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Self-Monitoring and Self-Protective Biases in Use of Consensus Information to Predict One's Own Behavior

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It is often important and useful for people to predict their own behavior in novel situations. Although theory suggests that such predictions should be based at least in part on consensus information, some past research in this area suggests that people ignore it. Previous investigators have argued that, instead of using consensus information, people predict their own behavior on the basis of their personal histories. Two studies reported in this article demonstrate that people are willing to make use of consensus information in predicting their own behavior. However, self-monitoring is found to regulate consensus information use. High self-monitors are more responsive to complimentary consensus information than are low self-monitors, and low self-monitors are more responsive to threatening consensus information than are high self-monitors.

The use of base-rate information in statistical reasoning processes has been of interest to psychologists for many years, due in part to Kahneman and Tversky's (1972, 1973, 1984) interest in people's appreciation of statistical rules and laws and to Kelley's (1967) interest in processes by which people make attributions regarding the causes of behavior. Early research on the use of base-rate information suggested that people either ignore it or vastly underuse it. However, more recent research has shown that people often use base-rate information to make judgments but that its influence is greater under some circumstances than under others (for reviews, see Borgida & Brekke, 1981; Kassin, 1979). People are more responsive to base-rate information derived from a representative sample than they are to information based on an unrepresentative sample (Wells & Harvey, 1977). Base-rate information has more effect when it is encountered after other sorts of competing information than when it is encountered before such information (Ruble & Feldman, 1976; Zuckerman, 1978). People make more use of base-rate information when they bring a scientific judgmental orientation to a problem than when they bring a clinical orientation (Zukier & Pepitone, 1984). Finally, people are more responsive to base-rate information if inferential rules suggesting the use of base rates have been activated (Ginossar & Trope, 1987). Thus, it is now clear that people use base-rate information under some circumstances when making social judgments.

However, two important studies suggest that people do not use consensus information at all when predicting their own behavior in novel situations (Nisbett & Borgida, 1975; Wells & Harvey, 1977). There are a number of strategies that people might employ to make such predictions. For example, predictions could be derived from memories of one's behavior in similar situations in the past, if such memories are available. However, this strategy will seldom yield accurate predictions, because even subtle changes in situational features often radically alter behavior (Mischel, 1968, 1984). People might also base these predictions on what they believe are their general dispositions or traits, but these predictions are also likely to be inaccurate in many instances (again, see Mischel, 1968, 1984).

A far better strategy for predicting whether a person will perform a certain behavior in a particular situation is to use *consensus information,* data regarding how most people behave in that situation. Consensus information is useful because it reveals the power of forces at work in the situation of interest to elicit the behavior (e.g., Kelley, 1973; see also Hilton, Smith, & Alicke, 1988). Therefore, consensus information is a particularly sensible basis for predictions of one's own behavior in novel or unspecified situations, and is sometimes even more effective than individuating information (e.g., Slovic & Lichtenstein, 1971).

This article reports two studies that tested two hypotheses regarding the impact of consensus information on predictions of one's own behavior. First, we examined whether people use consensus information when it is self-serving but ignore it when it is not. Second, we examined whether use of consensus information is regulated by personality dispositions.

Initial Research on Consensus Information and Predictions of One's Own Behavior

Studies assessing the impact of consensus information on people's predictions of their own behavior have been conducted

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by Nisbett and Borgida (1975) and by Wells and Harvey (1977). Nisbett and Borgida (1975) described to their subjects two psychology experiments previously conducted by Nisbett and Schachter (1966) and Darley and Latané (1968). The first involved people receiving increasing amounts of electric shock until they refused to continue, and the second involved people helping a person who seemed to be having a seizure. Some of Nisbett and Borgida's subjects were given consensus information that contradicted their expectations. Specifically, these subjects were told that a majority of the participants in the Nisbett and Schachter (1966) experiment had accepted a great deal of shock before refusing to continue, and a majority of the participants in the Darley and Latané (1968) study had failed to help the seizure victim for a considerable amount of time. Other subjects in Nisbett and Borgida's (1975) study were not given this consensus information.

Nisbett and Borgida (1975) asked their subjects to predict how they would behave in the Nisbett and Schachter and the Darley and Latané experiment situations. Most subjects predicted that they would perform the behaviors that a minority of the original participants did (i.e., refuse to accept shock quickly or help the seizure victim quickly), and these predictions were unaffected by the consensus information.

Wells and Harvey (1977) replicated the helping experiment segment of Nisbett and Borgida's (1975) study. When Wells and Harvey implemented Nisbett and Borgida's (1975) experimental procedures exactly, Wells and Harvey again found no effect of the consensus information on subjects' predictions of their own behavior. Some subjects in Wells and Harvey's (1977) study were first told that the sample on which the consensus information was based was representative of students. This manipulation increased the impact of the consensus information on subjects' judgments about others. However, even under these conditions, subjects ignored the consensus information when predicting their own behavior (see Wells & Harvey, 1977, p. 289).

