

---

# The Role of Contextual Constraints and Chronic Expectancies on Behavior Categorizations and Dispositional Inferences

Gifford Weary  
Darcy A. Reich  
Stephanie J. Tobin  
*Ohio State University*

---

*The authors examined the roles of chronic expectancies and other contextual information in the dispositional inference process within the domain of ability judgments. Prior to viewing a videotaped performance under either cognitive load or no load, participants in Studies 1 and 2 were given additional information designed to constrain their categorizations of the performance. In Study 2, chronic future-event expectancies also were assessed. Analyses revealed that when under cognitive load, participants' ability inferences were assimilated to the constraint information (Studies 1 and 2) and to chronic expectancies (Study 2). Furthermore, Study 2 analyses revealed that these effects were mediated by participants' behavior categorizations. Evidence suggestive of a proceduralized form of correction for task difficulty (Studies 1 and 2) and an effortful, awareness-based correction for the constraint information and for chronic expectancies also was found. Results are examined in light of recent models of the dispositional inference process.*

---

When extracting information about others' enduring dispositions from their behavior, perceivers may have access to a vast array of contextual cues, including prior information about the target, situational information, and event-outcome information. Perceivers also have at their disposal knowledge structures, such as schemas and stereotypes, as well as naïve theories about such things as the malleability of traits (Dweck, Chiu, & Hong, 1995) and trait-behavior relations (Reeder & Brewer, 1979). With so many potential influences on the social inference process, researchers are faced with the intriguing and complicated task of trying to determine how these factors interact to influence the dispositional inferences perceivers make about others.

One of the most frequently rendered and consequential dispositional judgments we make about others concerns their levels of ability. In the current research, we explored the impact of prior behavior category information and chronic expectancies, the use of situational information, and the mediational role of behavior categorizations in the process of drawing inferences about another's ability. We especially were interested in examining the mechanisms through which chronic expectancies exert their biasing impact on dispositional inferences (Reich & Weary, 1998). Do chronic, generalized future-event expectancies guide dispositional inferences by first steering perceivers toward a particular initial interpretation of another's behavior? If so, are perceivers able to fully correct both their categorizations of the behavior and their dispositional inferences for the effects of such expectancies when they have the cognitive resources and motivation necessary to do so?

---

**Authors' Note:** This research was supported in part by a National Science Foundation research grant (SBR-9631858) awarded to Gifford Weary and also by National Institute of Mental Health training grant (T32-MH19728) fellowships awarded to Stephanie J. Tobin and Darcy A. Reich. We thank John A. Edwards, William von Hippel, and Aaron Wichman for their helpful comments on an earlier version of this article. We also thank Tom Gilovich and two anonymous reviewers for their insightful comments on an earlier version. A partial report of the data for Study 1 was presented by Darcy A. Reich at the 1997 Graduate Research Forum at Ohio State University. A partial report of the data for Study 2 was presented by Gifford Weary at the 1998 American Psychological Association convention as part of her Division 8 Presidential Address. Correspondence concerning this article should be addressed to Gifford Weary, Department of Psychology, Ohio State University, 1885 Neil Avenue, Columbus, OH 43210; e-mail: [weary.1@osu.edu](mailto:weary.1@osu.edu).

*PSPB*, Vol. 27 No. 1, January 2001 62-75

© 2001 by the Society for Personality and Social Psychology, Inc.

Answers to such questions might both extend and challenge current models of the process by which perceivers transform social information into dispositional inferences. Before delving into such questions, however, it might be useful to examine current theory and research pertaining to the dispositional inference process.

*STAGE MODELS OF THE  
SOCIAL INFERENCE PROCESS*

Although differing in important ways, the current models of the social inference process (Gilbert, Pelham, & Krull, 1988; Trope, 1986) generally suggest that when making dispositional judgments, perceivers typically progress through a series of stages. More specifically, they propose that perceivers first categorize a behavioral event in terms of attributionally relevant categories (e.g., a successful performance). Because the default inferential goal often is a dispositional one (cf. Krull, 1993), perceivers next make a correspondent inference about the target's disposition (e.g., he is an intelligent person) and adjust this inference for other factors that might have contributed to the target's behavior (e.g., an easy or difficult task).

The models also suggest that these stages differ in their cognitive resource requirements (Gilbert et al. 1988; Trope, 1986). All state that the early stages of behavior categorization and initial characterization of the target in dispositional terms require relatively few cognitive resources and, therefore, occur relatively automatically. As a result, these stages are thought to be less vulnerable to disruption by factors that affect perceivers' ability and motivation to process. They may be susceptible, however, to influence by a variety of salient contextual cues and by perceivers' prior and accessible knowledge of the target and the situation.

That such contextual and prior information may alter the outcome of the early stages of the inference process recently has been demonstrated by Trope and his colleagues (see Trope & Gaunt, 1999, for a review). In one study, for example, Trope and Alfieri (1997) found that knowledge of existing situational pressures impinging on targets appeared to assist perceivers at an automatic, implicit level in narrowing the range of their possible behavior categorizations and target characterizations. Specifically, they found that both participants' behavior categorizations and derivative, correspondent target characterizations were automatically perceived as consistent with the prior situational information when the target's behavior was ambiguous. Because this assimilative process occurred at the early, relatively automatic stages of the inference process and therefore was not conscious, Trope and Alfieri (1997) contended that their

participants likely experienced both behavior and target judgments as direct perceptions.

What of the final stage of the inference process? According to the current models of the inference process, the inferential correction stage generally requires more cognitive resources than do the earlier stages of behavior categorization and target characterization. As a result, it is susceptible to disruption by factors that reduce the motivation or the ability to process information effortfully. Several studies, for example, have demonstrated that participants who are unmotivated or cognitively distracted (i.e., diverting attention to another task) fail to use situational information to correct their initial dispositional judgments (e.g., Gilbert et al., 1988; Reeder, 1997; Reich & Weary, 1998; Trope & Alfieri, 1997; Yost & Weary, 1996).

*CHRONIC EXPECTANCIES AND THE  
DISPOSITIONAL INFERENCE PROCESS*

In the current research, we focused on the role of perceivers' generalized event-outcome expectancies in the dispositional inference process. More specifically, previous research by Andersen and her colleagues (Andersen, 1990; Andersen, Spielman, & Bargh, 1992) has shown that the pessimistic future-event expectancies held by depressed students are chronically accessible and efficient and that they are applied to predictions about both the self and others; in contrast, the more positive expectancies of nondepressed students, although neither chronic nor efficient, are associated with more optimistic predictions about the self and others.

Reich and Weary (1998) recently examined in two studies whether these stored knowledge structures could impact the dispositional inference process. In their research, Reich and Weary asked depressed and nondepressed participants to observe a target's relatively successful performance on a test of cognitive ability and then to make inferences about his or her general level of ability. These investigators assumed that their depressed participants would categorize the target's behavior in line with their chronic expectancies. They further assumed that the behavior categorizations of both depressed and nondepressed participants would determine their subsequent characterizations of the target and would serve as a context for their interpretations of the nonfocal situational factor of task difficulty. That is, the more negative (positive) behavior categorizations of depressed (nondepressed) participants should lead them to interpret the moderate difficulty of the task as an inhibitory (facilitative) cause of the target's moderately (highly) successful performance. Moreover, this contextual influence of behavior categorizations on task-difficulty inferences should affect the direction of

inferential correction. When motivated and able to engage in inferential correction, perceivers generally augment target inferences for inhibitory factors and discount them for facilitative factors. These opposing directions of inferential correction on the part of depressed and nondepressed participants in no-load conditions of the Reich and Weary studies, then, were expected to obscure any initial depressed-nondepressed differences in target inferences.

