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## THE ROLE OF EPISODIC AND SEMANTIC MEMORY IN THE DEVELOPMENT OF TRAIT SELF-KNOWLEDGE

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Research by Klein and Loftus (e.g., Klein & Loftus, 1993a, 1993c) has suggested that the development of trait self-knowledge follows a particular sequence. When people have performed relatively few trait-relevant behaviors, their trait knowledge is represented episodically; but as their trait-relevant behaviors increase, they begin to abstract trait knowledge from behavioral episodes and represent it in semantic form. The present research updates this model by showing that even when trait-relevant experience is low, semantic knowledge of one's traits is available and it can serve as the basis for trait self-judgments.

Over the past decade, Klein and Loftus and their colleagues have been developing a model of how people represent and utilize trait knowledge about the self (for reviews, see Kihlstrom & Klein, 1994; Klein & Loftus, 1993a). In its original formulation (e.g., Klein & Loftus, 1990; Klein, Loftus, & Burton, 1989), their model held that trait self-knowledge consists of both abstract information about one's trait characteristics (semantic trait knowledge) and specific information about one's trait-relevant behaviors (episodic trait knowledge). It proposed that trait judgments about the self are accomplished by accessing semantic trait knowledge without reference to episodic behavioral memories.

More recently, Klein and Loftus have revised the model, arguing that

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the representation of trait self-knowledge follows a developmental progression (e.g., Klein & Loftus, 1993a, 1993b, 1993c; Klein, Loftus, Trafton, & Fuhrman, 1992; Schell, Klein, & Babey, 1996). Specifically, they proposed that the formation of semantic trait knowledge requires that one have sufficient trait-relevant experience to support the abstraction process. When trait-relevant experience is low, self-knowledge regarding that trait will be represented episodically because too few behaviors have been encountered to support the formation of semantic trait representations. In this context, therefore, a person's judgments of whether he or she possesses that trait will require retrieval of behavioral episodes. However, as the amount of trait-relevant experience increases, semantic trait representations evolve, which then serve as the basis for judgments. Thus, with increasing experience, our trait knowledge about the self becomes increasingly abstract, and the role of behavioral episodes in the trait judgment process decreases.

The key evidence in support of this developmental model came from a priming procedure developed to assess the role of episodic and semantic knowledge in trait judgments about the self (e.g., Klein & Loftus, 1990, 1993a; Klein et al., 1989; Klein et al., 1992). The procedure used three types of tasks: a *describe* task, which required subjects to judge whether a stimulus trait was self-descriptive, a *recall* task, which required subjects to remember a specific incident in which they displayed the trait, and a *define* task, which required subjects to generate a definition for the stimulus trait. A trial consisted of performing two of these tasks (an initial task and a target task) in succession on the same trait word.

Klein and Loftus reasoned that when the knowledge used in making a *describe* judgment is represented in memory by specific behavioral episodes, the time required to make the judgment should be less when a *recall* task is performed first than when a *define* task is performed first. This is because the behavioral episodes on which the *describe* judgment is based will have been made available already during the *recall* task, but not during the *define* task (see Klein & Loftus, 1993a, 1993b, Klein et al., 1992, for evidence in support of these assumptions). By contrast, if trait knowledge consists only of semantic trait abstractions, the time required to make the judgment should be unaffected by whether the initial task is *recall* or *define*. This is because subjects access trait abstractions, not behavioral episodes, to make *describe* judgments, and therefore a *recall* task should be no more facilitating than a *define* task to the subsequent performance of a *describe* task (e.g., Klein et al., 1989; Klein et al., 1992).

To test the specific predictions of the developmental model, Klein and Loftus (Klein & Loftus, 1993c; Klein et al., 1992) manipulated the time frame to which subjects referred when performing the *describe* and *recall* tasks. This enabled them to create contexts in which subjects' trait-rele-

vant experience was either relatively low or relatively high. For example, Klein et al. (1992, Experiment 3) had first-quarter undergraduates refer either to the time period since they had entered college (self-at-college) or to the entire time period before their arrival at college (self-at-home).