Possible Explanations

Nisbett and Borgida (1975) claimed that when concrete, vivid, and salient information is available with which to predict someone's behavior, it overwhelms consensus information, which is abstract, pallid, and remote (see also Nisbett, Borgida, Crandall, & Reed, 1976). When a person is predicting his or her own behavior, a great deal of vivid information about one's past experiences is available with which to make the prediction; this information, Nisbett and Borgida claimed, overwhelms the consensus information. Indeed, Nisbett and Borgida's subjects explained that their predictions were based on "features of the experimental situation and their past experience with somewhat similar situations" (p. 943). When one has vivid information of this sort available, they argued, one is highly likely to base predictions of behavior solely on that information and to ignore consensus information. Consistent with this notion, Zuckerman (1978) showed that consensus information has less impact on predictions of another person's behavior when personality information about that person is available than when it is not.

However, there is a second reason why subjects may have ignored the consensus information when predicting their own behavior in Nisbett and Borgida's (1975) and Wells and Harvey's (1977) studies. It may be that people are motivated to protect their positive self-images and that these subjects ignored the consensus information because it was threatening. Subjects in these studies were presented with consensus information indicating that most people were unlikely to quickly refuse to accept shock or to quickly help the seizure victim. These subjects may have considered refusing to accept shock and helping a seizure victim quickly as more respectable or socially desirable than remaining passive for a long time. Thus, subjects may have ignored the consensus information in these studies because it suggested that they were unlikely to take respectable actions. In fact, Nisbett and Borgida (1975) noted that "students quietly exempt themselves from the findings of social psychological experiments that they happen to find . . . unpleasant" (p. 943).

One implication of this reasoning is that students may apply the findings of such experiments to themselves when the findings are pleasant, despite the availability of their vivid past histories. More generally, it may be that when a prediction of one's own behavior based on consensus information is more flattering than predictions derived by other strategies, people will apply consensus information to themselves. Accordingly, people may heed consensus information when it suggests that they are more likely to do a good deed than they otherwise thought. Likewise, people may follow the implications of consensus information suggesting that they are less likely to do a bad deed than they otherwise thought. But when using consensus information would lead one to make a prediction less flattering than an alternative strategy would have, the consensus information may be ignored. Taken together, these propositions constitute the hypothesis that people apply consensus information to themselves in predicting their own behavior when doing so is self-serving.

An experiment conducted by Kulik and Taylor (1981) offers indirect support for the notion that people apply consensus information to themselves when it is self-serving to do so. These investigators also replicated the helping portion of Nisbett and Borgida's (1975) study. They told half of their subjects the actual consensus level (i.e., few people helped the seizure victim quickly) and told the other half that most subjects in the Darley and Latané (1968) study had helped the seizure victim quickly. Kulik and Taylor presumed that this latter consensus information would be flattering to subject's self-images, whereas the actual consensus level would be threatening. Subjects who were told the flattering consensus information predicted that they were more likely to help the seizure victim quickly than did subjects given the threatening consensus information.

Kulik and Taylor failed to compare these predictions to pretreatment predictions to determine which of the two bits of consensus information had an effect. Therefore, the results they reported could reflect any one of three possible patterns: (a) Subjects may have responded equally to the flattering and threatening consensus information, (b) they may have responded more to the threatening consensus information than to the flattering consensus information, or (c) they may have responded more to the flattering consensus information than to the threatening information. The studies reported below were designed to test more effectively the hypothesis that people apply consensus information when predicting their own behavior only if it is self-serving to do so.

Consensus Information Use and Personality

The present studies also explored whether the tendency to use consensus information might vary according to individuals' personality characteristics. One characteristic, in particular, seems likely to regulate consensus information use—self-monitoring. According to Snyder (1979), high self-monitors are especially concerned with projecting a positive image of themselves to others and are highly responsive to situational cues in order to do so. High self-monitors strive to perform whatever behavior is most appropriate in a particular situation. In contrast, low self-monitors are less interested in projecting a positive self-image than they are in expressing their true attitudes and beliefs. They are less sensitive to situational cues and are less concerned with projecting self-images that others will respect.

This reasoning suggests that high self-monitors may be more concerned than low self-monitors with projecting a positive self-image when making predictions of their own behavior. As a result, high self-monitors may be more responsive than low self-monitors to consensus information suggesting that they are likely to do good deeds and unlikely to do bad deeds. By the same token, high self-monitors may be less responsive than low self-monitors to consensus information suggesting that they are unlikely to do good deeds and are likely to do bad deeds.

Kulik and Taylor (1981) measured self-monitoring and examined the relation of self-monitoring to use of consensus information in making predictions of one's own behavior. Their data indicate that, overall, high self-monitors made more use of consensus information than did low self-monitors. However, these investigators did not examine responsiveness to threatening consensus information separately from responsiveness to complimentary consensus information. Therefore, it is impossible to determine which type of consensus information each self-monitoring group was most responsive to. Also, it is impossible to determine which self-monitoring group was most affected by each type of consensus information. The present studies allow for this separation and therefore permit testing of the prediction that high self-monitors show a stronger self-enhancement bias than low self-monitors in using consensus information to predict their own behavior.

