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Situation-Specific Effects in Person Memory

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Given that most person memory models have concentrated on trait expectancies, and have ignored situational ones, this article attempts to show that new predictions can arise from an explicit focus on the situation. Participants were led to believe that a target person was kind or unkind either at work or at home. They were subsequently presented with congruent and incongruent behavioral items ostensibly performed by the target person in each of those settings. Consistent with the notion that people form situation-specific expectancies, incongruent behaviors were better recalled than congruent ones, but only if they pertained to the situation specified in the expectancy manipulation; an incongruity effect was not obtained for behaviors performed in the unspecified situation. These data suggest that situation-specific expectancies should be addressed in future person memory models.

A large number of experiments (see Wyer & Srull, 1989, for a review) have been performed that employed variations on the following paradigm. First, participants are told about a target person and are led to believe that the target person has a particular trait (e.g., kind, intelligent, or others). Second, they are asked to form an impression of the target person on the basis of information that is about to be presented. Third, they are presented with a set of behaviors ostensibly performed by the target person. Finally, usually after a short delay, they are given a surprise recall task where they are asked to write down as many of the presented behaviors as possible.

The behaviors ostensibly performed by the target person can have three types of relationships to the initial trait expectancy. That is, these behaviors can be congruent with, incongruent with, or irrelevant to the initial trait expectancy. Most researchers have found that incongruent behaviors are better recalled than are congruent behaviors, which, in turn, are better recalled than are irrelevant behaviors (e.g., Bargh & Thein, 1985; Hastie & Kumar, 1979; Srull, 1981; Srull, Lichtenstein, & Rothbart, 1985; Stern, Marrs, Miller, & Cole, 1984; Wyer & Gordon, 1982; see Rojahn & Pettigrew, 1992, and Stangor & McMillan, 1992, for meta-analyses). Several accounts of this incongruity effect have been proposed. These accounts assume that the relationship between the behaviors and the trait expectancy is particularly important. For example, Srull et al. (1985) argued that behaviors incongruent with a trait expectancy are difficult to comprehend and are consequently compared with many other relevant (i.e., congruent and incongruent) items to resolve the incongruity (also see Srull & Wyer, 1989; Wyer & Srull, 1989). This process results in a large number of interitem associations connecting to incongruent items (i.e., incongruent items are associated with other incongruent items and congruent items), fewer associations connecting to congruent items (they are associated with incongruent items but not with each other), and hardly any associations being connected to irrelevant items (they are isolated in the network).

Other accounts are also possible. Hastie (1980) pointed out that behaviors incongruent with a trait expectancy are more informative than are congruent behaviors and therefore might be expected to remain longer in working memory. An additional possibility is that because incongruent behaviors are surprising, people make attributions about them, which increases their ease of retrieval (Hastie, 1984). In sum, although these theories postulate different mechanisms for the incongruity effect, they share an emphasis on the relationship of the behaviors to a prior trait expectancy.

Recent Trends in Person Memory

Recently, researchers have become increasingly concerned with delineating the conditions where incongru-

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ity effects occur or do not occur. Much of this research suggests that the presence or absence of alternative processing objectives is an important variable. For example, Asuncion and Lam (1995) performed an interesting experiment where participants received, or did not receive, a mood manipulation prior to the expectancy induction. Although the usual incongruity processing was obtained in the no mood condition, the effect was eliminated in both the happy and sad conditions. These findings suggest that incongruity effects may fail to occur when participants devote attentional capacity toward dealing with an induced mood.

Using a response latency paradigm, Sherman and Hamilton (1994) also showed that incongruity effects do not always occur. Participants in their experiments read a series of congruent, incongruent, and irrelevant behaviors and were periodically probed with a recognition task. In the first two experiments, recognition latencies for previously presented behaviors were faster following an incongruent item than following a congruent or irrelevant item. Sherman and Hamilton argued that this finding supports the notion that incongruent items cause previously presented items to be brought into working memory. Interestingly, however, the effect disappeared in Experiment 3 when participants were forced to attend to an additional task (repeating the items aloud two times), which conceptually replicates findings by Srull et al. (1985).

Wyer, Budesheim, Lambert, and Swan (1994) had a speaker present participants with information about a target person's traits and behaviors in the context of a conversation. Although previously cited findings suggest that incongruent information should have been better recalled than congruent information, this implication was not supported by the data. Specifically, when participants were presented with the information in a conversational context, the incongruity of the target's behaviors to the initial trait description was unrelated to the recall of these behaviors. Rather, Wyer et al. concluded that participants were more concerned with the speaker's intentions in conveying the information than in the information itself, thereby eliminating the type of information processing that typically results in an incongruity effect.