In accord with their predictions, Reich and Weary (1998) found that when under a cognitive load, depressed compared to nondepressed participants rated the target lower in ability. When not under load, their corrected dispositional inferences were similar. Of importance, in a second study these interactive effects of depression and cognitive load were replicated and it was revealed that the depressed-nondepressed differences in inferences that occurred under conditions of cognitive load were attributable to perceivers' chronic, generalized event-outcome expectancies. It should be noted, however, that several of Reich and Weary's key process assumptions could not be tested directly in their research; in neither study were participants' behavior categorizations directly manipulated or assessed.

#### CURRENT RESEARCH

If chronic expectancies exert their effects on dispositional inferences by narrowing the range of categorizations participants are prepared to make for an observed performance, then an experimental manipulation that restricts the range of likely categorizations of the performance should replicate the load condition findings of Reich and Weary (1998). In two studies, we employed such a manipulation. We gave participants, prior to their observation of the tape, information designed to suggest that the level of the target's general performance had been either successful or unsuccessful. In Study 2, we also assessed participants' generalized future-event expectancies.

A secondary purpose of the current research was to examine more completely when, how, and for what factors perceivers' inferences about cognitive ability are corrected. As noted earlier, Reich and Weary (1998) suggested that perceivers' behavior categorizations would influence their interpretations of the nonfocal situational factor as a facilitative or inhibitory cause of the target's performance. They further argued that perceivers would correct their initial target inferences for this factor. In the current research, we examined the possible correction of target judgments for the perceived ease or difficulty of the task. Although past attribution research generally has forced on participants the prompt to adjust target inferences for situational factors (e.g., by telling them that a speaker was assigned to argue a given topic

or that a person was discussing an anxiety-provoking subject), in the current research we gave them no specific, prior information about the situational context. Consequently, they were forced to generate their own inferences about the situational context and were allowed to correct (or not) for those inferences. We also examined possible correction of target inferences for the potential diagnosticity of the performance-level information (Studies 1 and 2) and for the potential bias introduced by perceivers' chronic expectancies (Study 2).

#### STUDY 1

Our procedures and materials for Study 1 were nearly identical to those employed by Reich and Weary (1998, Study 2). The single alteration involved informing participants that the particular child they would be observing on the tape either had or had not met the time requirements for completing the videotaped test items and therefore either was or was not successful enough to continue testing. Under load conditions, we expected that participants who received information suggesting that the performance was relatively successful would categorize the performance as more successful than would participants who learned that the performance was relatively unsuccessful, they should then make correspondent characterizations of the child's ability. Under no-load conditions, perceivers should have sufficient cognitive resources available to engage in effortful correction of their target characterizations for contextual factors.

In Study 1, there were two types of contextual factors for which participants might adjust their characterizations of the target. First, there were various cues relevant to the diagnosticity or sufficiency of the performance-level information. That is, we expected that our information indicating that the target either had or had not met the time requirements for the set of test items would be sufficient, at least initially, to constrain but not fully determine participants' ability inferences. It seemed possible, however, that the value of this information for behavior categorizations and target inferences (Gilbert & Osborne, 1989; Krull & Erickson, 1995) might well be reevaluated by our participants when they had adequate cognitive resources. They might, for example, call to mind other behavioral cues relevant to an assessment of the target's performance level. They also might consider the fact that they had seen only a small portion of the child's overall performance and that they had received no information about his or her performance on other test items. Should this occur, our no-load participants should give lesser weight to the performance-level information and should adjust their dispositional judgments accordingly.

The second factor in Study 1 for which participants might correct their inferences was the perceived ease or difficulty of the task. Such corrections should result in a positive relationship between perceptions of task difficulty and inferences of high ability. Should we expect to see this relationship for both successful and unsuccessful target performances? Although Reich and Weary (1998) suggested that we should, Reeder (1997) has argued that perceivers may possess beliefs that a strong performance requires high ability, whereas a weak performance requires neither a high nor a low ability level. As a consequence, we could find adjustment of dispositional inferences for the contributory effects of situational factors but only when ability is not a necessary causal factor—only for unsuccessful target performances. We examined these possibilities in Study 1.

### Method

#### PARTICIPANTS

Participants were 86 undergraduate students who completed the study in exchange for partial course credit in an introductory psychology course. The data for 3 participants were not analyzed for various reasons: 1 participant previously had viewed the video in a related experiment and 2 others failed to understand the experimental instructions. The remaining sample included 34 male and 49 female participants. Participants attended experimental sessions in groups of three to six and were randomly assigned to performance-level conditions. Assignment to cognitive load conditions was done on the basis of random assignment of small groups.

#### MATERIALS

The 5-minute videotape used in the experiment was identical to the one used by Reich and Weary (1998). It showed an 11-year-old boy performing four moderately difficult tasks from the block design subtest of the Stanford-Binet intelligence test. Each 30- to 78-second clip showed the child beginning and completing a different puzzle. The picture key to the test and the examiner's head occasionally obstructed participants' views of the child's work, thereby making it difficult to tell whether the task was being completed successfully. To make the child's level of performance even more vague, the audio was omitted from the tape (Borkenau & Liebler, 1995).

#### PROCEDURE

Participants were seated in a semicircle facing a large television and VCR. The experimenter explained to participants that they would be asked to watch a videotape of a child performing a spatial ability task, to complete a questionnaire regarding their impressions of the child's performance, and to fill out a few scales for the Psychology Department. Participants then read instructions

informing them that they would watch one of four 5-minute videotapes of a child performing several tasks that were part of a full-length intelligence test. They learned that the children on the tapes differed in their levels of intelligence and that the tasks, which measured an important component of general intelligence, varied in their levels of difficulty. The instructions also stated that whereas some children performed their tasks quite successfully, others were less successful.

All participants then received the following dispositional inferential goal instructions:

It will be your task to figure out *HOW INTELLIGENT THE CHILD IS* in general. As you know, very intelligent people sometimes appear less intelligent because they are performing a very difficult task and less intelligent people sometimes appear very intelligent because they are performing a very simple task. We do not want you to tell us how intelligent the child merely appears. Instead, we want you to watch the child on the tape and figure out how intelligent you think the child is in general.

These instructions have been found to be sufficient to motivate participants to engage in inferential correction when ample cognitive resources are available (Reich & Weary, 1998). They also may serve to increase the accessibility and applicability of a compensatory schema for the effects of ability and task difficulty on the target's performance.

*Manipulation of cognitive load.* To manipulate the attentional resources available for inferential correction, participants in the cognitive load conditions were informed that an eight-digit number would appear on the screen at the beginning of the videotape. They were asked to rehearse this number as they watched the tape and completed the main dependent measures. For these participants, the number appeared on an otherwise blank screen for 20 seconds prior to the appearance of the child working on the spatial ability tasks. Participants in the no-load conditions received no information about the memory task and did not see the number.

*Manipulation of performance-level information.* After reading the instructions, one participant in each group was asked to choose a slip of paper from a box to determine which of the four videos the group would watch; the videos were positioned beside the television screen with different labels. The tapes were actually identical but the choice of a tape was intended to lead participants to believe that they were randomly selecting a videotaped performance from a range of performance levels rather than being shown one that had been specifically selected for its particular characteristics. The experimenter then announced the chosen video (e.g., Child 1, Task S) and removed six laminated index cards from its

jacket. While distributing a card to each participant, the experimenter announced that the cards contained additional information about this particular video. Participants were asked to read the card carefully and then to give it back to the experimenter.