The present studies also investigated the relation of use of consensus information to a variety of other personality variables: self-esteem (Fleming & Cortney, 1984; Rosenberg, 1979), need for social recognition (Jackson, 1976), locus of control (Rotter, 1966), and need for uniqueness (Snyder & Fromkin, 1980). We hypothesized that individuals at the external end of the locus of control dimension might be more responsive to consensus information than would individuals at the internal end, because the former individuals presumably perceive their behavior as more influenced by situational pressures, the nature of which are revealed by consensus information (for a similar argument regarding desire for control, see Burger, 1987). We expected individuals with a high need for uniqueness to be less influenced by consensus information than those with a low need for uniqueness, because the former would presumably resist cognitive strategies that require the assumption that they will react to situational forces in a way similar to most people. We expected individuals with a high need for social recognition to be especially self-protective in their use of consensus information in order to reach judgments that are complimentary to their self-images.

Finally, we postulated two ways in which self-esteem might be related to consensus information use. First, we thought that individuals high in self-esteem might be especially responsive to complimentary consensus information (because it confirms their generally high opinions of themselves) and especially resistant to threatening consensus information (because it is inconsistent with their favorable self-images). Alternatively, we thought that individuals high in self-esteem might be more willing to use threatening consensus information than individuals low in self-esteem. The former individuals might be better able to handle the negative implications for self-esteem of incorporating this information into a prediction regarding their own behavior (for evidence supporting both hypotheses, see Baumgardner, Kaufman, & Levy, 1989; Shrauger, 1975; Shrauger & Lund, 1975; Shrauger & Schoeneman, 1979; Swann, 1987; Taylor & Brown, 1988).

Although techniques for measuring self-esteem, need for social recognition, locus of control, and need for uniqueness are well established, there has been a substantial controversy regarding the measurement of self-monitoring. Snyder (1974, 1979) originally developed a 25-item scale, but Snyder and Gangestad (1986) recently recommended using only the 18 items that loaded most strongly on the first unrotated factor in factor analyses of the scale. Briggs and Cheek (1988) argued instead that the self-monitoring items actually reflect two distinct subscales, one measuring what they called "public performing" and the other tapping what they called "other-directedness." In our analyses, we examined the effects of self-monitoring using all four configurations: the 25-item scale, the 18-item scale, the public performing subscale, and the other-directedness subscale. Thus, we were able to assess whether different operationalizations of self-monitoring would lead to different substantive conclusions about its effects.

The Present Studies

Of the two studies described below, the first involved a within-subjects design and the second involved a between-subjects design. In both, subjects were given consensus information (that was either flattering or threatening to their self-image) and were asked to predict their behavior in the experimental situations used by Nisbett and Borgida (1975). Subjects also completed a number of personality inventories. We examined whether consensus information use was self-protective and whether it was regulated by the personality variables we measured.

Study 1

Method

Subjects. Subjects were 225 undergraduates enrolled in introductory psychology courses at The Ohio State University (OSU). Participation in this experiment partially fulfilled a course requirement.

Procedure. Subjects were run in small groups. When they arrived at the laboratory, they were each given a questionnaire booklet, which they worked through at their own pace. At the beginning of the booklet was a description of Darley and Latané's (1968) study of the length of time it took people to help a person supposedly having a seizure. In that

experiment, the participants were each in an individual booth and participated in a group discussion through an intercom system. At one point, participants heard a confederate have what sounded like an epileptic seizure. The experimenters measured the length of time it took participants to leave their individual booths and attempt to help the confederate. After reading a lengthy description of this study, all subjects predicted how they thought they would behave in that situation. The behavior predictions were made on a 6-point scale with verbally labeled points, 1 being labeled "I would help as soon as the victim began stuttering" and 6 being labeled "I would never help." Subjects then guessed how the 30 participants in the original study had behaved by indicating how many would have fallen at each point on this 6-point scale.

After making these predictions, subjects in the present study were told how the participants in the Darley and Latané study had behaved. One half of our subjects, the desirable feedback group, were told that most participants had helped the seizure victim. The remaining subjects, the undesirable feedback group, were told that most participants had not helped the seizure victim. After reading this consensus information, subjects again predicted how they would behave in that situation. Finally, subjects completed a series of personality scales measuring self-esteem (Fleming & Cortney, 1984), self-monitoring (Snyder, 1974), locus of control (Rotter, 1966), and need for social recognition (Jackson, 1976).

Half of the subjects (selected randomly) were told that the Darley and Latané study had been conducted recently using participants taking the same course in which our subjects were enrolled at OSU. The other half were told that the participants in the original study were adults living in the New York area who participated in the study at New York University in 1959. On the basis of evidence that people presume that higher similarity is associated with greater predictability (Kunda & Nisbett, 1988) and that others who are similar in demographic terms to themselves also tend to think and act in similar ways (Cohen, Mutz, Price, & Gunther, 1988), we expected that the consensus information might have more impact on predictions when our subjects were highly similar rather than highly dissimilar to the original participants.