Hamilton, Driscoll, and Worth (1989) also used a paradigm that eliminated the incongruity effect. They induced multiple trait expectancies (e.g., that the target person is friendly, intelligent, and adventurous) and then presented participants with congruent and incongruent (and irrelevant) information pertaining to the traits. Although these authors later replicated the usual incongruity effect when only one trait was involved, the effect was eliminated in a multiple trait paradigm. Hamilton et al. argued that using a multiple trait paradigm caused participants to form associations between congruent and other congruent items, thereby elevating the recall of congruent items to equal that of incongruent items. An alternative explanation for the Hamilton et al. findings, however, is that attending to multiple traits resulted in extra cognitive demands that caused resources to be diverted away from processing the incongruent items (Wyer & Carlston, 1994). In sum, the recent literature suggests limitations on the generality of the incongruity effect to different paradigms.

**Situation-Specific Expectancies**

Although person memory research has focused mainly on trait expectancies, a few researchers have argued that people also have situational expectancies. For example, attribution researchers have argued that behavior is more informative when it violates social desirability norms (Jones & Davis, 1965), which implies that people have expectancies about what kinds of behavior are expected (or are socially desirable) in certain situations (also see Jones & Mc Gillis, 1976). In addition, one of the key dimensions in Kelley's (1967) famous Covariation model addresses people's expectancies about situations. More recently, Wright and Mischel (1988) have argued that even trait expectations imply situational predictions. They point out, for example, that aggressive children are not expected to always behave aggressively; rather, they are expected to do so only in certain situations (e.g., when a goal is blocked or when there is something to gain by aggressive behavior). In fact, part of the definition of a trait is that it is only expected to be exhibited in behavior if certain conditions are met (also see Shoda, Mischel, & Wright, 1989; Wright & Mischel, 1987).

It is possible to extend this argument. It is one thing to assert, for example, that friendly persons should be expected to perform friendly behaviors if certain conditions are met. This assertion implies that given particular situations, friendly persons will be expected to perform friendly behaviors. In contrast, it is also possible to assert (Zuroff, 1982) that it is an inherent characteristic among some people that they perform friendly behaviors in some situations, whereas it is an inherent characteristic among other people that they perform friendly behaviors in other situations. In other words, people have situation-specific expectancies about other people. Although the work by Wright and Mischel supports the first assertion, there is very little support for the latter one. The primary goal of this article is to provide such support and to explore whether the hypothesized expectancies can be represented in person memory models. The incongruity effect described earlier will be used as a diagnostic tool to test the hypothesis that people form
expectancies that are situation-specific against the alternative hypothesis that expectancies are general.

To illustrate these hypotheses, consider the following. Suppose that people, on the basis of information gained in a work setting, form an expectancy that a particular person (Joe) is kind. In addition, suppose that they read about Joe’s behaviors in a variety of settings (at work and at home). If people form general expectancies instead of situation-specific ones, then they should expect Joe’s kindness to extend to both work and home settings. Thus, the incongruity effect described earlier suggests that people should recall unkind behaviors better than kind behaviors, regardless of the situation in which these behaviors were performed. In contrast, if people form situation-specific expectancies, then they should not expect Joe’s kindness to extend to a home setting. Therefore, unkind behaviors should be recalled better than kind behaviors only if they were performed at work. Given recent trends in the person memory literature, each of these alternative hypotheses seems plausible.

There was also a secondary goal. Hamilton, Katz, and Leirer (1980) showed that memory for behaviors is better when participants attempt to form an impression of the target person than when they are asked to memorize the items. Srull et al. (1985) extended this research with their demonstration that incongruity effects tend to occur when participants form impressions of the target person, but not when they attempt to memorize the items. Therefore, to test whether the Srull et al. findings would extend to the present paradigm, both of these conditions were included.

METHOD

Participants

Seventy-two male and female introductory psychology students participated in the experiment. Participation partially fulfilled a course requirement.

