
Social Perception in Multitarget Settings: Effects of Motivated Encoding Strategies

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Two experiments examined the effects of a number of motivated encoding strategies (anticipated-interaction, impression formation, later use, self-comparison, friend comparison, and memory instructions) on the recall and cognitive organization of information about multiple target persons. As in past research on the effects of motivated encoding strategies on the cognitive processing of information about a single target, memory instructions produced the lowest levels of recall. However, in contrast to past research, no instruction set produced evidence of higher cognitive individuation of targets than memory instructions. The results are discussed in the context of two alternative models of person memory—the associative network model and the elaboration model.

DRecently there has been a resurgence of interest in the interface between cognition and motivation (Sorrentino & Higgins, 1986, 1990) and especially in the impact of motivated encoding strategies on the way social information is attended to, cognitively represented, and retrieved (for reviews, see Showers & Cantor, 1985; Srull & Wyer, 1986).

Research regarding the effects of motivated encoding strategies on the processing of social information has been based mostly on associative network models of person memory. According to such models (Pryor & Ostrom, 1981; Srull & Wyer, 1989; Wyer & Carlston, 1979), behaviors or personality characteristics (i.e., information items) referring to a target person are represented in memory as nodes. These nodes are often expected to be linked to a central target node through a series of associative pathways. These associative pathways will be called *name-to-item associations* because the central target node is frequently assumed to represent

the target's name. Additional associative pathways may develop between the nodes representing information items about the target if a subject thinks about the relationship between these items during the encoding process. These additional pathways will be called *item-to-item associations*.

The effects of motivated encoding strategies on the processing of social information have been measured through recall of information items, matching of each information item with the correct target name, and clustering of information items in free recall. These measures are thought to tap different aspects of the cognitive structure of target information. Name matching is assumed to be sensitive primarily to name-to-item associations, and clustering is assumed to be sensitive primarily to item-to-item associations, resulting from comparison and attempts for integration of target items with one another in working memory. The recall of any particular item is expected to be enhanced if it is involved in either a name-to-item or an item-to-item association (see Devine, Sedikides, & Fuhrman, 1989).

The impact of motivated encoding strategies or processing objectives on social perception has been examined almost exclusively in reference to single targets. Subjects either are presented with information about a single target (e.g., Hamilton, Katz, & Leirer, 1980; Neuberg & Fiske, 1987; Srull, 1981; Srull, Lkhtensftein, &

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Rothbart, 1985; Wyer & Gordon, 1982) or are asked to focus on a single target within a multitarget setting (e.g., Devine et al., 1989; Srull & Brand, 1983). They are given instructions to anticipate an interaction with a target, form an impression of the target, memorize the information pertaining to the target, compare the target information with the self, or compare the target information with their best friend. Both anticipated-interaction and impression formation instructions have been found to lead to higher levels of recall for the target and more accurate matching of the target's name with the corresponding information items than any of the remaining three instruction sets. This suggests that more name-to-item associations are formed with anticipated-interaction and impression formation processing objectives than with self-comparison, friend-comparison, and memory-only objectives. Alternatively, only the anticipated-interaction instructions have been found to lead to higher clustering around the target (i.e., the prospective interaction partner) than any other instruction set. This suggests that more item-to-item associations are generally formed when subjects have an anticipated-interaction processing objective.

There have been several attempts to bridge the gap between perception of single individuals and perception of multiple individuals or groups (Park & Hastie, 1987; Pryor & Ostrom, 1981, 1987; Srull, 1983). In so doing, researchers have come to postulate that multitarget settings (e.g., social gatherings, classrooms, workplaces) may be distinctively different from single-target settings (Devine & Ostrom, 1985). In many ways, multitarget settings are accompanied by a sharp increase in the amount of target information to be processed. Moreover, information about each target may need to be compared and contrasted against information about other targets.