Results

A repeated-measures analysis of variance (ANOVA) revealed that the manipulation of consensus information did have significant effects on subjects' predictions, $F(2, 217) = 84.45$, $p < .001$ (see Table 1). Although Nisbett and Borgida (1975) and Wells and Harvey (1977) found that people ignored undesirable consensus information when predicting their own behavior, the present study failed to replicate that finding. Instead, after reading that most participants in the original experiment had not helped at all, subjects in the undesirable feedback group revised their predictions by decreasing the likelihood that they would help quickly. On the 6-point prediction scale, their predictions changed from 2.63 to 3.16, a .54 unit change, $t(109) = 6.95$, $p < .001$. Thus, subjects used the consensus information even though it suggested that they were unlikely to do a good deed.

Consistent with our expectations, subjects in the desirable feedback group also used the consensus information. After reading that most participants in the original experiment had helped the seizure victim quickly, subjects in this group revised their predictions by increasing the likelihood that they would help quickly. Their average prediction changed from 2.76 to 2.32, a .44 unit change, $t(108) = 6.03$, $p < .001$. Because this change is not significantly different from that for the undesirable feedback group, $t(217) = 0.90$, $p = .37$, these results disconfirm our prediction that the desirable feedback group would be more responsive to consensus information than would the undesirable feedback group.

Table 1
Behavior Predictions for Total Sample, High Self-Monitors, and Low Self-Monitors: Study 1

Group	Initial prediction	Revised prediction	Difference
Total sample			
Desirable feedback	2.76	2.32	−0.44*
Undesirable feedback	2.63	3.16	0.54*
High self-monitors			
Desirable feedback	3.07	2.49	−0.58*
Undesirable feedback	2.53	2.92	0.39*
Low self-monitors			
Desirable feedback	2.46	2.15	−0.31*
Undesirable feedback	2.76	3.51	0.76*

* $p < .01$.

Contrary to Kulik and Taylor's (1981) finding, we found no main effect of self-monitoring on consensus information use, $t(212) = 0.34$, $p = .74$. However, as expected, the two-way interaction between consensus information desirability and the 25-item self-monitoring scale was significant, $F(1, 210) = 8.21$, $p < .006$. Among subjects in the desirable feedback group, high self-monitors were more responsive, prediction change = .58, $t(54) = 5.33$, $p < .001$, than were low self-monitors, prediction change = .31, $t(51) = 3.16$, $p < .003$, this difference being marginally significant, $F(1, 105) = 3.49$, $p < .07$. Also, among subjects in the undesirable feedback group, low self-monitors were more responsive, prediction change = .76, $t(44) = 5.43$, $p < .001$, than were high self-monitors, prediction change = .39, $t(61) = 4.44$, $p < .001$, a difference that was significant, $F(1, 105) = 5.55$, $p < .03$. The low self-monitors were significantly more influenced by the undesirable feedback than by the desirable feedback, $t(95) = 2.69$, $p < .01$, and the high self-monitors were more influenced by the desirable feedback than by the undesirable feedback, though not significantly so, $t(115) = 1.41$, $p = .16$. When we repeated these analyses using the 18-item self-monitoring scale, the public performing subscale alone, and the other-directedness subscale alone, the results were identical to those obtained using the complete 25-item scale.

All of the findings reported above were consistent across the variation in the types of participants in the original Darley and Latané experiment. Thus, these results disconfirm the prediction that consensus information would have more impact when the characteristics of the sample from which that information is derived match the characteristics of the predictor. Furthermore, responsiveness to consensus information was not a function of self-esteem, need for social recognition, or locus of control.[1]

[1] It is conceivable that the experimental manipulations affected assessments of the personality characteristics because these measures were completed by subjects at the end of the experimental session. However, ANOVAs revealed no significant effects of the manipulations on self-monitoring, $F(3, 206) = 0.98$, $p = .41$, need for social recognition, $F(3, 206) = 0.42$, $p = .74$, locus of control, $F(3, 206) = 0.64$, $p = .59$, or self-esteem, $F(3, 215) = 1.18$, $p = .15$.

Thus far, we have viewed the differences in responsiveness to consensus information as due to differences in the degree to which the consensus information was flattering to subjects' self-images. However, there is an alternative possible interpretation for these findings, in terms of the degree to which various types of consensus information are expectancy confirming or expectancy disconfirming. Specifically, subjects may have expected most people who participated in the original Darley and Latané study to have offered help quickly. If this were the case, the flattering consensus information that we provided to our subjects would have been expectancy confirming and the threatening consensus information would have been expectancy disconfirming. If subjects' initial predictions of their own behavior were based partly on their expectations regarding people's behavior in the original Darley and Latané study, providing expectancy-confirming consensus information should have relatively little impact on our subjects' predictions because of its redundancy. In contrast, providing expectancy-disconfirming consensus information would be more surprising to subjects and might therefore have more impact on predictions of their own behavior. Of course, these predictions are perfectly consistent with the finding that, overall, our subjects were more responsive to the threatening consensus information than they were to the flattering consensus information.