Klein et al. (1992) predicted that for the high-experience context (self-at-home), subjects would have sufficient experience to support the formation of semantic trait knowledge, and with this knowledge available, self-descriptiveness judgments could be made without reference to behavioral episodes. With no need for behavioral episodes, an initial *recall* task should be no more facilitating than an initial *define* task to the subsequent performance of a *describe* task. By contrast, for the low-experience context (self-at-college), response latencies should be shorter when the initial task was *recall* than when it was *define*. This is because in the school context subjects would have had comparatively few trait-relevant behavioral experiences. Individuals therefore would be more likely to rely on memories of their behavior at school to decide if traits are self-descriptive. Because such episodes are made available by a *recall* task but not by a *define* task, a *recall* task should be more facilitating than a *define* task to the subsequent performance of a *describe* task.

Consistent with these predictions, Klein et al. (1992, Experiment 3) found that trait judgments were influenced by the retrieval of behavioral episodes when experience was low, but they were unaffected by behavioral retrieval as the amount of experience increased: An initial *recall* task was more facilitating than an initial *define* task to a *describe* task performed with reference to self-at-college, but not to a *describe* task performed with reference to self-at-home. These results led Klein and Loftus (1993a, 1993c) to conclude that memory for trait-relevant episodes is important for trait judgments at low levels of behavioral experience, but this importance decreases as trait-relevant behavioral experience increases. When amount of experience is low, trait judgments require the retrieval of relevant behavioral evidence; when experience is high, behavioral episodes play little if any role in the judgment process.

However, a recent study examining the trait self-knowledge of an amnesic patient calls this conclusion into question (Klein, Loftus, & Kihlstrom, 1996). The patient, W.J., suffered a concussive blow to the head shortly after completing her first quarter in college. As a result of this injury, she showed a profound amnesia for personal events and experiences over the six months immediately prior to her accident—a period of time covering approximately her first quarter at college. Over the next month, her amnesia remitted completely.

In contrast to the impairment and recovery of episodic memory, W.J.'s trait ratings of self-at-college did not change at all over the same period of time: Her ratings made during the amnesic period agreed with those

she made afterward. Thus, while she was amnesic, W.J. knew what she had been like in college despite the fact that she couldn't recall anything from her time in college—a finding at odds with Klein and Loftus's (e.g., Klein & Loftus, 1993a, 1993c; Klein et al., 1992) contention that first-quarter undergraduates require behavioral evidence to make trait judgments of themselves at college.

We propose that the inability of Klein and Loftus's developmental model to account for W.J.'s performance stems from a mistaken conclusion drawn from a key test of that model. Specifically, Klein et al. (1992, Experiment 3) found that subjects whose experience at college was limited were significantly faster to make self-descriptiveness judgments about themselves at college when they first retrieved a relevant behavior than when they first generated a definition for the trait. From this they inferred that when experience pertaining to a particular trait is low, self-descriptiveness judgments regarding that trait require the retrieval of behavioral memories (e.g., Klein et al., 1992; Klein & Loftus, 1993a, 1993c).

However, although Klein et al.'s (1992) findings show that people *can* use the behavioral information provided by a *recall* task to make trait judgments about themselves, they do not speak to the issue of whether people *must* access behaviors to make these judgments. For that, it is necessary to demonstrate that judging a trait for self-descriptiveness activates behavioral episodes in memory, thereby facilitating their retrieval in a subsequent *recall* task (for a discussion, see Klein, Loftus, & Sherman, 1993). Unfortunately, previous tests of the developmental model have not examined this ordering of initial and target tasks.

## THE PRESENT STUDIES

In the present studies, we first replicate Klein et al.'s (1992, Experiment 3) finding that the effect of an initial *recall* task on the subsequent performance of a *describe* task decreases as behavioral experience increases (Study 1). We then undertake the more appropriate test of the developmental model by comparing the effects of *describe* judgments made with reference to low- and high-experience contexts on the subsequent performance of a *recall* task (Study 2). On the basis of these studies, we conclude that at low levels of trait-relevant experience, behavioral memories play a more limited role in trait self-descriptiveness judgments than suggested by the developmental model.