Consequently, caution has been recommended against generalizing from single-target environments to multitarget environments (Ostrom, 1989; Srull & Wyer, 1989; Wyer & Gordon, 1984). The present article is concerned with a similar issue: whether the memorial effects that motivated encoding strategies produce in single-target settings are observable in multitarget settings. Do multitarget settings impose constraints in associative network models of person memory?

EXPERIMENT 1

Experiment 1 explored the relative effects of four processing goals—anticipated interaction, impression formation, memory, and later use—on the recall and cognitive organization of information pertaining to multiple targets. These four goals have a historical precedent in person memory research (e.g., Devine et al. 1989;

Hamilton et al., 1980; Srull et al., 1985). However, the "use" instruction set has been employed almost exclusively in conjunction with other instruction sets, such as memory or impression formation. For example, one reason offered to subjects for having to read through the target information is that they will have to use the information at a subsequent phase of the research (e.g., Wyer & Martin, 1986; Wyer, Srull, Gordon, & Hartwick, 1982). In the current experiment we attempted to disentangle the effects of the use instruction set from the effects of impression formation, anticipated-interaction, and memory instruction sets.

Method

Subjects. Subjects were 144 females. One hundred subjects were paid \$6 for participating; the remaining 44 subjects were introductory psychology students who received course credit for participation. Equal proportions of paid and unpaid subjects were run in each condition of the experiment. Subjects were run in groups of six and were randomly assigned to the conditions of the experiment

Design. The experiment involved a three-way between-subjects factorial design. The first factor, *instruction set*, had four levels: anticipated interaction, impression formation, use, and memory. The second factor, *presentation format*, had three levels: target-blocked format, item-blocked format, and random format (i.e., information items were presented either blocked by target person, blocked by item category, or in a random order). People often process social information in a target-blocked format (e.g., focusing on facts describing a particular person before proceeding to someone else), but sometimes they process the information in an item-blocked format (e.g., when being told the various clubs to which multiple others belong) or in a random-order format (e.g., being exposed to scattered information items about participants at a busy social setting). We wondered whether our results would generalize across those different presentation formats (see Srull, 1983). The third factor, *replication set*, had two levels, set 1 and set 2. This factor was also included for generalizability reasons.

Stimulus materials. We used the same stimulus materials as Devine et al. (1989; see their Table 1). We constructed two stimulus sets. Each stimulus set contained a total of 25 information items: 5 items referring to each of five targets. The information items belonged to five categories. The item categories for stimulus set 1 were college major, self-descriptive trait, pet peeve, home town, and favorite musical performer; for stimulus set 2, favorite board game, hobby, place of residence, part-time summer job, and a trait others used to describe the target. The information items were organized into a

booklet with one information item per page. Each information item was associated with a target's name (e.g., "Mary is a computer information sciences major," "Tina is friendly," "Susan's pet peeve is cracking knuckles"). The order of information items within each stimulus set was either (a) organized on a target-by-target basis, (b) organized on an item-category by item-category basis, or (c) random. The order of the item categories was randomized within each target and kept constant across subjects.

Procedure. Subjects read about a person perception experiment, either in a campus newspaper advertisement or on a sign-up board, and telephoned the experimenter for an appointment. When the subject called, she was told that the experiment would be run in small groups and that in an effort to coordinate the groups the subject was asked to respond to eight general information questions. Five of the questions corresponded to the item categories about which the subject would learn during the experiment. The telephone interviews and the partial overlap between the questions and the item categories were intended to enhance the believability of the experimental session for the anticipated-interaction subjects, given that these subjects would ostensibly learn about real others in their visit to the laboratory. In actuality, though, subjects' answers were not recorded, and the targets about whom the subjects learned in the experimental session were fictitious. After responding to the questions, subjects scheduled an appointment for the experiment.

Upon their arrival, subjects were individually escorted to the experimental room to preclude the possibility of social interaction in the waiting area. Partitions on the tables of the experimental room obstructed visual contact among subjects. The experimental booklet was placed on the table in front of each subject. A slip with the subject's name on it was attached to the first page of the booklet (the name was obtained through the telephone interviews). Subjects were asked to read through the instructions on the first page of the booklet.