The cards, which contained the following information, were designed to constrain participants' categorizations of the performance.<sup>1</sup>

Additional Information:

CHILD (number), TASK (letter)

All of the individual test items you will see on this video were *timed*. In order to move on to the next set of test items, the child needed to complete all items in the current set within a certain time frame.

(*Success condition*): This child managed to complete the set of test items you will be viewing, and he was also quite successful in meeting the time requirements. Consequently, he was successful enough to continue testing.

(*Failure condition*): Although this child managed to complete the set of test items you will be viewing, he was *not* successful in meeting the time requirements. Consequently, he was not successful enough to continue testing.

After reading the paragraph and before viewing the tape, participants were reminded that their goal was to diagnose the child's intelligence level and, for those in the cognitive load condition, also to rehearse the number that would appear at the beginning of the video.

*Dependent measures.* Immediately after viewing the tape, participants completed items designed to assess their dispositional and situational inferences. The dispositional measure asked participants to rate the child's general intellectual level (1 = *very low*, 9 = *very high*), and the situational measure asked participants to rate the difficulty of the spatial ability task (1 = *not at all difficult*, 9 = *very difficult*). These measures were presented in counterbalanced order across participants. After completing them, participants in the cognitive load condition recorded the number they had rehearsed. Next, all participants completed an item designed to check on the manipulation of performance level; specifically, they indicated how well they thought the child had done on the spatial ability task (1 = *very poorly*, 9 = *very well*). Participants then rated on 9-point scales the child's likability, sociability, nervousness, and activity level. They also rated their engagement with or interest in the tape. After completing a few additional scales, participants were debriefed and dismissed.

*Results*<sup>2</sup>

Past research (Weary & Reich, 1999) using the general procedures employed in Study 1 has found that participants sometimes differ in their self-reports of engage-

ment with the video observation task. Moreover, this variable at times has been found to account for a significant amount of variance in behavior and target inferences, such that high task engagement is associated with higher behavior and target ratings. Initial analyses, however, indicated that task engagement was not a significant covariate for any of the dependent measures employed in Study 1. Consequently, this variable was not included in any of the analyses reported below.

COGNITIVE LOAD

MANIPULATION CHECK

Participants in the cognitive load conditions ( $N = 41$ ) recalled and correctly positioned 86% of the digits in the eight-digit number. In a cognitive load procedure, a small number of mistakes is desirable because it indicates both that participants were seriously engaging in the rehearsal task and that the task was difficult enough to be cognitively demanding. Because a large number of mistakes may indicate that participants were not effectively engaged in the cognitive load task, and therefore were not under any cognitive load, several researchers suggest excluding participants who recall fewer than half of the digits (e.g., Gilbert & Hixon, 1991). In the current study, 4 participants recalled fewer than four digits; in accord with the above recommendation, their data were excluded from further analyses. For the remaining participants, digit recall did not vary as a function of performance-level condition ( $p > .79$ ).

PERFORMANCE-LEVEL CHECK

A 2 (cognitive load: load, no load)  $\times$  2 (performance level: success, failure)  $\times$  2 (gender) analysis of variance (ANOVA) was performed on participants' perceived performance-level ratings. This analysis revealed only the predicted main effect of performance level,  $F(1, 75) = 16.49$ ,  $p < .001$ , such that participants in the failure ( $M = 6.00$ ) compared to the success ( $M = 7.37$ ) condition indicated that the child had performed less well.

TARGET AND TASK INFERENCE

A 2 (cognitive load: load, no load)  $\times$  2 (performance level: success, failure)  $\times$  2 (gender) analysis of variance (ANOVA) was performed on participants' ratings on the dispositional inference measure. This analysis revealed a main effect of performance level,  $F(1, 71) = 5.08$ ,  $p < .03$ , such that participants in the failure condition rated the child as less intelligent ( $M = 6.00$ ) than did those in the success condition ( $M = 6.58$ ). This main effect was qualified by the predicted two-way interaction of load and performance level,  $F(1, 71) = 7.76$ ,  $p < .01$ . As predicted, the relatively automatic target characterizations made under conditions of cognitive load were assimilated to the performance-level information, whereas the target inferences made under no-load conditions did not dif-

fer. See Table 1 for the means and results of a priori comparisons.

A similar three-way ANOVA was conducted on participants' ratings on the task-difficulty measure and revealed a significant Load  $\times$  Performance Level interaction,  $F(1, 79) = 4.41, p < .04$ . The relatively automatic characterizations of the task made under conditions of cognitive load indicated that participants who received failure information perceived the task as less difficult compared to those who received success information; this pattern was reversed in the no-load conditions. However, none of the pairwise comparisons of means within either load or no-load conditions reached conventional levels of significance (see Table 1).

#### CORRECTION OF TARGET INFERENCES

The analyses of the dispositional inference measure suggested that participants were able to correct their ability inferences under no-load conditions either by reducing the weight given to the performance-level information, by adjusting for the difficulty of the task, or both. We examined these possibilities by regressing dispositional inferences on standardized task-difficulty ratings, the performance-level variable, and their interaction.<sup>3</sup> Finally, we examined whether any correction for task difficulty that occurred was moderated by performance level, as suggested by Reeder (1997).

We report the results for the load conditions first where correction for task difficulty generally would not be expected. The regression analysis revealed that both the performance-level variable ( $\beta = .52, p < .001$ ) and participants' task-difficulty inferences ( $\beta = .28, p < .05$ ) significantly predicted their dispositional ratings. Those participants who received failure information rated the target's ability as lower compared to those who received success information. Somewhat surprisingly, participants augmented their ability inferences to the degree that they perceived the task as difficult, and they did so for both successful and unsuccessful outcomes (interaction  $\beta = -.13, p = .38$ ).

Next, we report the same analysis conducted for the no-load conditions, where correction for both performance-level information and task difficulty theoretically would be expected. As predicted, this analysis indicated that when participants had the requisite cognitive resources, they reduced the weight given to the performance-level information ( $\beta = .04, p = .76$ ). As in the preceding analysis, they also corrected their dispositional inferences for the perceived difficulty of the task ( $\beta = .35, p < .04$ ), regardless of the valence of the outcome (interaction  $\beta = -.08, p < .59$ ).

#### ANCILLARY MEASURES

It is possible that the interaction of the cognitive load and performance-level manipulations affected partici-

**TABLE 1: Performance Level  $\times$  Cognitive Load Means**

Variable	Cognitive Load		No Load	
	Success (n = 17)	Failure (n = 20)	Success (n = 21)	Failure (n = 21)
Dispositional ability	6.86 <sub>a</sub> (0.99)	5.45 <sub>b</sub> (0.90)	6.38 (1.90)	6.52 (1.13)
Task difficulty	5.88 (1.62)	5.15 (1.14)	5.28 (1.74)	5.91 (1.34)

NOTE: Within level of cognitive load, means with different subscripts differ significantly at  $p < .01$ . Standard deviations are in parentheses.

pants' global evaluative judgments of the target rather than having effects that were specific to goal-relevant judgments (i.e., ability inferences). However, separate three-way ANOVAs conducted on participants' ratings of the child's likability, sociability, and activity level provided no support for this possibility.

#### Discussion

The results of Study 1 showed, as predicted, that the performance-level manipulation constrained initial target characterizations. That is, load condition participants who received success information inferred a correspondingly higher level of intelligence compared to participants who received failure information. In contrast, under no-load conditions, inferences about the target's level of ability did not differ as a function of the performance-level information. Thus, when participants were able to engage in effortful correction of their dispositional inferences for the performance-level information, they appeared to do so. Whether this correction occurred through direct or indirect means (i.e., through recategorization of their behavior perceptions) could not be determined because no measure of participants' relatively automatic behavior categorizations was included.