### STUDY 1

In this study we had first-quarter undergraduates perform self-related tasks either in reference to a high-experience context or to a low-experi-

ence context. We did this by limiting the time period to which subjects were instructed to refer when performing these tasks. Thus, the *describe* and *recall* tasks were paired with a cue that specified the context to consider when performing those tasks. The cue for the low-experience context was "college," which referred to subjects' experience since they had entered college (i.e., 2-3 months); the cue for the high-experience context was "home," which referred to the entire time period before their arrival at college.

A developmental model of the representation of trait self-knowledge makes the following predictions about response latencies for the *describe* target task:

1. When the context for the *describe* task is home, response latencies should be the same regardless of whether the initial task is *define*, *recall home*, or *recall college*. This is because experience of the self at home should be sufficient to have supported the formation of semantic trait knowledge; and with this knowledge available, self-descriptiveness judgments should be made without reference to behavioral episodes. With no need for behavioral memories, *recall home* and *recall college* tasks should be no more facilitating than a *define* task to performance of a *describe home* target task.
2. When the context for the *describe* task is college, response latencies should be shorter when the initial task is *recall college*, than when it is either *recall home*, or *define*. This is because in the college context, subjects will have had comparatively few trait-relevant experiences. They therefore will be less likely to have formed semantic trait knowledge, and more likely to rely on episodic memories of their behavior at school to decide if traits are self-descriptive. Of the three initial tasks, only the *recall college* task provides behavioral information about the self-at-college. Although the *recall home* task would make available behavioral episodes, these memories would not be relevant to judgments about the self-at-college. Thus, the *recall home* task should be no more facilitating than the *define* task to the performance of a *describe college* task.

## METHOD

*Subjects.* Twenty undergraduates from the University of California at Santa Barbara in their first college quarter were recruited from the psychology subject pool. They were tested individually in sessions lasting approximately 40 minutes.

*Materials and Design.* The stimuli were 72 trait adjectives chosen from the norms provided by Kirby and Gardner (1972). The adjectives we

selected were rated within one standard deviation of the means on the familiarity, imagery, and behavioral specificity norms.

Subjects received 72 trials, 1 trial per adjective. A trial consisted of performing an initial task and a target task in succession for each adjective. Three initial tasks (*recall college*, *recall home*, and *define*) were factorially combined with three target tasks (*describe college*, *describe home*, and *define*) to create nine initial task-target task pairings.<sup>1</sup> For the *recall college* task, subjects recalled a specific incident at college in which their behavior exemplified the presented trait; for the *recall home* task, subjects recalled a trait-relevant behavioral episode that had occurred before they entered college; for the *describe college* task, subjects judged whether the presented trait described themselves since entering college; for the *describe home* task, subjects judged whether the presented trait described the way they were before they came to college; and for the *define* task, subjects thought of a definition for the trait adjective.<sup>2</sup> The assignment of trait adjectives to initial task-target task pairs (8 trait adjectives per pair), and the order in which task pairs were presented were randomized across subjects.

In summary, the experiment was a 3 (Initial Task: *recall college*, *recall home*, and *define*)  $\times$  3 (Target Task: *describe college*, *describe home*, and *define*) within-subjects design.

*Procedure.* Subjects were told that we were interested in their ability to perform various tasks on stimulus words. We told them that it was important to perform the tasks accurately and that they should indicate immediately when they had completed each task. We then described the experimental tasks and gave them instructions for performing them.

A microcomputer presented the stimulus traits and recorded response latencies for the target tasks. Each trial began with the appearance on a computer screen of a cue for the initial task. The cue was either *recall college*, *recall home*, or *define*. After 1 second, a trait adjective appeared below the cue. Both the cue and the trait adjective remained on the screen until the subject indicated that he or she had completed the initial task

1. Even though our hypothesis requires examination of only conditions in which initial *recall* and *define* tasks are followed by a *describe* target task, we also included conditions in which the *define* task served as a target task (subjects were told that on trials where the target task was the same as the initial task they need not generate a new response for the target task; rather, they could simply call the original response to mind a second time). We hoped this would discourage subjects from developing expectancies for a particular initial task-target task pairing by making it more difficult to anticipate the target task on any trial.