Anticipated-interaction instructions indicated that the goal of the experiment was to examine how people who are unfamiliar with one another work collectively to solve various problems. The instructions emphasized that the experiment was specifically interested in the performance of six-member groups. Subjects were informed that the other five group members present in the room were their prospective interaction partners. The instructions also indicated that the experiment would take place in two sessions. In the first session, subjects would learn information about their five partners. Information would supposedly facilitate performance. In the

second session, subjects would engage in problem solving for 25 to 30 min. Subjects were told that successful problem solving depended on cooperation among the group members and that each group's performance would be compared with that of other groups. Subjects were further told that the information about the remaining five group members that would be presented to them in the first session was based on the telephone interviews. They were assured that only first names were used—their last names would remain confidential. At this point, subjects were asked whether they found anything in the procedure of the experiment objectionable. None of them did.

Memory instructions asked subjects to memorize the information items referring to five targets for the purpose of a recall task. *Impression formation* instructions asked subjects to form an impression of each of the five targets. Finally, *use* instructions informed subjects that they would have to use the information about the five targets for various tasks at some later point in the experiment. Subjects were then paced through the 25 information items at a rate of 6 s per page. A tape recorder provided subjects with a signal for when to turn each page. Subjects were instructed not to turn back to any previous page after reading an information item. After presentation of the information items, subjects performed a distractor task by writing down as many U.S. state names as they could remember for 2.5 min. The distractor task was justified to the anticipated-interaction subjects by telling them that one of the problem-solving tasks involved geography and that listing states would serve as a warm-up task before the commencement of the problem-solving session.

During the next 5 min, subjects worked on a free recall test. They were provided with a blank booklet and were asked to write down as many information items about all five targets as they could remember. Subjects were asked to write only one information item per page without turning back to previous pages and to write the information items in any order in which the items came to mind.¹ The free recall task was justified to subjects in the anticipated-interaction condition by mentioning that it was important for the experimenters to know how much information subjects remembered about each of the five prospective partners prior to the problem-solving session.

Finally, subjects completed a series of manipulation checks. All subjects were asked whether they had comprehended and followed the instructions they had received in the beginning of the experiment. Anticipated-interaction subjects were additionally reminded that the problem-solving session was next and

were asked whether they anticipated interacting with the other people present

After the manipulation checks, subjects were thoroughly debriefed, thanked for their participation, and excused.

Results and Discussion

MANIPULATION CHECKS

Our manipulations were successful. Across all four instruction sets, 96% of the subjects said they had comprehended the instructions (range: 94-100%), and 90% said they had followed the instructions (range: 81-94%). Further, 92% of the subjects in the anticipated-interaction condition indicated that they indeed expected to interact with the other persons in the room.

ORGANIZATION AND MEMORY MEASURES

Two memory measures were derived from subjects' free recall protocols—number of information items recalled and clustering of information items.

Number of information items recalled. The analysis of variance (ANOVA) on the number of information items recalled yielded a main effect for instruction set, $F(3, 120) = 5.03, p < .003$. Newman-Keuls tests ($p < .05$) showed that anticipated-interaction ($M = 13.44$), impression formation ($M = 13.31$), and use ($M = 12.50$) instructions produced higher recall levels than memory instructions ($M = 10.78$). The results replicated respective findings from single-target experiments (e.g., Devine et al., 1989; Hamilton et al., 1980; Srull, 1983; Srull et al., 1985).

The main effect of presentation format was also significant, $F(2, 120) = 4.30, p < .01$. Newman-Keuls analyses ($p < .05$) revealed that subjects recalled more information items under the target-blocked condition ($M = 13.52$) than either the item-blocked ($M = 12.44$) or the random order ($M = 11.56$) condition. This finding replicates results obtained by Srull (1983).