Participants also appeared to use their judgments of task difficulty to adjust their ability inferences. As predicted, inferences of greater task difficulty were associated with inferences of higher target intelligence, even after the effects of the performance-level manipulation were statistically controlled. Interestingly, this result obtained under both no-load and load conditions where participants arguably were less able to engage in effortful processing.

The possibility of such efficient adjustment of dispositional inferences certainly would seem to be inconsistent with the arguments of some researchers (e.g., Gilbert et al., 1988). However, the general notion that situational factors, when salient, accessible, and applicable, may influence the early stages of the inference process is consistent with recent data (Trobe & Gaunt, 1999). What is noteworthy here is that we found

such effects when no specific situational information had been provided to participants.

It seems entirely possible that our general instructions suggesting that both ability and task difficulty typically affect performance might not only have made participants' self-generated situational inferences salient but also might have activated proceduralized correction processes (Lucas, Krull, & Pelham, 1999; Weary, Tobin, & Reich, 1999). Heider's (1958) analysis of perceivers' intuitive theories of action suggested the operation of a compensatory schema (Kelley, 1972) for the effects of ability and environmental difficulty on performance outcomes. This schema implies that in contributing to a successful performance, a high level of ability compensates for a difficult task and an easy task compensates for a low level of ability. To the degree, then, that our research participants had extensive experience in judging the important dimension of cognitive ability, they might have possessed well-rehearsed compensatory schemata that operate with relative efficiency. They might then have been able to adjust their ability inferences for task difficulty, even when their cognitive resources were depleted.

Finally, it is interesting to note that situational correction of dispositional inferences was not limited to the unsuccessful performance condition. This failure to find support for Reeder's (1997) notion of asymmetrical correction as a function of our performance-level information could be the result of a variety of procedural differences between his studies and ours. For example, we used task difficulty as our situational factor; to our knowledge, Reeder has not examined this factor in his studies of inferential correction. In addition, the situational information in our studies was inferred by, rather than provided to, participants.

#### STUDY 2

In Study 1, we replicated the dispositional inference findings of Reich and Weary (1998) by using a manipulation designed to constrain participants' categorizations of the target's performance. In Study 2, we attempted to provide a more direct test of Reich and Weary's arguments regarding the effects of perceivers' chronic expectancies on dispositional inferences. Toward this end, we used the same general procedure that was employed in Study 1 but we also included an instrument designed to assess the content of perceivers' generalized, chronic future-event expectancies (Andersen, 1990). Using items from the future-event expectancy scale (FES), Andersen et al. (1992) have shown that people who exhibit pessimism (i.e., moderately depressed individuals) also demonstrate greater automaticity in their future-event predictions both for themselves and for others. Moreover, those who score below the median on the

FES (i.e., those with relatively pessimistic predictions) have been shown to draw relatively automatic and pessimistic inferences about another person when under cognitive load (Reich & Weary, 1998). Thus, this scale was used in the current research as an indicator of the chronic accessibility of participants' future-event expectancies.

It is important to note, however, that the addition of chronic expectancies to an analysis in which behavior categorizations have been constrained by the performance-level manipulation provides a conservative test of the effects of such expectancies. That is, because the performance-level manipulation served as a restriction on the plausible range of categorizations, the automatic influence of and the correction for participants' chronic future-event expectancies should be less pronounced in this study than in Reich and Weary (1998).

An additional goal of Study 2 was to examine the mediational role of behavior categorizations. We therefore included an index of participants' behavior categorizations. In accord with past research, we expected that participants' dispositional inferences would be assimilated both to their chronic expectancies and to the performance-level information under load conditions. We further expected that these main effects would be mediated by participants' behavior categorizations.

What about inferential corrections under no-load conditions? Reich and Weary (1998) assumed that the attenuation of the effects of chronic, future-event expectancies on dispositional inferences in the no-load conditions of their studies was due to situational correction. However, the results of the current Study 1 suggested that correction for situational factors occurred under both load and no-load conditions. An alternative possibility is that the participants' correction of dispositional inferences in Reich and Weary resulted from recategorization of the target's behavior and a corresponding correction of target judgments in light of the possible biasing influence of chronic expectancies. The current Study 2 permitted an examination of this possibility as well as the possibility that the correction of dispositional inferences for the performance-level information observed in Study 1 was due to recategorization of the target's behavior.

We should note here that few attribution researchers have given much attention to the notion that recategorization of observed behavior may be one mechanism whereby dispositional inferences are corrected. In fact, some have argued that such recategorization does not occur (Trope & Alfieri, 1997). However, a few researchers recently have found evidence that, with sufficient motivation and cognitive resources, perceivers can effortfully correct their categorizations for biasing influences, at least under certain circumstances (Thompson,

Roman, Moskowitz, Chaiken, & Bargh, 1994). For example, Weary et al. (1999) recently have demonstrated that perceivers can recategorize behavior if they are aware of a biasing influence on their initial judgments and if they perceive that influence to be illegitimate.

Finally, we again investigated the role of task-difficulty inferences in the dispositional inference process. In accord with the results of Study 1, we expected that participants would augment their dispositional inferences to the degree that they perceived the task as difficult and that they would do so under both load and no-load conditions.

### Method

#### PARTICIPANTS

Participants were 201 university students who completed the study in exchange for partial course credit in an introductory psychology course. Seven participants were excluded from analyses for various reasons: 4 participants in one experimental session were inadvertently exposed to loud noise from outside the experimental room, 1 did not understand the instructions, and 2 others previously had viewed the video in a related experiment. After these exclusions, the sample included 194 students ( $n = 66$  men,  $n = 126$  women,  $n = 2$  gender not indicated). Participants generally attended experimental sessions in groups of two to six and were assigned randomly to performance-level conditions. Random assignment to cognitive load conditions was done on the basis of small groups.

#### MATERIALS AND PROCEDURE

The same videotape and experimental manipulations used in Study 1 were employed here. A few notable changes, however, were made to the procedure. First, in Study 2 we included before the cognitive load recall task (i.e., before termination of the cognitive load manipulation) an assessment of participants' perceptions of the level of the child's performance. This change was designed to permit an assessment of participants' relatively automatic behavior categorizations. Specifically, we included the manipulation check item from Study 1 that asked participants how well the target had performed the task and an additional item that read as follows: "The success of the children's performance on the four videotapes you chose from differed. What level of performance (1 = *very successful*, 9 = *very unsuccessful*) was depicted in the tape you watched?" The order of these questions and the dispositional inference measure were counterbalanced; the task-difficulty measure always followed them. Second, to ensure that differences in categorizations and inferences as a function of cognitive load were not due to differential attention to or encoding of

the video, we added four items assessing recall for video details.

*Scales.* After completing the experimental questionnaire, all participants completed in counterbalanced order the FES developed by Andersen (1990) and the Beck Depression Inventory (BDI) (Beck, 1967). These scales were introduced as part of a separate study being conducted by the Psychology Department. The FES contains 26 items describing both positive and negative events. Participants are asked to indicate on an 11-point scale ( $-5 = \textit{extremely unlikely}$ ,  $+5 = \textit{extremely likely}$ ) the likelihood of each event happening to them at some point in their lives. After completing these two scales, participants were fully debriefed, with one exception. In accord with local internal review board requirements, they were not told that the BDI was a measure of depressive symptoms.