2. We did not request that subjects report their responses during the experimental trials; rather, we instructed them to generate responses to the task questions in their heads. Klein and Loftus (1993a, 1993b) provide a detailed discussion of our reasons for adopting this procedure and present research demonstrating the efficacy of the technique.

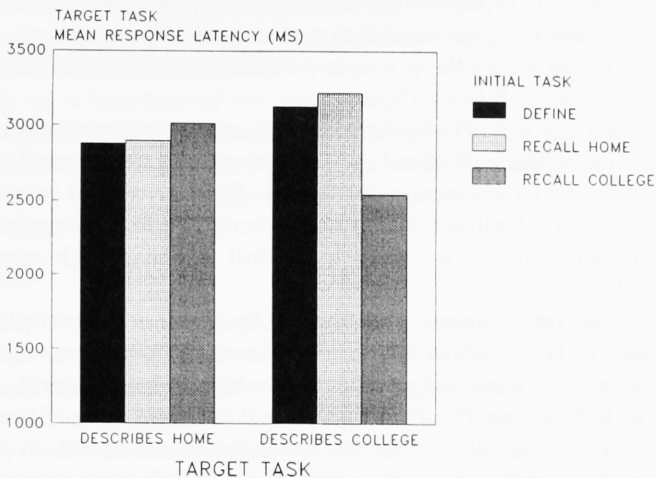


FIGURE 1. Mean Describe Target-Task Latencies as a Function of Initial Task and Context (College or Home): Experiment 1.

by pressing a key. The initial task cue was then removed, leaving the stimulus trait on the screen. After a 1 second pause, the cue for the target task (*describe college*, *describe home*, or *define*) appeared on the screen above the stimulus trait and a timer was activated. Again the cue and trait remained on the screen until the subject indicated by pressing a key that he or she had completed the target task. The timer then stopped and the target task response latency was recorded. There was a 2 second delay prior to beginning the next trial.

## RESULTS AND DISCUSSION

To test the specific predictions outlined above, we examined the joint effects of initial task (*define*, *recall home*, *recall college*) and level of experience (home and college) on *describe* target task response latencies. A  $3 \times 2$  repeated measures Analysis of Variance (ANOVA) on these latencies (see Figure 1) showed no effect of either initial task,  $F(2, 38) = 2.18, p > .10$ , or target task,  $F(1, 19) = .14, p > .50$ . There was, however, an Initial Task  $\times$  Target Task interaction,  $F(2, 38) = 4.27, p < .05$ . Replicating the pattern of latencies obtained by Klein et al. (1992, Experiment 3), simple effects tests revealed that the *describe college* target task was performed more quickly when preceded by a *recall college* task than when preceded by either a *recall home* task,  $F(1, 19) = 10.14, p < .01$ , or a *define* task,  $F(1, 19) = 7.56, p < .05$  (the latter two tasks yielded target task response latencies that were longer by



674 ms and 582 ms, respectively, than that yielded by an initial *recall college* task). By contrast, the time needed to perform a *describe home* task was not differentially affected by the previous performance of a *recall college*, *recall home*, or *define* task (all  $F_s < 1.0$ ).

Thus, when amount of behavioral experience varies across experimental conditions, judgments about the self correspond to the predictions of Klein and Loftus's developmental model: The retrieval of relevant behavioral evidence facilitated trait self-descriptiveness judgments in a low-experience context (self-at-college), but not in a high-experience context (self-at-home).

However, as noted above, the finding that trait self-descriptiveness judgments can be influenced by the retrieval of behavioral memories does not prove that these judgments require behavioral retrieval. All that can be concluded from this finding is that if the right type of memories are made available, subjects in the low-experience condition *can* use them in making trait judgments about the self. Whether subjects *need* these memories to make trait judgments is the question addressed in Study 2.