Cognitive organization. Cognitive organization of information was measured by means of the adjusted ratio of clustering (ARC; Roenker, Thompson, & Brown, 1971). ARC scores typically range from 0 (chance clustering) to 1 (perfect clustering); negative ARC scores indicate that subjects employed organizational strategies that are different from the category under which the data were scored.

The stimulus display allowed subjects to cognitively organize the information on the basis of either person categories or item categories. We created a new two-level within-subjects design factor by computing two separate ARC scores, one for person categories and one for item categories. We call this factor *organizational preference*.

Overall, subjects preferred to cluster information around item categories ($M = .348$) rather than person

TABLE 1: Mean Adjusted Ratio of Clustering (ARC) Scores as a Function of Organizational Preference and Instruction Set, Experiment 1

	Instruction Set			
	Anticipated Interaction	Impression Formation	Use	Memory
Person-ARC score	-.092	-.044	-.039	.087
Item-ARC score	.468	.377	.344	.202

categories ($M = -.022$), $F(1, 120) = 68.31, p < .000001$ (see Sedikides & Ostrom, 1988). However, this main effect was qualified by an Organizational Preference x Instruction Set interaction, $F(3, 120) = 4.33, p < .006$. The means for this interaction are presented in Table 1. Newman-Keuls analyses ($p < .05$) tested whether the difference between person category clustering and item category clustering was significant along each instruction set. Under anticipated-interaction, impression formation, and use instructions, item category clustering was significantly higher than person clustering. It was only under memory instructions that the difference between the two organizational modes was not significant.

Past research (e.g., Devine et al., 1989) has demonstrated that an anticipated-interaction processing objective produces higher individuation of the target person from the other stimulus persons than impression formation, self-comparison, friend comparison, and memory processing objectives. The present experiment failed to replicate this finding. Subjects in the anticipated-interaction condition did not individuate targets to a higher extent than subjects in the impression formation, use, and memory conditions.

Anticipated-interaction instructions led to target individuation in single-target settings but not in multitarget settings. The effects of motivated encoding strategies on social perception seem to depend on structural characteristics of the social setting.

EXPERIMENT 2

The goal of Experiment 2 was to replicate and extend Experiment 1. The use instruction set did not produce results that were discriminable from the results of impression formation or memory instructions. We therefore replaced the use instruction set with two alternative instruction sets that might contribute to a better understanding of the cognitive processes invoked by motivated encoding strategies. These two instruction sets were comparing each target with the self and comparing each target with the best friend. Recent research (for reviews see Higgins & Bargh, 1987; Kihlstrom et al., 1987) has shown that information is better recalled when it is compared

TABLE 2: Mean Adjusted Ratio of Clustering (ARC) Scores as a Function of Organizational Preference and Instruction Set, Experiment 2

	<i>InstructionSet</i>				
	<i>AnticipatedInteraction</i>	<i>ImpressionFormation</i>	<i>Self</i>	<i>Friend</i>	<i>Memory</i>
Person-ARC score	.198	.266	.055	.130	.259
Item-ARC score	.093	.192	.286	.277	.111

with information about the self or a familiar other than when it is not Devine et al. (1989) employed this instruction set, but their research was concerned with perception of single targets within a multitarget setting.

We also extended Experiment 1 by adding a new dependent measure, an explicit name-to-item matching task (see Devine et al., 1989). It is possible that when the stimulus field becomes complex in terms of number of people and information items present, subjects lack the cognitive capacity for simultaneously developing item-to-item associations but can manage to develop name-to-item associations.

Method

Subjects. Subjects were 80 females fulfilling an introductory psychology course option. Subjects participated in groups of five to six (tables and dividers were arranged in such a way that it was impossible for subjects to tell how many others were present in the room). Subjects were randomly assigned to the conditions of the experiment.