### Results

In Study 2, the measure of task engagement proved to be a significant covariate in a number of the analyses. Where it was, we checked that the assumption of homogeneity of regression coefficients was met and then conducted analyses that equated participants for this nuisance variable. For all analyses where the covariate proved to be significant, we report those results. Note that in all such instances, the reported effects were similar to (albeit often somewhat stronger than) those obtained without the statistical removal of the covariate.<sup>4</sup>

#### COGNITIVE LOAD

##### MANIPULATION CHECK

The percentage of digits correctly recalled and positioned by participants was comparable to that found in Study 1 ( $M = 93\%$ ). The 4 participants who recalled fewer than four digits were excluded from further analyses, as in Study 1 and in accord with past research (Gilbert & Hixon, 1991). For the remaining participants, there were no effects of performance level, FES group, or their interaction on digit recall ( $p > .56$ ). Thus, the cognitive load task appears to have successfully engaged participants regardless of condition.

#### VIDEO RECALL

Participants responded to four multiple-choice questions about various details of the video, including the number of test items performed by the target, the color of the child's shirt, the background, and the color of the test administrator's hair. A 2 (cognitive load: load, no load)  $\times$  2 (performance level: success, failure)  $\times$  2 (FES group: positive, negative)  $\times$  2 (gender) ANOVA revealed no significant main effect of cognitive load; however, it did yield an unexpected interaction of performance level and load,  $F(1, 171) = 5.45$ ,  $p < .03$ . Tukey's HSD pro-



cedure for comparing unequal cell sizes revealed only that the mean recall for load ( $M = 3.33$ ) and no-load ( $M = 2.87$ ) participants in the success conditions differed significantly ( $p < .05$ ). Of importance, the direction of this effect is opposite to what would have been expected if the load manipulation had interfered with participants' processing of the videotape. Overall, the average recall was 3.11 items.

*DESCRIPTIVE STATISTICS  
FOR ANDERSEN'S SCALE*

FES scores were calculated by subtracting the sum of participants' likelihood ratings for the 13 negative events from the sum of their likelihood ratings for the 13 positive events. Total scores ranged from  $-57$  to  $123$ , with a mean of  $41.14$  and a median of  $41$ . One participant did not fully complete the FES and was dropped from subsequent analyses. Consistent with past research (Reich & Weary, 1998; Weary et al., 1999), a median split procedure was used to divide participants into two FES groups: negative ( $N = 94$ ) and positive ( $N = 95$ ).<sup>5,6</sup> The 3 participants with scores at the median were included in the positive FES group.

*PRELIMINARY ANALYSES*

The BDI and FES were administered at the end of the experimental session to avoid priming negative affect and depression-related thoughts (Spielman & Bargh, 1990). It therefore was necessary to demonstrate that participants' scores on these measures were not influenced by the experimental manipulations or by participant gender. A  $2$  (performance level)  $\times 2$  (load)  $\times 2$  (gender) ANOVA performed on each of these measures revealed no significant effects ( $ps > .12$ ).

*TARGET, BEHAVIOR,  
AND TASK INFERENCES*

A  $2$  (load)  $\times 2$  (performance level)  $\times 2$  (FES)  $\times 2$  (gender) ANCOVA was performed on the measure of dispositional inference. This analysis revealed a tendency for negative FES participants to see the target as less intelligent than positive FES participants ( $Ms = 6.40$  vs.  $6.85$ ),  $F(1, 169) = 2.74$ ,  $p = .10$ . There also was a main effect of performance level,  $F(1, 169) = 7.25$ ,  $p < .01$ ; participants in the failure condition rated the child as less intelligent ( $M = 6.34$ ) than did those in the success condition ( $M = 6.90$ ). The performance-level main effect, however, was qualified by the predicted two-way interaction of load and performance level,  $F(1, 169) = 5.66$ ,  $p < .01$ . The pattern of means involved in this interaction effect and the results of a priori comparisons were similar to those found in Study 1 (see Table 2). As expected, target inferences were assimilated to the performance-level information under load but not under no-load conditions.

Because the two behavior categorization items were highly correlated ( $r = .71$ ,  $p < .01$ ), they were averaged to create a categorization index. Participants' ratings on this index and on the measure of task difficulty were subjected to separate four-way ANCOVAs. For the categorization index, the analysis revealed results that paralleled those obtained on the dispositional inference measure. Negative FES participants saw the performance as less successful than did positive FES participants ( $Ms = 6.90$  vs.  $7.29$ ),  $F(1, 169) = 4.10$ ,  $p = .04$ . It also yielded a main effect of performance level,  $F(1, 169) = 29.35$ ,  $p < .001$ . This effect, however, was qualified by the predicted two-way interaction of load and performance level,  $F(1, 169) = 3.75$ ,  $p = .05$ . As seen in Table 2, participants' behavior categorizations were assimilated to the performance-level information under load; under no-load conditions this difference, although still apparent, was attenuated. No significant effects associated with FES, load, or performance level were obtained for the task-difficulty measure.

*MEDIATIONAL ANALYSES*

Theoretically, we would expect the effects of our performance-level manipulation and participants' chronic expectancies on their dispositional inferences to be mediated by their categorizations of the child's performance under cognitive load conditions, but this effect should be attenuated under no-load conditions (Trope, 1986). Because both our hypotheses and the effects of the performance-level manipulation on dispositional inferences varied systematically as a function of the cognitive load manipulation, we chose to examine our mediational hypotheses separately for the load and no-load conditions. We followed the procedures outlined by Baron and Kenny (1986) for such tests. These authors suggest that evidence for mediation requires three patterns of relationships: (a) the predictor should be correlated with the criterion, (b) the predictor should be correlated with the mediator, and (c) the mediator should affect the criterion, after controlling for the effect of the predictor. To establish mediation, the effects of the predictor on the criterion should become nonsignificant (full mediation) or be sufficiently reduced in significance (partial mediation) when the effects of the mediator are controlled.

First, we conducted a series of regressions and a modification of the Sobel test (Baron & Kenny, 1986) to assess whether the effects of performance level and of participants' chronic expectancies on adjusted dispositional inferences were mediated by participants' categorizations of the child's performance under cognitive load conditions. Specifically, we regressed dispositional inferences on both performance and FES levels. Both variables (performance level  $\beta = .36$ ,  $p < .001$ ; FES  $\beta = .17$ ,  $p <$

**TABLE 2: Adjusted Performance Level × Cognitive Load Means**

Variable	Cognitive Load		No Load	
	Success (n = 48)	Failure (n = 46)	Success (n = 47)	Failure (n = 47)
Dispositional ability	7.10 <sub>a</sub> (1.08)	6.16 <sub>b</sub> (1.21)	6.70 (1.31)	6.47 (1.20)
Behavior categorization	7.64 <sub>a</sub> (1.01)	6.29 <sub>b</sub> (1.20)	7.61 <sub>c</sub> (1.16)	6.80 <sub>d</sub> (1.43)
Task difficulty	6.05 (1.25)	6.06 (1.26)	5.84 (1.28)	5.97 (1.40)

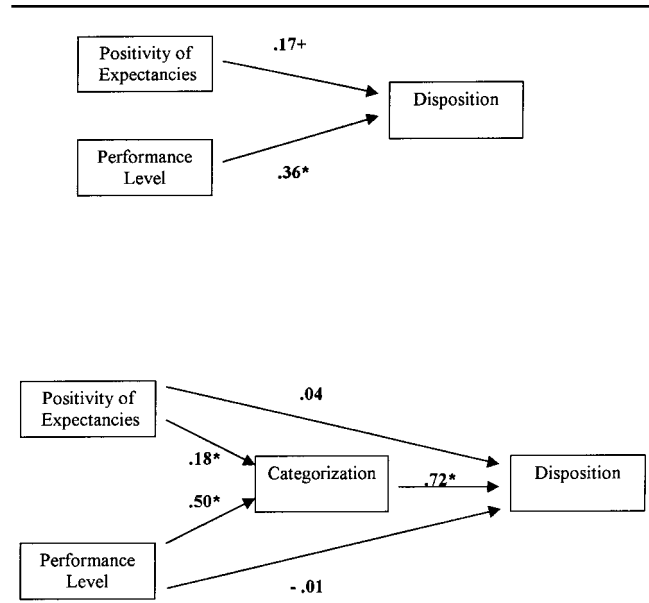
NOTE: Within level of cognitive load, means with different subscripts differ significantly at  $p < .01$ . Standard deviations are in parentheses.