## STUDY 2

In this study, we repeated the procedure described in Study 1 with one change: the *describe* tasks were performed only as initial tasks and the *recall* tasks were performed only as target tasks. We predicted that if behavioral memories are required for trait self-descriptiveness judgments at low levels of experience, but not at high levels of experience, the following two things should occur:

1. When the judgment context is college (i.e., a low-experience context), *recall* target task latencies should be shorter when the initial task is *describe college*, than when it is either *describe home* or *define*. This is because the behavioral information required to perform the *recall college* task will have been activated by the *describe college* task, but not by either the *describe home* or *define* task.
2. When the judgment context is home (i.e., a high-experience context), there should be no difference in *recall* target task latencies as a function of initial task. Of the three initial tasks (*describe home*, *describe college*, and *define*), only the *describe home* task is relevant to the performance of a *recall home* target task. However, because the *describe home* task does not make available behavioral information about the self (see Study 1), this task should be no more facilitating than a *describe college* or a *define* task to performance of a *recall home* task.

By contrast, if behavioral memories are not required for trait self-descriptiveness judgments made with reference either to low- or to high-experience contexts, we should find no difference in *recall* target task latencies as a function of the initial task performed. Because *describe* tasks, regardless of context (home or college), do not activate trait-relevant behavioral memories, these tasks should be no more facilitating than a *define* task to performance of *recall* target tasks.

## METHOD

*Subjects.* Twenty-six first quarter undergraduates from the University of California at Santa Barbara participated in the study. Subjects were tested individually in sessions lasting approximately 40 minutes.

*Materials and Design.* The stimulus words and design were the same as in Study 1, except that the *describe college* and *describe home* tasks served as initial tasks, and the *recall college* and *recall home* tasks served as target tasks. These changes resulted in a  $3 \times 3$  design, with initial task (*describe college*, *describe home*, and *define*) and target task (*recall college*, *recall home*, and *define*) both varied within-subjects.

*Procedure.* The procedure was identical to that used in Study 1.

## RESULTS

The results are shown in Figure 2. A  $3$  (Initial Task: *define*, *describe home*, *describe college*)  $\times$   $2$  (Target Task: *recall home*, *recall college*) repeated measures ANOVA on the target task mean response latencies failed to reveal any significant effects (all  $F_s < 1.0$ ). Thus, we found no evidence that subjects required behavioral memories to make trait self-descriptiveness judgments performed with reference to either high- or low-experience contexts.

It is important to note that this failure to find a significant effect of initial task performance on target task latency is not subject to some of the usual criticisms concerning null findings (e.g., Greenwald, 1975). There is a wealth of evidence attesting to the sensitivity of Klein and Loftus's priming procedure in detecting behavioral activation following a trait-descriptiveness judgment (e.g., Babey & Klein, 1996; Klein & Loftus, 1993a; Klein et al., 1992; Sherman, 1996; Sherman & Klein, 1994). All of these studies reported interactions in which facilitation was observed only in those conditions in which judgments were predicted to rely on behavioral retrieval. Failures to find facilitation occurred only where predicted. Therefore, we feel it is unlikely that the failure to find *recall* task facilitation following a *describe* judgment in Study 2 was due to a lack of sensitivity of the procedure used.

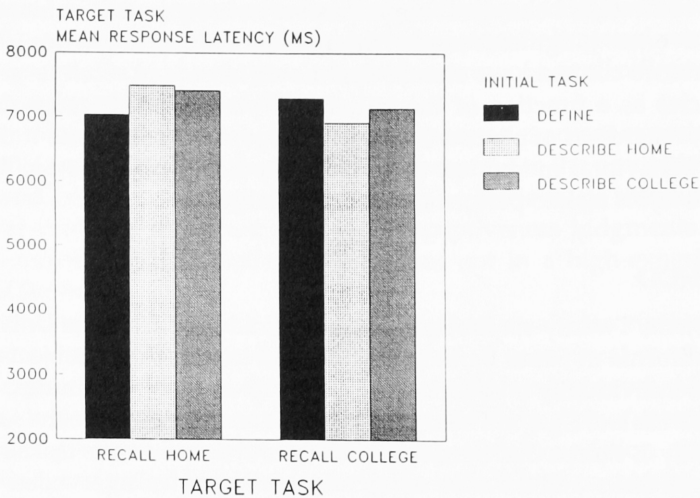


FIGURE 2. Mean Recall Target-Task Latencies as a Function of Initial Task and Context (College or Home): Experiment 2.