Furthermore, the differences observed above between high and low self-monitors could have been due to differences in initial expectations. If high self-monitors had more negative expectations regarding others' behavior than did low self-monitors, the flattering consensus information would have been generally expectancy disconfirming for high self-monitors and generally expectancy confirming for low self-monitors. Therefore, high self-monitors would be expected to be more responsive to this information, which is just the result we obtained. Similarly, threatening consensus information might have been expectancy confirming for high self-monitors and expectancy disconfirming for low self-monitors. This would suggest that low self-monitors should be more affected by this information than high self-monitors, again precisely the result we obtained.

Complicating matters further, a different but equally problematic argument can be constructed on the basis of the assumption that expectancy-confirming information attracts closer attention (Rothbart, Evans, & Fulero, 1979) and therefore has more impact on inferences than does expectancy-disconfirming information (Darley & Fazio, 1980; Jussim, 1986). Our subjects, particularly our low self-monitors, may have expected most of Darley and Latané's participants not to have offered help. In contrast, our high self-monitors may have expected most of Darley and Latané's participants to have offered help quickly. Again, this reasoning could explain our findings without reference to self-protective biases.

As plausible as these arguments appear, they turn out not to be supported by a series of additional analyses involving subjects' initial guesses about what the original participants in the Darley and Latané study did. First, our subjects generally expected that the average original participant was relatively slow to help; 63% guessed that the average original participant fell toward the "never help" side of the midpoint of the 6-point rating scale, whereas only 37% guessed that the average original participant fell toward the "help immediately" side. Thus, the threatening consensus information was expectancy confirming, not expectancy disconfirming, for the majority of subjects.

Remarkably, expectancies were completely uncorrelated with self-monitoring ($r = -0.009$, $n = 214$, $p = .448$). Furthermore, there were no differences in terms of responsiveness to either type of consensus information between subjects who expected that most of Darley and Latané's original participants helped quickly and those who expected that most participants never helped: consensus information by expectancies interaction, $F(1, 215) = 2.25$, *ns*. Therefore, the results reported above cannot be explained by the alternative hypothesis that expectancy-disconfirming consensus information has more or less impact than expectancy-confirming consensus information.

It is interesting to note that our subjects' initial predictions of their own behavior were more complimentary than were their expectations regarding the behavior of the original study participants. Subjects placed themselves, on average, at 2.70 on the 6-point scale, whereas they placed the average original participant at 3.80, a difference of 1.10, $t(218) = 14.63$, $p < .001$. Thus, subjects viewed themselves as significantly more likely than the average other person to provide help quickly to the seizure victim.

This finding is consistent with many previous studies demonstrating that people typically believe they are more likely to do good deeds and to have good things happen to them than the average person and that they are less likely to do bad deeds and to have bad things happen to them (Brown, 1986; Burger & Burns, 1988; Cohen et al., 1988; Harris & Guten, 1979; Larwood, 1978; Perloff & Fetzer, 1986; Schriber, Larwood, & Peterson, 1985; Slovic, Fischhoff, & Lichtenstein, 1978; Svenson, 1981; Weinstein, 1980, 1984; Weinstein, Klotz, & Sandman, 1988). Replication of this general finding here offers support for our assumption that subjects viewed offering help to the seizure victim as socially desirable and viewed not offering help as socially undesirable.

Discussion

This study failed to replicate Nisbett and Borgida's (1975) and Wells and Harvey's (1977) finding that people ignore consensus information when it suggests that they are unlikely to do a good deed. Subjects in our experiment incorporated consensus information into their predictions of their own behavior, regardless of whether that information suggested that they were likely or unlikely to help a seizure victim. However, self-monitoring regulated use of consensus information: High self-monitors were self-protective, and low self-monitors were not.

There are a number of procedural differences between this study and the studies conducted by Nisbett and Borgida (1975) and Wells and Harvey (1977) that might be responsible for the discrepancy between our findings and theirs. The most obvious factor is that those studies involved between-subjects designs, whereas the present study involved a within-subjects design. In the original studies, one group of subjects predicted their own behavior without having received any consensus information, whereas another group predicted their behavior after having read consensus information. In contrast, subjects in the present study predicted their own behavior, read consensus information, and then predicted their own behavior a second time. Our

subjects may have felt that they were expected to revise their predictions by using the consensus information, and therefore did so in response to these demand characteristics. Consistent with this argument, a number of studies have shown that base-rate use is typically greater in within-subjects designs than in between-subjects designs (Birnbaum & Mellers, 1983; Fischhoff, Slovic, & Lichtenstein, 1979). It is interesting to note that Kulik and Taylor (1981) also used a within-subjects design, so their finding of consensus information use could also be attributed to this design feature.

There were also some small differences between the study description and questionnaire format used in Study 1 and those used by Nisbett and Borgida (1975). We therefore felt that it was important to attempt to replicate our results using a procedure as close as possible to those used in the previous studies. To increase the generalizability of our conclusions, we chose to conduct a second study using the portion of the Nisbett and Borgida (1975) study that addressed the Nisbett and Schachter (1966) experiment.