.09) predicted dispositional inferences in the expected direction. Next, we regressed the adjusted categorization index on performance and FES levels. Both performance level ( $\beta = .50, p < .001$ ) and FES ( $\beta = .18, p < .05$ ) significantly predicted the mediator and behavior categorizations. Finally, we regressed dispositional inferences on performance level, FES level, and the categorization index. Behavior categorizations were significant predictors of dispositional inferences ( $\beta = .72, p < .001$ ), whereas performance-level information ( $\beta = -.01, p > .88$ ) and FES ( $\beta = .04, p > .60$ ) were not. The Sobel test revealed that the reductions in the paths from performance-level information ( $z = 3.29, p < .01$ ) and from FES level ( $z = 1.96, p = .05$ ) to dispositional inferences were significant when behavior categorizations were included in the equation (see Figure 1).

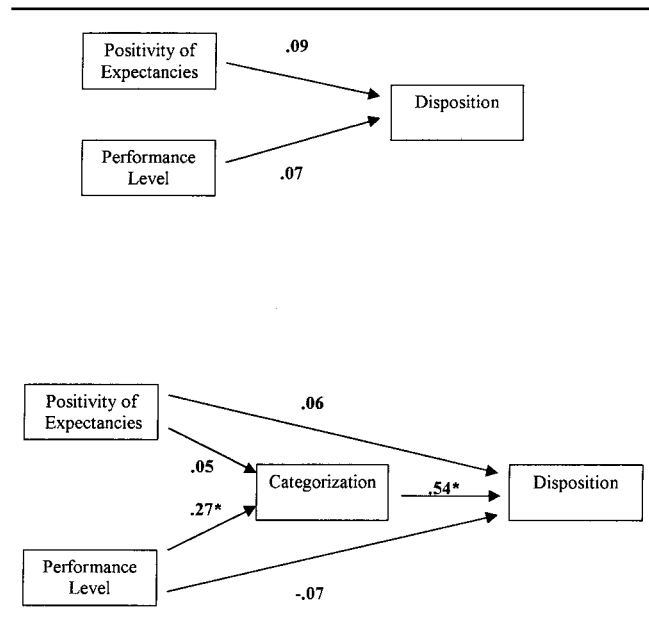
Similar analyses were performed for the no-load conditions. In the first step, neither performance information ( $\beta = .07, p < .48$ ) nor FES level ( $\beta = .09, p = .38$ ) significantly predicted adjusted dispositional inferences. The second step was informative in that performance level ( $\beta = .27, p = .01$ ) significantly predicted adjusted behavior categorizations, whereas the FES variable ( $\beta = .05, p > .61$ ) did not. The performance level effect, however, was attenuated compared to that observed under load conditions. Indeed, a comparison of the beta weights for the effects of the performance-level variable under load and no-load conditions revealed that the variance in behavior categorizations that was accounted for by performance level was significantly smaller under no-load than load conditions ( $z = 2.01, p < .02$ ). In the final equation of the mediational analysis for no-load conditions, behavior categorizations significantly predicted dispositional inferences ( $\beta = .54, p < .001$ ), whereas neither the performance level ( $\beta = -.07, p > .43$ ) nor the FES level variables ( $\beta = .06, p > .47$ ) did (see Figure 2).<sup>7, 8</sup>

*SITUATIONAL INFERENCE*S

Did participants' categorizations of the performance significantly predict their adjusted task-difficulty ratings? A regression analysis revealed that they did under



**Figure 1** Categorization as a mediator of dispositional inferences in cognitive load conditions of Study 2.  
\* $p < .05$ . † $p < .10$ .



**Figure 2** Categorization as a mediator of dispositional inferences in no-load conditions of Study 2.  
\* $p < .05$ .

both the load ( $\beta = .27, p = .01$ ) and no-load ( $\beta = .20, p = .06$ ) conditions. However, the direction of the relationship was opposite to that suggested by Reich and Weary (1998). Categorizations of the performance as successful were associated with higher ratings of task difficulty.

Did participants' task-difficulty judgments affect their dispositional inferences for the no-load conditions? When adjusted task-difficulty ratings were added to the final equation reported in the mediational analyses section for the no-load conditions, the performance-level main effect was not a significant predictor of dispositional inferences ( $\beta = -.04, p > .64$ ), nor was the FES effect ( $\beta = .08, p > .33$ ). However, both behavior categorizations ( $\beta = .48, p < .001$ ) and task-difficulty inferences ( $\beta = .31, p = .001$ ) were significant predictors.

Did we again obtain evidence suggestive of proceduralized correction of dispositional for task-difficulty inferences under cognitive load conditions? When adjusted task-difficulty ratings were added to the final equation reported for the cognitive load conditions above, neither the performance level ( $\beta = .05, p > .53$ ) nor the FES term ( $\beta = .08, p > .31$ ) significantly predicted ability inferences. However, behavior categorizations ( $\beta = .61, p < .001$ ) and task-difficulty inferences ( $\beta = .28, p < .001$ ) were both significant predictors of dispositional inferences.<sup>9</sup>

#### ANCILLARY MEASURES

Again, to assess the possibilities that the interaction of the cognitive load and performance-level manipulations affected participants' global evaluative judgments of the target, we submitted participants' ratings of the child's likability, sociability, and activity level to separate four-way analyses. These revealed a main effect of FES on likability ratings,  $F(1, 169) = 5.92, p < .02$ , such that negative FES participants thought the child was less likable ( $M = 6.14$ ) than did positive FES participants ( $M = 6.69$ ). Otherwise, no effects associated with FES levels, the Performance Level  $\times$  Load interaction on ratings of the target's social skills, or activity level were obtained ( $ps > .10$ ).

#### DEPRESSIVE SYMPTOMATOLOGY

To ensure that the effects of FES on dispositional inferences were due to chronic future-event expectancies rather than to general depression levels, we performed a four-way ANCOVA on dispositional inferences with participants' self-reported task engagement and BDI scores as covariates. The results of this analysis indicated that BDI was not a significant covariate ( $p = .32$ ).

#### Discussion

The results of Study 2 provide evidence that perceivers' categorizations of the target's behavior were assimilated to the performance-level information under both load and no-load conditions and that the effects of this information on their dispositional characterizations were mediated by their behavior categorizations. This study also provided evidence that the effect of performance level on behavior categorizations, although significant, was attenuated under no-load conditions.

These findings suggest, then, that participants engaged in some degree of recategorization for the perceived diagnosticity or sufficiency of performance-level information when they had sufficient cognitive resources available.

In addition, Study 2 provided evidence regarding the determinants of participants' task-difficulty inferences. Although neither the performance-level nor the cognitive load manipulations affected such inferences (see Note 3 for details regarding comparable findings in Study 1), behavior categorizations did exert a direct influence on them. The direction of the effect, however, was inconsistent with expectations based on the reasoning of Reich and Weary (1998). They argued that categorizations of behavior as successful (unsuccessful) should result in interpretations of the nonfocal situational factor as a facilitative (inhibitory) causal force. According to such logic, then, we should have found a negative relationship, if any, between behavior categorizations and inferences of task difficulty. Instead, we found that categorizations of the target's behavior as more successful were associated with perceptions of the task as more difficult.