## GENERAL DISCUSSION

Klein and Loftus's developmental model (e.g., Klein & Loftus, 1993a, 1993c; Klein et al., 1992) proposes that for trait self-descriptiveness judgments, the type of knowledge retrieved will depend on the amount of trait-relevant experience in memory. When experience is low, trait knowledge is represented only at the level of behavioral episodes; trait self-descriptiveness judgments must, therefore, be based on the retrieval of relevant behaviors. However, with sufficient experience, trait knowledge will be abstracted from behavioral episodes and represented in semantic form. Judgments then can be made on the basis of semantic knowledge, and retrieving behavioral episodes no longer will be necessary.

The data from our high-experience conditions conformed nicely to the predictions this model: We found no evidence that behavioral memories either facilitate (Study 1) or are required for (Study 2) trait self-descriptiveness judgments made with reference to a high-experience context.

Our low-experience conditions, however, failed to support the model: Although we found evidence that first-quarter undergraduates' judgments of self-at-college can be facilitated by the retrieval of relevant behavioral episodes (Study 1), they do not appear to require

them (Study 2)—if they did, then performing a *describe college* task should have facilitated retrieval of a behavioral memory in a subsequent *recall college* task. Contrary to this prediction, Study 2 showed that subjects were no faster to retrieve behavioral memories of self-at-college following performance of a *describe college* task than following a *describe home* or a *define* task.

These findings suggest that the role of behavioral episodes in trait judgments made with reference to low-experience contexts has been overstated by the developmental model. The results of Study 2 make it clear that subjects do not require behavioral episodes to make these judgments. Rather, they suggest that even at low levels of behavioral experience subjects possess semantic trait self-knowledge and access this knowledge to make trait self-descriptiveness judgments.

However, it also is clear that at low levels of trait-relevant behavioral experience, trait self-descriptiveness judgments can be facilitated by the retrieval of behavioral memories: First-quarter undergraduates were reliably faster to make judgments about self-at-college provided the right type of behavioral information first was made available. It may be that in the early stages in the development of semantic trait self-knowledge—when trait generalizations necessarily are based on relatively few relevant experiences—subjects lack confidence in that knowledge. Under these circumstances, the trait-relevant behavioral memories made available by a *recall* task provide evidence in support of subjects' semantic trait-knowledge, thereby decreasing the time they require to make judgments regarding that knowledge.

Some support for this interpretation can be seen in the *describe* task latency data in Figure 1. If subjects are more confident about trait judgments made with reference to high-experience contexts than to judgments made with reference to low-experience contexts, one would predict that judgment latencies for self-at-home should take less time than judgments about self-at-college. Analysis of latencies for *describe* judgments supported these predictions: A planned comparison (e.g., Rosenthal & Rosnow, 1985) revealed that the time to perform a *describe* judgment was shorter when the judgment context was home than when it was college (the mean latency for the *describe college* judgment did not include data from the condition in which the *describe* task was influenced by the task performed initially—i.e., when the *describe college* task was preceded by a *recall college* task),  $t(38) = 1.80, p < .05$ , one-tailed (the same pattern of significant findings can be found in Klein & Loftus, 1993c, and Schell et al., 1996).

However, the results of Study 1 also suggest that, with increasing experience, subjects' confidence in their semantic trait-knowledge

reaches a point at which temporarily accessible behavioral information no longer affects the time required to make trait self-descriptiveness judgments.