Design and stimulus materials. The experiment involved a 5 (Instruction Set: anticipated-interaction, impression formation, self-comparison, friend comparison, memory) \times 2 (Replication Set: 1,2) between-subjects factorial design. The replication set factor was included for generalizability reasons. In Experiment 1, the presentation format factor did not interact with organizational preference. Consequently, in Experiment 2 we used a target-blocked presentation format exclusively. We employed the same stimulus materials as in Experiment 1.

Procedure. The procedure was identical to that of Experiment 1, with the following exceptions. First, subjects did not participate in a telephone interview; in the anticipated-interaction condition, subjects were led to believe that the experimenters had gathered information only about the remaining five persons present (a manipulation check indicated that subjects believed this). Second, subjects in the self-comparison and friend comparison conditions were instructed to determine how similar each of the targets was to themselves and to their best friend, respectively. Finally, following the free recall task, subjects completed a name-to-item matching task; subjects were provided with a list of all information items

and a separate list of all target names and were asked to match each item with the corresponding target name.

Results and Discussion

MANIPULATION CHECKS

Our manipulations were successful. Across all five instruction sets, 96% of the subjects said they had comprehended the instructions (range: 88-100%), and 93% said they had followed the instructions (range: 88-100%). All anticipated-interaction subjects indicated that they indeed expected to interact with the other persons present.

ORGANIZATION AND MEMORY MEASURES

Number of information items recalled. The instruction set main effect was significant, $F(4, 70) = 7.28, p < .0001$. Newman-Keuls analyses ($p < .05$) revealed that anticipated-interaction ($M = 14.31$), impression formation ($M = 14.50$), self-comparison ($M = 13.06$), and friend comparison ($M = 14.38$) instructions produced higher recall than memory instructions ($M = 9.31$). There were no significant differences among the first four instruction sets. Corresponding findings from single-target experiments, as well as the current Experiment 1, were replicated.

Cognitive organization. In contrast to Experiment 1, organizational preference did not interact with instruction set, $F(4, 70) = 1.00, p < .41$. As is evident from Table 2, targets were not individuated more in the anticipated-interaction, impression formation, self-comparison, and friend comparison conditions than in the memory condition.

The nonsignificance of this interaction may be in part due to subjects' lack of an organizational preference for item categories, $F(1, 70) = 0.02, p < .89$ (mean item-ARC = .192; mean person-ARC = .182), a finding that is inconsistent with the corresponding finding of Experiment 1. The reason for this discrepancy may be that item categories were made salient to subjects in Experiment 1 through the phone conversations that preceded the experimental session. Subjects may have subsequently encoded the information in accordance with the item categories that were already more salient to them. Given that phone interviews did not take place in Experiment 2, subjects had to read through at least two targets in order to realize the consistency of the item categories and start encoding the information in accordance with them.

Nevertheless, we should emphasize that the most important aspect of these findings is that they are not consistent with the findings from single-target experiments (e.g., Devine et al., 1989; Srull & Brand, 1983). Anticipated-interaction instructions did not produce a unique pattern of results relative to the remaining instructions. In that sense, the corresponding results of Experiment 1 were replicated.

Number of correct name-to-item matches. The instruction main effect was not significant, $F(4, 70) = 0.28, p < .88$. There were no significant between-instruction-set differences in the number of correct name-to-item matches (anticipated-interaction $M = 12.13$, impression formation $M = 12.13$, self-comparison $M = 11.82$, friend comparison $M = 11.25$, and memory $M = 10.63$). Relevant findings from single-target experiments (e.g., Devine et al., 1989) were not replicated.

GENERAL DISCUSSION

The present research was concerned with how a number of motivated encoding strategies can affect social information processing in multitarget settings. As in previous research that has focused on single targets (e.g., Devine et al., 1989; Hamilton et al., 1980), all five of the incidental learning tasks used in our experiments (i.e., anticipated-interaction, impression formation, use, self-comparison, and friend comparison instructions) led to better overall recall of the target information than the intentional learning task (i.e., the memory set instructions). In contrast to previous single-target research, however, the anticipated-interaction and impression formation instructions in our multitarget setting did not produce more correct name matches than the self-comparison, friend comparison, or memory instructions. Further, in contrast to our earlier single-target research, the anticipated-interaction instructions did not lead to the highest clustering of information items around the multitarget stimulus persons.