The obtained relationship would seem to be more in line with our earlier supposition that participants, at least in the context of the cognitive ability task employed here, might possess a compensatory schema relating causes and effects. In addition to facilitating the proceduralized correction of target inferences found in this study and in Study 1, such a schema also would permit a calibration of one cause (ability) against another (an easy task) in accounting for a given effect (success). One important implication of use of this kind of schema is that the most confident inference about ability can be made if the same level of success were achieved on a difficult task (Kelley, 1972). Our participants apparently arrived at characterizations of the task that, given the perceived level of success, would have permitted the most confident goal-relevant inferences to be made. They then effortlessly used these situational characterizations to adjust their dispositional inferences. That is, regardless of cognitive load, task-difficulty ratings accounted for a significant amount of variance in ability ratings even after controlling for performance level, generalized expectancies, and behavior categorizations.

Of importance, this study also provided a direct test of the effects of chronic expectancies on behavior categorizations and ability inferences under both load and no-load conditions. Results of the omnibus ANOVA showed only a marginal main effect of FES on dispositional inferences rather than the FES  $\times$  Load interaction found in Reich and Weary (1998). Because the performance-level information provided to participants limited the influence of participants' chronic

expectancies under load and no load, this result was not unexpected. Still, regression analyses showed that, consistent with Reich and Weary's assumptions, under cognitive load conditions, negative compared to positive FES participants rated the target as less intelligent. In addition, they showed that the effects of chronic expectancies on dispositional inferences under cognitive load conditions were mediated by behavior categorizations.

However, under no-load conditions, the effects of chronic expectancies on categorizations of the performance and on dispositional inferences were not significant. Thus, the assimilative effect of chronic expectancies on behavior categorizations appears to have been relatively flexible; participants appeared to have corrected their categorizations for the influence of these expectancies when sufficient cognitive resources were available, a point to which we will return below.

#### GENERAL DISCUSSION

In two experimental studies, we examined the roles of situational inferences, prior category information, chronic expectancies, and behavior categorizations in the process of drawing inferences of ability. Overall, the results of both studies provided support for the hypothesis that behavior categorizations and initial characterizations of a target's disposition would be assimilated to prior information about the level of performance (Studies 1 and 2) and to chronic expectancies (Study 2) under conditions of cognitive load. They also offered support for the prediction that perceivers would correct their dispositional inferences for the effects of the performance-level information (Studies 1 and 2) and for their chronic expectancies (Study 2) when they had the requisite resources. Of importance, this inferential correction of dispositional inferences for both factors appeared to result, in part, from behavioral recategorization processes.

Because some researchers have argued that behavioral recategorization does not generally occur (Trope & Alfieri, 1997), it would seem important to consider briefly why we were able to obtain evidence of such processes in the current research. In a collateral research program of ours, we have found that negative FES perceivers generally are aware of the potential bias introduced by their chronic expectancies and that they often attempt to correct for such biases. The recategorization for chronic expectancies observed in Study 2, then, may well have been due to participants' awareness of the biasing influence of their expectancies and, when sufficient cognitive resources were available, to their deliberate correction of behavior categorizations for this perceived bias. The fact that generalized future-event expectancies are not inherently specific to the target and are not provided to participants as objective information also may

make behavior categorizations based on such expectancies more amenable to recategorization. In contrast, participants in previous research have been provided with specific, unambiguous contextual information that could be used to disambiguate target behaviors (e.g., Gilbert et al., 1988; Trope & Alfieri, 1997). At the correction stage, it is unlikely that perceivers in that research would have reconsidered or identified such information as a potential bias or as illegitimate. Therefore, it is unlikely that they would have attempted to correct for its effects on their categorizations of the observed behavior.

Similarly, our performance-level manipulation provided participants with specific information about whether the target had met the time requirements. Although such information probably served to limit the magnitude of possible recategorization, it clearly aided participants in categorizing the target's behaviors. Its diagnosticity and/or sufficiency, however, was (intentionally) not so clear. This, combined with the fact that the performance-level information was highly salient to participants, in all likelihood resulted in an awareness-based correction of dispositional inferences.

With growing evidence that recategorization can occur (see also Thompson et al., 1994; Weary et al., 1999), new research issues naturally arise. Does recategorization require either the awareness of an illegitimate biasing influence (Stapel, Martin, & Schwarz, 1998) or a strong motivation to be accurate? Is it generally less likely to occur when prior contextual cues are specific, unambiguous, and apparently objective or legitimate? Certainly, we believe, as do other researchers (Reeder, 1997), that investigation of the conditions under which recategorization of behavior may occur is an intriguing avenue for future research, as is the exploration of the potentially complex consequences of such recategorizations for the inference process.

As we noted earlier in this article, one major difference between the currently dominant models of the dispositional inference process concerns the point at which situational information is thought to exert an influence on dispositional inferences. Gilbert's model (e.g., Gilbert et al., 1988) predicts that dispositional inferences will be adjusted for situational factors only during the later stages when perceivers have the cognitive resources and motivation to engage in effortful correction processes. Trope's (1986) model, on the other hand, argues that situational information may influence the early stages if it is particularly salient, accessible, and applicable.

In both of our studies, we found evidence that participants' inferences about the difficulty of the task affected their relatively automatic ability inferences. That such adjustment was found under cognitive load conditions, when participants arguably were less able to engage in

effortful processing, is noteworthy. Moreover, this apparently proceduralized adjustment of target characterizations was obtained despite the fact that we did not provide our participants with specific, unambiguous situational information and did not prompt them to correct their inferences for such information.

Overall, it seems likely that understanding the circumstances under which dispositional inferences are corrected for situational factors will turn out to be a relatively complex business. We argued that the apparently effortless adjustment of target characterizations for task difficulty observed in both of the current studies (and recently replicated in another set of studies [Weary et al., 1999]) resulted from the application of a proceduralized, compensatory attributional schema (Kelley, 1972). The validity of this admittedly post hoc argument, however, will need to be determined by future research. In fact, we believe that considerable research efforts should be directed toward investigating the determinants of the implicit adjustment of dispositional inferences for situational factors in various domains and by various perceivers, as well as the possible impact of the self-generation of inferences about the situational context on focal judgments.

#### IMPLICATIONS AND CONCLUSIONS

Previous research on assimilative identification and mediation of dispositional inferences has relied largely on prestructured, linguistic stimulus materials (e.g., Trope & Alfieri, 1997). Ours employed more naturalistic and complex stimuli that required perceivers to infer behavioral and situational information from observation of a behavioral episode spanning some time period. The results of this research both supported and extended previous work concerning the processes by which social inferences are influenced by diverse sources of contextual information. Evidence of both proceduralized and effortful correction of dispositional inferences for several contextual factors was obtained. In addition, support for a corrective process insufficiently examined by attribution researchers, recategorization of observed behavior, was found. Thus, the findings of the current research expand our understanding of the complicated and intriguing process by which perceivers draw inferences about the enduring dispositions of others.

#### NOTES

1. A pilot study revealed that, as intended, participants who received the failure information compared to those who received the success information expected the child to perform significantly worse,  $F(1, 51) = 29.93, p < .001$ .

2. Participant gender was included as a factor in all analyses of studies 1 and 2. However, because relatively few effects associated with this variable were found and because those few that were obtained were not predicted, did not replicate across studies, and did not qualify our major findings, we do not report any of the significant gender effects

here. Interested readers should contact the authors for information relevant to these effects. In addition, for Study 1, effects of order of the target and task inference measures were examined. The only effect that occurred was a three-way interaction of load, performance level, and order on the task-difficulty measure, indicating that the obtained Load  $\times$  Performance Level interaction occurred only when the task-difficulty measure was first. In Study 2, no effects associated with order of behavior categorization and dispositional inference measures were found.