Study 2

Method

Subjects. Subjects were 96 undergraduates enrolled in introductory psychology courses at OSU. Participation in this experiment partially fulfilled a course requirement.

Procedure. In this study, subjects again filled out a questionnaire at their own pace. The questionnaire was identical to that used by Nisbett and Borgida (1975) in their original study. All subjects read a description of the Nisbett and Schachter (1966) study. In the Nisbett and Schachter study, participants were asked to attach electrodes to one of their hands and to endure a series of increasingly strong electric shocks. Participants were told to indicate when they first felt the shock, when the shock became painful, and when it became too painful to endure.

After reading this description, some of our subjects were told how the original participants had behaved. The desirable feedback group was told that most of the original participants had refused to participate in the experiment. The undesirable feedback group was told that most of the original participants had endured all the shocks, including ones that jolted their arms. The control group was not told anything about how the original participants had behaved. Our subjects then predicted how they thought they would behave in that situation. The behavior predictions were made on 6-point scales with each point verbally labeled. Point 1 was labeled "would have refused to participate" and Point 6 was labeled "would have gone all the way to jolt causing entire arm to jerk."

Subjects then completed personality scales measuring self-monitoring (Snyder, 1974), self-esteem (Rosenberg, 1979), and need for uniqueness (Snyder & Fromkin, 1980). These scales were not included in Nisbett and Borgida's study, however, because they appeared at the end of our questionnaire, they were unlikely to have altered answers to the previous questions. Thus, the methodology of the present study was essentially identical to that used originally by Nisbett and Borgida.

Results

Overall, the consensus information did alter subjects' behavior predictions, $F(2, 84) = 9.70$, $p < .003$ (see Table 2). Subjects in the desirable feedback group predicted that they were more likely to refuse to accept shock than did those in the control group, prediction difference = .87, $t(62) = 2.16$, $p < .04$. Also, subjects in the undesirable feedback group predicted that they were less likely to refuse to accept shock than did those in the control group, though not significantly so, prediction difference = .57, $t(62) = 1.32$, $p < .20$. Because the effect of the undesirable consensus information was smaller than the effect of the desirable consensus information, it might seem that the hypothesis that people would be self-serving in their use of consensus information is supported. However, the differences between the effects of these two sorts of information were not statistically significant, $t(62) = 0.72$, $p = .48$. Thus, it seems most appropriate to conclude that these results replicate those of Study 1.

Table 2
Study 2: Behavior Predictions for Total Sample, High Self-Monitors, and Low Self-Monitors

Group	Behavior prediction	Difference from control group
Total sample		
Desirable feedback	2.44	0.87*
Control group	3.31	
Undesirable feedback	3.88	0.57†
High self-monitors		
Desirable feedback	2.18	1.71**
Control group	3.89	
Undesirable feedback	3.89	0.00
Low self-monitors		
Desirable feedback	2.73	−0.27
Control group	2.46	
Undesirable feedback	3.86	1.40*

† $p < .20$. * $p < .05$. ** $p < .01$.

Again contrary to Kulik and Taylor's (1981) evidence, we found no evidence of a main effect of self-monitoring on consensus information use, $t(62) = 0.61$, $p = .54$. However, the interaction between consensus information desirability and self-monitoring identified in Study 1 appeared even more strongly in these data, $F(2, 84) = 3.93$, $p < .03$. Among the desirable feedback group, high self-monitors were more responsive to the consensus information, prediction difference = 1.71, $t(34) = 3.48$, $p < .003$, than were low self-monitors, prediction difference = −0.27, $t(26) = 0.44$, *ns*, a highly significant difference, $t(30) = 3.37$, $p < .002$. Also, among the undesirable feedback group, low self-monitors were more responsive to the consensus information, prediction difference = 1.40, $t(25) = 2.12$, $p < .05$, than were high self-monitors, prediction difference = 0.00, $t(35) = 0.01$, *ns*, again a significant difference, $t(30) = 2.12$, $p < .05$. The low self-monitors were significantly more influenced by the undesirable consensus information than by the desirable consensus information, $t(27) = 2.53$, $p < .02$, and the high self-monitors were significantly more influenced by the desirable consensus information than by the undesirable consensus information, $t(33) = 2.90$, $p < .01$. These results were equivalently strong when we replicated this analysis using the 18-item self-monitoring scale, the public performing subscale, and the other-directedness subscale. Use of consensus information was found not to vary according to self-esteem or need for uniqueness.[2]

[2] Again, the manipulations of consensus information had no impact on self-esteem, $F(2, 93) = 1.15$, $p = .32$, or need for uniqueness, $F(2, 93) = 0.69$, $p = .50$.