Materials

Thirty-six behavior statements were used. Half of these statements pertained to a target person’s (Joe’s) behavior at home and the rest pertained to Joe’s behavior at work. Each group of behavior statements was divided into three subgroups of six kind behaviors, six unkind behaviors, and six irrelevant behaviors. For example, the item “Joe yelled at the secretary because the coffee was too strong” is a work-unkind behavior. The item “Joe invited his lonely mother to stay with him instead of going to Europe as he had planned” is a home-kind behavior. And the item “Joe left his briefcase on a chair in his office” is a work-irrelevant item. These 36 behavior statements were chosen from a set of 48 behavior statements on the basis of ratings obtained from an independent sample of subjects. More specifically, the behaviors performed at home and at work that were rated as most kind on a scale from kind to unkind were chosen as the “kind at home” and “kind at work” behaviors to be included. The “unkind at home” and “unkind at work” items chosen were those that were rated as most unkind. Finally, the “irrelevant at home” and “irrelevant at work” items chosen were those that were closest to the middle of the scale. There were no significant differences in kindness ratings between home and work items for either the kind, unkind, or irrelevant items.

Design

The experimental design was a $2 \times 6 \times 6$ mixed factorial with two between-participants factors and one within-participants factor. The first between-participants factor was the Instructions (memory set vs. impression set); participants were told to memorize the behaviors or to form an impression of the target person on the basis of the behaviors. The second between-participants factor was Expectancy (kind in general vs. unkind in general vs. kind at home vs. unkind at home vs. kind at work vs. unkind at work). The within-participants factor was Item type (home-kind vs. home-unkind vs. home-irrelevant vs. work-kind vs. work-unkind vs. work-irrelevant), which refers to the actual behavior statements that were used (see Materials section).

Procedure

After signing informed consent forms, participants were induced to create either a general, home, or work expectancy about a person named Joe Harrison. In the general expectancy conditions, participants learned “Joe tends (not) to do nice things for people and behaves in a generally (un)kind manner.” In the home expectancy conditions, participants learned “People in Joe’s family describe Joe as being much more (un)kind and (un)friendly than the average person. Joe tends (not) to do nice things for people and behaves in a generally (un)kind manner.” Finally, in the work expectancy conditions, participants read the same information prefaced with the statement, “The people who Joe works with describe him as . . .”

The participants in the memory set condition were instructed to remember the behavioral information they were about to be presented with as well as possible and that they would later be asked to recall its basic content. The participants in the impression set condition were instructed to use the behavioral information to form an impression of what the target person was like and that they would later be asked to make some simple judgments about that person.
After receiving an expectancy, all of the participants were paced through the 96 items at a rate of 5 seconds per item. They were subsequently given a delay of 5 minutes, during which they wrote down as many of the states making up the United States as possible, before being asked to write down as many of the behavioral items as they could recall.

RESULTS

The free-recall data were scored according to a lenient general meaning criterion (Srull, 1984) by a judge blind to all experimental conditions. Previous research has indicated that this procedure can be used with near perfect reliability (Srull, 1981; Srull & Brand, 1983). Also comparable to other studies that have used behavioral items (Hastie & Kumar, 1979; Srull et al., 1985), an extremely small number of intrusions was found in the present data set (less than 2%).

The total number of items recalled was analyzed as a function of the two between-participants and one within-participants factors. The main effect of the instructions (memory set versus impression set) was not significant, F(1, 360) = 1.53, p > .20, nor did this variable enter into any interactions. Thus, participants were collapsed across this factor. The mean number of home-kind, home-unkind, home-irrelevant, work-kind, work-unkind, and work-irrelevant items recalled are presented in Table 1 as a function of the expectancy factor.

There was a significant main effect of item type (irrelevant items were not recalled very well overall), F(5, 360) = 14.48, p < .001, but this was qualified by an important interaction between Item Type and Expectancy, F(25, 360) = 14.23, p < .001. Because there are six levels associated with each of these variables, the nature of this interaction is best understood by examining how the pattern of recall associated with each item type changes across the various expectancy conditions.

Table 1 presents the mean number of home-kind, home-unkind, home-irrelevant, work-kind, work-unkind, and work-irrelevant items recalled as a function of the two home expectancy conditions. There are a number of things to note about these data. In the home-kind expectancy condition, participants recalled a greater number of home-unkind than home-kind items and a greater number of home-kind than home-irrelevant items (i.e., the standard incongruity effect). Post-hoc significance tests using Newman-Keuls procedures indicate that each difference is significant at p < .01. Analogously, under the home-unkind expectancy condition, participants recalled more of the incongruent home-kind than congruent home-unkind items (p < .01), and more of the home-unkind than home-irrelevant items (p < .01). This pattern of results essentially replicates findings previously reported by Srull (1981; Srull et al., 1985). Incongruent items are recalled best and irrelevant items are recalled most poorly.