These conclusions rest on the assumption that the crucial difference between our home and college contexts was a quantitative one—having been at college for only a few months, subjects had far less behavioral experience than they had at home. However, there also is a difference in the age of the behavioral memories associated with these two contexts: Behavioral experiences of self-at-college are more recent than are those associated with self-at-home. Thus, it is possible that the differential effects of behaviors retrieved from the home and school contexts on latencies to make trait judgments may be due to the age of the memory retrieved rather than the amount of experience associated with those contexts.

This interpretation, however, is called into question by a recent experiment by Klein (1993). Klein's study was identical to Study 1 with three modifications. First, behavioral experience was manipulated by selecting subjects who either had a low-amount of experience in the college context (first-year undergraduates) or a high amount of college experience (fourth-year undergraduates). Second, for the *describe* target task, subjects decided whether the presented trait described them at college. Third, for the *recall* initial task, subjects were instructed to restrict their recall to incidents that had occurred at college in the last 6 months.

If the differential facilitation reported by Klein et al. (1992, Experiment 3; see also Study 1 presented here) was due to differing amounts of experience between the two judgment contexts (home and college), then differential amounts of facilitation should also have been found between first-year and fourth-year students. By contrast, if differences in facilitation were attributable to differences in the age of the memories associated with the home and college contexts, then both first- and fourth-year students should have shown comparable facilitation. This is because requiring subjects to restrict their recall to events occurring in the previous 6 months guarantees that both first- and fourth-year subjects will access recent trait-relevant behavioral memories during performance of the *recall* initial task.

Klein's results clearly favored the amount of experience hypothesis: Subjects whose experience at college was limited (first-year undergraduates) were significantly faster to make trait self-descriptiveness judgments about themselves at college when they first retrieved a relevant behavior than when they first generated a definition for the trait. By contrast, for subjects whose experience at college was considerable (fourth-year undergraduates), judgments took just as long fol-

lowing behavioral retrieval as following definition generation. These findings strongly support our contention that the pattern of facilitation found in Study 1 reflects quantitative differences in subjects' experiences at home and college rather than the age of the memory retrieved.

### SELF-KNOWLEDGE, IMPRESSION FORMATION, AND STEREOTYPING

Our results suggest that the distinction between episodic and semantic trait self-knowledge is not as clear-cut as initially suggested by Klein and Loftus's developmental model. The model assumed that if semantic trait self-knowledge existed, it alone would serve as the basis for trait self-descriptiveness judgments. However, the present studies show that even when subjects appear to possess semantic trait knowledge about themselves as college students (Study 2), judgments pertaining to that context can be facilitated by the retrieval of behavioral information (Study 1).

Similar results have been obtained in research on impression formation and stereotyping. For instance, Carlston and Skowronski (1986) showed that recently activated behaviors facilitated impression judgments even when abstract trait impressions of the target existed. Similarly, Bodenhausen, Schwarz, Bless, and Wanke (1995) demonstrated that judgments about social groups may be influenced by accessible group exemplars, even when stereotypes about the groups are relatively strong and abstract. Thus, the findings from the present research—that accessible behavioral episodes may continue to affect judgments even after abstract judgment-relevant knowledge has developed—do not appear to apply uniquely to self-knowledge. What does seem to be unique about self-knowledge is that with sufficient experience it becomes resistant to the influence of accessible behaviors. Similar demonstrations have not been reported in either the impression formation or stereotyping literatures.

At the other end of the developmental sequence, our results suggest that it is difficult to identify situations in which trait self-descriptiveness judgments *require* the retrieval of behavioral information. In contrast, past research has shown that trait judgments about other individuals (e.g., Klein et al., 1992; Sherman & Klein, 1994) and groups (Sherman, 1996) *necessarily* are based on the retrieval of particular behavioral episodes in the early stages of knowledge development. It would seem that the developmental sequence of social knowledge—evolving from episodic to semantic—may be shifted toward the semantic end for knowledge pertaining to self. Not only is it difficult to identify domains in which trait self-descriptiveness judgments require the retrieval of behavioral episodes, it also is possible to identify domains in which self-judg-

ments are uninfluenced by the retrieval of trait-relevant behaviors. To the best of our knowledge, neither of these conditions have been shown to occur with other kinds of social knowledge.

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