (Briscoe, Woodyard, & Shaw, 1967; Reeder & Coovert, 1986; Richey, McClelland, & Shimkunas, 1967; Ybarra, 1999b).

A related issue that should be investigated in subsequent research has to do with whether expectancy favorability has the same effects if the expectancies do not concern morality. In the morality domain, negative information is more diagnostic of underlying dispositions than is positive information, because any person, moral or immoral, can enact positive behaviors. In the ability domain, the nature of the diagnostically appears to be reversed. In this domain, positive performances are more indicative of underlying dispositions than are negative performances, because even a person with high ability can have an off day, but a low-ability person is less likely to turn in a good performance (see Reeder & Brewer, 1979; Skowronski & Carlson, 1989). In the present research, the expectancies concerned morality and not ability. Thus, given the present conceptualization, it makes sense that people are more uncertain about a favorable versus an unfavorable target because, in terms of morality, most people are expected to behave positively. However, it is important to note (see also Footnote 1) that other researchers (Carlson, 1971; Lingle & Ostrom, 1979; Yzerbyt & Leyens, 1991) have found that even when people process ability-related information, results consistent with the present framework have been obtained. Thus, the point may be that most people may be expected to try to present themselves in a favorable way in terms of both their morality and their abilities, and this understanding induces the social perceiver to be more skeptical of positive than negative targets.

It is important to note that the present research may better capture Western (e.g., American) than Eastern (e.g., Asian) tendencies in social perception. Westerners have a predilection for wanting to understand others in terms of dispositions. Easterners, in contrast, although interested in dispositional information, emphasize the situations in which people conduct themselves when trying to understand people's behavior (Miller, 1984; Morris & Peng, 1994; Ybarra & Stephan, 1999). Because Westerners may be motivated to a greater degree to uncover the nature of a person's disposition, they may be prone to be uncertain about a favorable
target because it is more difficult to make dispositional judgments about them (Lingle & Ostrom, 1979; Reeder & Brewer, 1979; Reeder, Henderson, & Sullivan, 1982; Rothbart & Park, 1986; Skowronski & Carlston, 1987, 1989; Yzerbyt & Leyens, 1991). In contrast, Easterners may not be as motivated by the goal of determining the nature of a person’s dispositions, so they may be less certain about a target whose behavior reflects social convention. They may even have a sense of certainty about such targets, for instance, that such a target did not engage in positive behaviors for dispositional reasons.

Finally, although quite speculative, it is of interest to relate the present findings and the underlying conceptualization to the notion of cheater detection. Evolutionary psychologists have argued that it is adaptive for people to detect others in the environment who may defect from social contracts to avoid exploitation. Available research has shown that people are quite good at solving logic tasks that are framed in terms of cheater detection (Cosmides, 1989; Gigerenzer & Hug, 1992) and that cheaters are more likely to be recognized than noncheaters in a memory task (Mealey, Daood, & Krage, 1996; Oda, 1997). Social cognition research (Pratto & John, 1991) has also shown that people are quite sensitive to the negative characteristics of others, and much early research in person perception indicated that people tended to weight negative information about others more heavily than positive information in their judgments (see Kanouse & Hanson, 1972, for a review; also see Reeder & Covert, 1986). All of this research suggests that people are sensitive to the occurrence of cheating or characteristics which may be associated with cheating.

The image that emerges from this research, though, is that of a perceiver who passively responds to negative occurrences and negative behaviors from others. The image is not one in which the perceiver is actively trying to detect cheaters. The present research may help in this regard. For example, noting bad behavior should be relatively easy because such behavior breaks with social conventions. However, because most behavior displayed in most social systems is socially desirable, a person who behaves positively or who is expected to behave positively maintains the potential to be a cheater, whereas a person who has transgressed is already characterized as such. Thus, it would be potentially adaptive to process information more systematically and to test expectancies to a greater degree for a supposed favorable other than for an unfavorable other, as the present findings have shown. This makes sense given that successful cheating relies on concealing the trait or tendency to cheat (Harpending & Sobus, 1987). Thus, it may be useful to think of cheater detection as having at least two components, one component that is sensitive to the actual occurrence of cheating and one component that keeps perceivers from becoming prematurely committed to positive characterizations of others in the environment.

In conclusion, it is emphasized that a basic way of characterizing social targets is to regard them as favorable or unfavorable. The present research suggests that a framework based on people’s implicit understanding of others’ positive and negative behaviors is useful in considering how they will process information about targets for whom they hold favorable or unfavorable expectancies. Favorable and unfavorable expectancies about others induce greater or lesser certainty in people, an outcome which has direct consequences for how thoughtful people will be when confronted with additional information about targets.

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