3. In keeping with past theory and research, we postulated that situational inferences would be used to adjust dispositional ones, not vice versa. That is, when perceivers have a dispositional inference goal, as they did in the present research, evidence (Krull & Dill, 1996) indicates that dispositional inferences precede situational ones and that the latter are used to adjust the former, given adequate levels of perceiver ability and motivation. Still, in the current research one cannot rule out the possibility that dispositional inferences affected situational ones.

4. Finally, it also should be noted that one participant failed to complete the self-report assessment of task engagement; the data for that participant were excluded from relevant analyses.

5. Although our use of a median split approach to categorize participants as possessing positive or negative future-event expectancies is consistent with past research (e.g., Reich & Weary, 1998), it also may have resulted in the misclassification of some participants whose scores on the future-event expectancy scale (FES) fell close to the median. However, an examination of the results for participants in the top and bottom thirds of the distribution on the FES revealed that the effect sizes for FES, performance level, and the Performance Level  $\times$  Load interaction ( $r_s = .15, .16, .17$ ) on dispositional inferences were comparable to those found for the median split analysis ( $r_s = .14, .22, .15$ ).

6. A pilot study revealed, as predicted, that positive FES participants expected the child to perform significantly better than did negative FES participants,  $F(1, 65) = 5.77, p < .02$ .

7. Strictly speaking, evidence of mediation requires significant effects only at Steps 2 and 3, which, in turn, typically imply a significant result at Step 1. However, Step 1 may not yield significant effects of the exogenous variable on the criterion if the mediator is acting as a suppressor. The presence of suppression is suggested when, in the final equation, the mediational paths differ in sign from the direct path (Kenny, Kashy, & Bolger, 1998).

8. In light of the unexpected interaction of performance level and load on recall of the details of the videotape, we also included recall scores in the mediational analyses for load and no-load participants. For no step in either analysis did recall significantly predict the criterion (all recall  $p_s > .10$ ), neither did inclusion of recall scores in the analyses alter any of the other effects reported.

9. Regressions controlling for the effects of cognitive load, behavior categorizations, and FES group revealed that task-difficulty inferences significantly predicted ability ratings in both the successful ( $\beta = .436, p < .001$ ) and the unsuccessful ( $\beta = .201, p < .02$ ) performance conditions. Thus, situational correction was not limited to the unsuccessful performance condition.

#### REFERENCES

- Andersen, S. M. (1990). The inevitability of future suffering: The role of depressive predictive certainty in depression. *Social Cognition, 8*, 203-228.
- Andersen, S. M., Spielman, L. A., & Bargh, J. A. (1992). Future-event schemas and certainty about the future: Automaticity in depressives' future-event predictions. *Journal of Personality and Social Psychology, 63*, 711-723.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173-1182.
- Beck, A. T. (1967). *Depression: Clinical, experimental, and theoretical aspects*. New York: Hoeber.

- Borkenau, P., & Liebler, A. (1995). Observable attributes as manifestations and cues of personality and intelligence. *Journal of Personality, 63*, 1-25.
- Dweck, C. S., Chiu, C., & Hong, Y. (1995). Implicit theories and their role in judgments and reactions: A world from two perspectives. *Psychological Inquiry, 6*, 267-285.
- Gilbert, D. T., & Hixon, J. G. (1991). The trouble of thinking: Activation and application of stereotypic beliefs. *Journal of Personality and Social Psychology, 60*, 509-517.
- Gilbert, D. T., & Osborne, R. E. (1989). Thinking backward: Some curable and incurable consequences of cognitive busyness. *Journal of Personality and Social Psychology, 57*, 940-949.
- Gilbert, D. T., Pelham, B. W., & Krull, D. S. (1988). On cognitive busyness: When person perceivers meet persons perceived. *Journal of Personality and Social Psychology, 54*, 733-740.
- Heider, F. (1958). *The psychology of interpersonal relations*. New York: Wiley.
- Kelley, H. H. (1972). Causal schemata and the attribution process. In E. E. Jones, D. E. Kanouse, H. H. Kelley, R. E. Nisbett, S. Valins, & B. Weiner (Eds.), *Attribution: Perceiving the causes of behavior* (pp. 151-174). Morristown, NJ: General Learning Press.
- Kenny, D. A., Kashy, D. A., & Bolger, N. (1998). Data analysis in social psychology. In D. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (Vol. 1, pp. 233-265). New York: McGraw-Hill.
- Krull, D. S. (1993). Does the grist change the mill? The effect of the perceiver's inferential goal on the process of social inference. *Personality and Social Psychology Bulletin, 19*, 340-348.
- Krull, D. S., & Dill, J. C. (1996). On thinking first and responding fast: Flexibility in social inference processes. *Personality and Social Psychology Bulletin, 22*, 949-959.
- Krull, D. S., & Erickson, D. J. (1995). Judging situations: On the effortful process of taking dispositional information into account. *Social Cognition, 13*, 417-438.
- Lucas, M., Krull, D. S., & Pelham, B. W. (1999). *Practice makes perfect? The effect of familiarity with constraint on the correspondence bias*. Paper presented at the Midwestern Psychological Association meeting, Chicago.
- Reeder, G. D. (1997). Dispositional inferences of ability: Content and process. *Journal of Experimental Social Psychology, 33*, 171-189.
- Reeder, G. D., & Brewer, M. B. (1979). A schematic model of dispositional attribution in interpersonal perception. *Psychological Review, 86*, 61-79.
- Reich, D. A., & Weary, G. (1998). Depressives' future-event schemas and the social inference process. *Journal of Personality and Social Psychology, 74*, 1133-1145.
- Spielman, L. A., & Bargh, J. A. (1990). *The influence of immediately prior administration of depression inventories on tests of depressogenic cognition: The BDI priming effect*. Unpublished manuscript, New York University.
- Stapel, D. A., Martin, L. L., & Schwarz, N. (1998). The smell of bias: What instigates correction processes in social judgments? *Personality and Social Psychology Bulletin, 24*, 797-806.
- Thompson, E. P., Roman, R. J., Moskowitz, G. B., Chaiken, S., & Bargh, J. A. (1994). Accuracy motivation attenuates covert priming: The systematic Reprocessing of social information. *Journal of Personality and Social Psychology, 66*, 474-489.
- Trope, Y. (1986). Identification and inferential processes in dispositional attribution. *Psychological Review, 93*, 239-257.
- Trope, Y., & Alfieri, T. (1997). Effortfulness and flexibility of dispositional judgment processes. *Journal of Personality and Social Psychology, 73*, 662-674.
- Trope, Y., & Gaunt, R. (1999). A dual process model of overconfident attributional inferences. In S. Chaiken & Y. Trope (Eds.), *Dual-process theories in social psychology* (pp. 141-160). New York: Guilford.
- Weary, G., & Reich, D. A. (1999). *Attributional effects of conflicting chronic and temporary outcome expectancies: A case of automatic comparison and contrast*. Manuscript submitted for publication.
- Weary, G., Tobin, S. J., & Reich, D. A. (1999). *Chronic and temporary expectancies as comparison standards: Automatic contrast in dispositional judgments*. Manuscript submitted for publication.
- Yost, J. H., & Weary, G. (1996). Depression and the correspondence inference bias. *Personality and Social Psychology Bulletin, 22*, 192-200.

Received October 13, 1999

Revision accepted November 16, 1999