The recall and clustering effects obtained for single-target settings are generally reliable and have led to the development of a well-articulated person memory model (see Srull & Wyer, 1989). However, it could be argued that a complete model of person memory should be able to account for experimental findings obtained in both single-target and multitarget environments. If this premise is accepted, then the present research suggests that existing associative models of person memory will need to be modified or expanded to incorporate the current findings. More specifically, most of these models have assumed that the recall of target information is directly proportional to the number of name-to-item and item-to-item associations formed. The problem posed by our

results is that subjects showed recall advantages in the incidental learning tasks (relative to the intentional learning task) without the corresponding expected increase in the number of name-to-item or item-to-item associations.

There are at least two alternative ways to account for this apparent discrepancy between the traditional models of person memory and our results. First, we could assume that the enhanced recall of the multitarget information in the incidental learning conditions is due to some form of subjective, "nonperson" organization that subjects spontaneously used to encode the stimulus information. This type of organization would not necessarily be reflected by either the name-matching task or the person-cluster scores. One problem with this alternative, however, is that it does not explain why subjects would be systematically motivated to abandon the use of person categories in the multitarget setting and subsequently encode the stimulus information using a more idiosyncratic form of organization. In addition, this alternative does not provide us with an easy way to specify the precise nature of the item-to-item associations that would be expected to form between the various stimulus items. These difficulties lead us to offer the subjective organization explanation cautiously. More convincing evidence for this alternative would have to be obtained through a research design that requires subjects to generate at least two recall protocols of the multitarget stimulus information (for a discussion of this type of design, see Murphy & Puff, 1982).

A second explanation for our results is based on the elaboration model of person memory that has recently been proposed by Klein and Loftus (1990). This model argues that a number of the enhanced memory effects obtained in the person memory literature are not necessarily due to formation of associative links between the items of information presented about a person. Rather, certain types of incidental learning tasks (e.g., an impression formation task) may lead people to elaborate extensively on each of the stimulus items presented, thereby rendering these items more accessible in memory. This elaboration occurs when subjects try to make inferences about the stimulus person by evaluating each of the new stimulus items through the use of previously established knowledge structures (e.g., learning that Joan is a physics major may lead to the inference that she is smart because of the prior knowledge that many other physics majors are also smart). In contrast, subjects in a memory set condition are less likely to engage in this type of elaboration, because the task does not ask them to draw any inferences about the stimulus information.

Once an inference is made, the model assumes that the inference and its corresponding stimulus item are stored together in memory. However, no associative links are expected to be formed between any two of the

stimulus items—even if the items have led to the same inference about the person. To account for the clustering effects often found in person memory research, the model proposes that two conditions must be met: (a) Some of the stimulus items must have led the subject to make the same inference about the target person, and (b) the subject must have tried to use this inferred characteristic as one of the cues to help retrieve the original stimulus items.

The elaboration model proposed by Klein and Loftus can readily account for the results obtained in our current multitarget setting. It is conceivable that all five of our incidental learning tasks led subjects to elaborate on each of the five items for each of the five stimulus targets. This would explain why all of these incidental learning tasks showed enhanced recall over the memory set condition. In addition, the stimulus items used in our study could often lead subjects to infer five very different trait characteristics about each stimulus target. Consequently, even if a subject decided to use a trait cue to try to retrieve the various stimulus items, this retrieval strategy would rarely result in a cluster of recalled items that pertained to the same person.