General Discussion

Self-Protective Biases and Consensus Information Use

Taken together, these two studies offer support for a number of claims. First, in contrast to previous studies conducted by Nisbett and Borgida (1975) and Wells and Harvey (1977), we found that people do make use of consensus information when predicting their own behavior in novel situations. This finding is consistent with Kulik and Taylor's (1981) evidence. Their findings and ours challenge the claim (Nisbett & Borgida, 1975; Nisbett et al., 1976) that relatively pallid consensus information is always overwhelmed by individuals' vivid memories of their own past histories and other relevant information when they make predictions about their own behavior. Our conclusion on this point is consistent with other literature questioning the supposedly stronger impact of more vivid stimuli on judgment processes (e.g., Collins, Taylor, Wood, & Thompson, 1988) and with literature questioning the claim that base-rate information is inherently less vivid than individuating information (Solomon, Drenan, & Insko, 1981).

Although consistent with Kulik and Taylor's study in this respect, our findings go beyond theirs because we assessed self-protective biases in consensus information use. Kulik and Taylor (1981) did not report separate estimates of use of complimentary and threatening consensus information, so they did not address this issue. The analytical approach we employed allowed us to discern that all subjects, taken together, used consensus information to the same extent, regardless of whether it suggested they were likely to perform a respectable action or they were unlikely to perform a respectable action. This finding is consistent with other evidence showing that people in general are not necessarily more willing to revise predictions of their own future behavior in complimentary directions than in threatening directions (e.g., Eagly, 1967).

However, when self-monitoring was taken into account, we did find evidence of a self-protective bias in consensus information use. High self-monitors were more influenced by complimentary consensus information than were low self-monitors, and high self-monitors were less influenced by threatening consensus information than were low self-monitors. Thus, it appears that high self-monitors may decide whether to use consensus information on the basis of its implications for their self-image. If using that information would enhance the positivity of their prediction, they will use it. If that information threatens the positivity of their prediction, they will ignore it.

This evidence on the effects of self-monitoring also extends and clarifies Kulik and Taylor's (1981) findings. Kulik and Taylor found that, on average, high self-monitors made more use of consensus information than did low self-monitors, a pattern that we did not confirm. Instead, we found a more complex interactive relation between self-monitoring and the favorability of consensus information. Such an interaction may have been present in Kulik and Taylor's (1981) data, but they did not look for it. Thus, our data suggest that high-self-monitoring individuals are not uniformly more responsive to any sort of consensus information than low self-monitors. Rather, high self-monitors seem to be selective in making extensive use only of consensus information that will help them construct a positive self-image. More generally, our results suggest that high self-monitors are not more responsive to all situational forces. Rather, they are more responsive to only those situational forces that help them enhance the positivity of their self-images.

We recognize that what may appear to be a motivation-based self-protective bias in reasoning may actually be the result of a purely cognitive process (e.g., Bradley, 1978; Miller & Ross, 1975; Pyszczynski & Greenberg, 1987). However, the one plausible purely cognitive explanation that we were able to generate, involving expectancy confirmation and disconfirmation, was not supported by our analyses. We are therefore inclined to view the self-monitoring interaction we observed as motivation based because of the absence of a compelling purely cognitive explanation for it.

One aspect of our self-monitoring results was unexpected. In both studies, we found that low self-monitors made significantly more use of threatening consensus information than they made of complimentary consensus information. Thus, these individuals showed the reverse of a self-protective bias. One might wonder whether this pattern emerged because threatening consensus information was expectancy disconfirming for these individuals and therefore had more impact. However, as the data in Study 1 indicate, threatening consensus information was actually expectancy confirming for these individuals, and expectancies did not regulate consensus information use. Therefore, expectancies probably cannot help to explain this puzzle.

We suspect instead that the explanation may lie in the nature of low self-monitors' personal orientations. Snyder (1974, 1979) has suggested that high self-monitors use situational cues to choose the course of action most appropriate in any given situation, whereas low self-monitors' actions are driven primarily by their enduring attitudes and beliefs without regard for situational appropriateness. Our results suggest that low self-monitors may not actually be indifferent to the situational appropriateness of behavior. In fact, low self-monitors may actually sometimes enjoy behaving in ways that are counter to norms of social desirability because such behavior reinforces their images of themselves as independent nonconformists who think for themselves and stick to their beliefs. Therefore, when given information suggesting that they are likely to behave in a socially undesirable way in a particular novel situation, low self-monitors may readily accept the implications of that information. This is, of course, pure speculation, and we have been unable to uncover any previous research that bears on this hypothesis. Nonetheless, it can easily be subjected to empirical test, and we look forward to such tests being conducted.

We should note that the evidence reported here complements a large literature on the consequences of self-monitoring. Self-monitoring has been shown in recent research to regulate numerous phenomena, including the impact of manipulations of private and public self-awareness (Webb, Marsh, Schneiderman, & Davis, 1989), strategies for assessing the compatibility of romantic couples (Glick, DeMorest, & Hotze, 1988), susceptibility to leading questions (Lassiter, Stone, & Weigold, 1987), emergence as a group leader (Ellis, 1988), strategies for personnel selection (Snyder, Berscheid, & Matwychuk, 1988), and responsiveness to persuasive arguments (DeBono & Harnish, 1988). The present studies contribute yet another effect of self-

monitoring to this growing and important literature on the effects of personality.