The recall levels associated with the various work items are also interesting. There is no difference in the recall probabilities associated with these items as a function of whether they are kind, unkind, or irrelevant and these levels of recall do not change as a function of the expectancy condition (home-kind or home-unkind). These data indicate that the initial expectancy was clearly situation specific. In terms of associative network theory (Srull et al., 1985), these data would suggest that home-irrelevant items become isolated in the final representational structure (i.e., these items are not associated with other items), and this accounts for why they are so poorly recalled relative to other relevant (i.e., home-kind or home-unkind) items. In contrast, the work items appear to form a relatively undifferentiated network (no interitem associations are formed involving work items), and thus their recall does not vary as a function of whether they are kind, unkind, or irrelevant.

Figure 1 represents these findings in a more concise manner. The positive and negative expectancies were collapsed and the data were coded as being congruent or incongruent with the expectancy. So Figure 1 represents mean levels of home-congruent, home-incongruent, home-irrelevant, work-congruent, work-incongruent, and work-irrelevant items recalled by participants in all home expectancy conditions. Consistent with Table 1, Figure 1 demonstrates a situation-specific incongruity effect that occurs for the home items but not for the work items.

Table 1 also presents the mean number of home-kind, home-unkind, home-irrelevant, work-kind, work-unkind, and work-irrelevant items recalled as a function of the two work expectancy conditions. These data show a situation-specific incongruity effect for the work items but not for the home items.

<table>
<thead>
<tr>
<th>Type of Item Recalled</th>
<th>Type of Expectancy</th>
<th>Home Kind</th>
<th>Home Unkind</th>
<th>Home Irrelevant</th>
<th>Work Kind</th>
<th>Work Unkind</th>
<th>Work Irrelevant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kind</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General</td>
<td></td>
<td>2.00</td>
<td>4.00</td>
<td>0.92</td>
<td>1.42</td>
<td>3.08</td>
<td>0.75</td>
</tr>
<tr>
<td>Home</td>
<td></td>
<td>2.17</td>
<td>4.17</td>
<td>0.83</td>
<td>1.92</td>
<td>1.85</td>
<td>1.85</td>
</tr>
<tr>
<td>Work</td>
<td></td>
<td>2.25</td>
<td>2.00</td>
<td>2.08</td>
<td>2.00</td>
<td>4.17</td>
<td>1.08</td>
</tr>
<tr>
<td>Unkind</td>
<td></td>
<td>3.92</td>
<td>1.92</td>
<td>0.83</td>
<td>4.00</td>
<td>2.00</td>
<td>1.08</td>
</tr>
<tr>
<td>Home</td>
<td></td>
<td>4.25</td>
<td>1.75</td>
<td>0.92</td>
<td>2.00</td>
<td>2.00</td>
<td>1.92</td>
</tr>
<tr>
<td>Work</td>
<td></td>
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<td>1.67</td>
<td>1.75</td>
<td>4.00</td>
<td>2.00</td>
<td>0.75</td>
</tr>
</tbody>
</table>

*The maximum possible recall of any one kind of item was 6.0.
incongruity effect was obtained for the work items but not for the home items. In essence, Figures 1 and 2 indicate that participants recalled incongruent items better than congruent ones and congruent ones better than irrelevant ones, but only if they were performed in the situation specified by the expectancy.

In addition to the home and work expectancy conditions, Table 1 shows data relevant to the general expectancy conditions. Under these conditions, a quite different pattern emerges. In particular, participants receiving both the general-kind and general-unkind expectancy show better recall of incongruent than congruent items, and better recall of the congruent than irrelevant items (all differences are significant at least at $p < .05$). *This is true regardless of whether the items pertain to home or work* (see Figure 3). These data extend the findings previously reported by Srull (1981; Srull et al., 1985) and Hastie (1984) by showing that incongruity effects will be obtained not only for behaviors pertaining to a single trait dimension but also for behaviors performed in distinctly different situational contexts. On the other hand, this requires that the initial expectancy be a *general* one rather than *situation-specific* in nature.

**GENERAL DISCUSSION**

The results show that people form situation-specific expectancies and store them in memory. As far as I am aware, there are no person memory models that explicitly take these situation-specific expectancies into account. However, it would not be difficult to create a model to do so. For example, one can imagine a hierarchical model where there is a general person concept at the highest level, situation-specific concepts at an intermediate level, and behaviors at the lowest level.
Interitem associations between behaviors would depend upon whether they pertain to the situation specified by the expectancy or to an unspecified situation. In the former case, incongruent items should be associated with other incongruent items and with congruent items, congruent items should be associated with incongruent items but not with each other, and irrelevant items should have few interitem associations connecting to them (as described by Srull et al., 1985). In contrast, items pertaining to an unspecified situation should have few interitem associations connecting to them regardless of their congruency, incongruency, or irrelevancy (in contrast to Srull et al., 1985).