Although the elaboration model appears to give an adequate account of the results in the current multitarget experiments, it does not fully explain the clustering effects obtained in our previous single-target experiments (Devine et al., 1989). Subjects in our earlier research were given the same information about the five stimulus persons as was presented in the current study. However, they were asked to focus on only one of the stimulus persons during the incidental and intentional learning tasks. According to the elaboration hypothesis, the level of person clustering for these single-target experiments should have been low, because the stimulus items for each target person exhibited very few of the same trait implications. In fact, the person-clustering score for the single target was relatively high for the impression formation condition and exceptionally high for the anticipated-interaction condition. Although space does not permit us to discuss the nature of these clustering effects in detail, we believe it is possible that the recall of information in our previous single-target experiments was mediated by some combination of both associative organization and elaborative mechanisms. That is, subjects may have been more motivated to integrate their various item-based inferences about a target person when they expected to interact only with that person. Alternatively, they may have been less inclined to try integrating these assorted inferences when they anticipated an interaction with a large group of targets, no one of whom was expected to be their dominant conversation partner.

The two explanations we have offered for our results are clearly speculative, and additional work will be necessary before we can specify more precisely how the motivated encoding strategies for multitarget settings differ from those for single-target settings. One way to explore these potential differences is to conduct studies that manipulate the number of targets with whom subjects are presented or on whom subjects are asked to concentrate. Such a design would give the researcher the opportunity to identify the exact point (e.g., two targets, three targets) at which cognitive mechanisms are potential! altered for each of the various incidental learning conditions in order to accommodate the complexities of the stimulus field. Such tracking of subjects' strategies may help us to identify the elaboration processes and alternative organization strategies that subjects employ in the various incidental learning conditions of multitarget stimulus settings.

It is also important to consider some potential limitations of the present research. We examined only a subset of possible general motivated encoding strategies. Examining alternative general strategies as well as more specific motivated encoding strategies (e.g., an interviewer trying to decide whether an applicant is suitable for a particular position) would likely lead to a broader understanding of person memory and more complete person memory models. In addition, it would be productive to consider how the structure of multitarget settings could affect subjects' processing of stimulus information. In the present research, subjects were presented with targets who did not share any psychological bond. Social perception may be colored by the ways in which targets relate to one another. For example, motivated encoding strategies may differentially affect processing of information about people who are part of a cooperative problem-solving group or members of a romantic couple. Moreover, our subjects were provided with the same item categories of information about each target. Future research should explore the effects of motivated encoding strategies on social perception when there are missing cells or when different item categories of information are acquired about each target.

Our research used female subjects and female stimulus persons. However, it seems possible that the degree to which the subject identifies with the target may affect subsequent processing of target information, and identification may depend on the match between subject and target in terms of sex. For example, females may be more cooperative and less nervous when expecting to interact with a female than a male. Thus, this mismatch between sex of subject and sex of target might have influenced subjects' cognitive processes in the anticipated-interaction condition. Future research, should examine the effects

of motivated encoding strategies on the perception of same-sex versus different-sex targets.

Some of these suggestions apply uniquely to the multi-target stimulus setting (e.g., psychological bond among stimulus persons), and we would argue that the multi-target stimulus setting provides exciting and potentially productive avenues of investigation for person memory researchers. In fact, we believe that the most interesting and provocative aspect of the present research is that it challenges researchers to examine the appropriateness of person memory models to explain how subjects approach the multi-target stimulus situation. The multi-target setting does not initially appear to lead subjects to process information to create a series of individual person representations (i.e., person nodes connected with item nodes via associative pathways). Over time and repeated exposure to individuals, subjects may develop individual person representations. By exploring subjects' strategies in processing multi-target stimulus settings over time, we may be able to develop a complete model that explains the stages and processes involved in going from a nonindividuated group to separate, individuated person representations. Such a model would appear to be particularly desirable when considered in the context of the many situations in which social perceivers actually must, confront multi-target settings (e.g., teacher in a seminar, supervisor in a work setting, coach for a team).

NOTE

1. Subjects were encouraged, but not required, to list the target's name along with the information item pertaining to the target. However, most subjects omitted target names.

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