An alternative hierarchical model could posit that people may not form general person concepts when situation-specific ones account for the behavioral data, but be similar to the above model otherwise. This latter formulation, then, would be a hierarchical model with only two levels.

A third possible model is not hierarchical. Perhaps people store situation-specific expectancies in a separate structure from that where the behaviors are encoded but use these expectancies as a tool for determining the amount of cognitive resources to devote to processing each behavior. If a behavior contradicts a situation-specific expectancy, more resources are devoted to processing it, possibly resulting in more associative pathways connecting to it or more salient attributions being made about it. Thus, such a behavior is easy to retrieve relative to congruent behaviors or to behaviors performed in situations not specified by the expectancy. Obviously, more research is needed to test these possibilities against each other.

Implications for Evaluative and Descriptive Incongruency

Wyer and Gordon (1982; also see Wyer & Srull, 1989) distinguished between evaluative and descriptive incongruency. Evaluative incongruency occurs when a behavior contradicts the general tone (positive or negative) of an expectancy. Descriptive incongruency occurs when a behavior contradicts the specific implications of an expectancy. For example, if a target person is thought to be friendly (evaluatively positive trait) and performs a stupid behavior (an evaluatively negative behavior), then the behavior is evaluatively, but not descriptively, incongruent with the expectancy. The behavior would have to be an unfriendly one to qualify as being descriptively incongruent. Wyer and Gordon (1982) argued that it is evaluative incongruency rather than descriptive incongruency that causes the incongruity effect.

But consider the present data. One could argue that incongruent behaviors performed in both the specified and unspecified situations are evaluatively incongruent. That is, for example, if the target person is expected to be friendly at work (an evaluatively positive expectancy), then unfriendly behaviors, even if performed at home, are evaluatively negative and are therefore evaluatively incongruent. Thus, an incongruity effect should be obtained even for home behaviors—a prediction that is contradicted by the data. On the other hand, the Wyer and Gordon (1982) argument could be modified to state that evaluative incongruency causes incongruity effects, but only if the situation behaviors are performed in is deemed by the observer to be relevant to the expectancy. Clearly, then, evaluative incongruency does not necessarily extend to behaviors performed in situations not specified by the expectancy.

The Failure of the Processing Objective Manipulation

The most puzzling finding was the lack of an effect of the instructions (memory set or impression set) on memory for the target person's behaviors. This failure contrasts with other research where such an effect was obtained (e.g., Hamilton et al., 1980; Srull et al., 1985). These researchers had argued that in contrast to memory instructions, impression formation instructions induce people to form interitem associations, which aids in later retrieval. Thus, people should exhibit better recall in the impression formation condition than in the memory condition. Rather than interpreting the present finding as a challenge to this argument, it seems more reasonable to assume that participants in the memory condition, as well as those in the impression formation condition, created impressions of the target person. It is worth noting, in this regard, Winter and Uleman's (1984) findings that despite receiving memory instructions, their participants nevertheless engaged in a substantial amount of inferential activity. So, assuming that memory set participants in the present experiment also made inferences about the target person, and consequently formed interitem associations, it is not surprising that their recall of the items was elevated to a level similar to that achieved by the impression formation participants. To understand why this might have occurred in the present experiment and not in those performed by Srull et al. (1985), consider that Srull et al. used a paradigm that did not contain items performed in two distinct situations (i.e., home and work). It is possible that featuring two situations stimulated participants to attempt to form situation-specific impressions despite the memory instructions that half of them received. Of course, until this hypothesis is tested, it remains merely a possibility.
Final Thought

Although researchers, on occasion, have performed research indicating that people sometimes pay attention to the situation (Krull, 1995; Quattrone, 1982; Trafimow & Schneider, 1994; Zuroff, 1982), the clear trend of previous research has been a concern with trait inferences and representations (Gilbert & Malone, 1995; Gilbert, Pelham, & Krull, 1988; Jones & Harris, 1967; Newman & Uleman, 1993; Ross, 1977; Ross, Amabile, & Steinmetz, 1977; Ross & Nisbett, 1991; Uleman, 1987; Uleman & Moskowitz, 1994; Uleman, Moskowitz, Roman, & Rhee, 1993; Winter & Uleman, 1984; Winter, Uleman, & Cunniff, 1985). I would argue, along with Zuroff (1982), that both traits and situations (and their interaction) are important. It is hoped that the strong effect obtained in the experiment will pave the way for an explicit consideration of situation-specific expectancies in future person memory models.

REFERENCES


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