Measurement of Self-Monitoring

Our findings also contribute to the growing literature on the nature and measurement of the self-monitoring construct. Many investigators have argued that Snyder's (1974) 25-item scale does not reflect a single latent factor, but rather has a multifactorial latent structure (Briggs & Cheek, 1988; Briggs, Cheek, & Buss, 1980; Gabrenya & Arkin, 1980; Lennox & Wolfe, 1984). Snyder and Gangestad (1986) accepted the assertion that the 25 items reflect multiple underlying factors. However, they claimed that a single factor predominated these items and that an 18-item subset more effectively measured variance in that factor. We factor analyzed the self-monitoring items in Studies 1 and 2 here, and we obtained solutions that corresponded closely to those reported by Briggs and Cheek (1988).

Our results indicate that, at least in the case of consensus information use in making predictions about the self, distinctions among approaches to measuring self-monitoring are not important. The full 25-item self-monitoring scale worked as well as the 18-item scale or Briggs and Cheek's (1988) two subscales at distinguishing self-protective consensus information users from self-effacing consensus information users. Thus, to use Carver's (1989) terminology, it seems that this effect of self-monitoring is due to the single latent variable and not to one of its many surface manifestations. This is a surprising result in a sense, because psychometric theory suggests that, in general, scales composed of fewer items should have lower reliabilities and should therefore have weaker relations with other variables (Nunnally, 1978). But in the case of self-monitoring, it seems that the single underlying factor is captured well enough by these items so that even subsets of the 25-item scale are highly reliable.

Previous critiques of the self-monitoring construct have been based exclusively on factor analyses of item groups and other approaches to assessing relations between self-report measures of cognitive and behavioral tendencies (e.g., Briggs & Cheek, 1988; Lennox & Wolfe, 1984). In contrast, our studies did not explore the relation of self-monitoring to subjects' reports of how much use they typically make of consensus information. Instead, we correlated self-monitoring with actual use of consensus information. Therefore, it may be that subsets of the self-monitoring items have different relations to self-reports of other cognitive and behavioral tendencies but that all the self-monitoring items are equivalently related to actual cognitive and behavioral tendencies when measured more directly. In fact, it would not be at all surprising if high and low self-monitors show different biases when reporting general cognitive and behavioral tendencies. These biases might then produce illusory correlations between self-monitoring and these other self-reports. In this sense, our results may echo the findings of Hessing, Elffers, and Weigel (1988), who showed that the correlates of actual behavior can sometimes be completely different from the correlates of self-reports of the same behavior.

Regulatory Role of Other Personality Dimensions

Some critics of self-monitoring have charged that this construct is closely related to other conceptually distinct personality dimensions (Lennox & Wolfe, 1984). This raises the possibility that effects that appear to be due to self-monitoring may actually be spuriously due to some other aspect of personality. The present studies offer some evidence contradicting that claim. We found that use of consensus information was unrelated to self-esteem, locus of control, need for social recognition, or need for uniqueness. Thus, self-monitoring does not appear to regulate consensus information use simply because it is correlated with one of these other personality variables. Not surprisingly, self-monitoring was correlated only weakly with locus of control ($r = .15$), self-esteem ($r = -.18$), and need for social recognition ($r = -.37$) in Study 1 and with need for uniqueness ($r = .03$) and self-esteem ($r = -.32$) in Study 2. Of course, there may be some other personality variables, such as social anxiety (e.g., Lennox & Wolfe, 1984), that are spuriously responsible for the apparent effects of self-monitoring observed here. We look forward to future research that explores such possibilities.

Our hypotheses that locus of control, need for uniqueness, self-esteem, and need for social recognition might regulate consensus information use seemed sufficiently well-justified theoretically to merit empirical testing. But, as often happens, these hypotheses were not confirmed. The failure of locus of control raises the interesting possibility that people may not view consensus information as revealing the power of situational forces. Rather, people may view consensus information as revealing which behavioral tendencies are widely shared and are thus inherent in human nature, regardless of situational factors. If viewed in this way, individuals with an external locus of control would have no more reason than those with an internal locus of control to apply consensus information to themselves.

A possible explanation for the failure of need for uniqueness emerges from a careful reading of Snyder and Fromkin's (1980) review of literature on this construct. They argued that people generally prefer to be moderately similar to others and are uncomfortable with very high levels of similarity and very low levels of similarity. Even individuals who are chronically high in need for uniqueness do not prefer to be different from all other people in all ways (see Snyder & Fromkin, 1980, p. 91). Therefore, need for uniqueness may only reveal its effects when events begin to suggest to an individual either very high or very low levels of similarity with others. Because our experiments did not involve such events, need for uniqueness may not have exerted any effects on judgment strategies. If, instead, our subjects had first been subjected to experiences that challenged their feelings of individuality, individuals with a high need for uniqueness may have been especially resistant to the implications of consensus information encountered subsequently.

In the case of self-esteem, we initially generated two contradictory predictions regarding its regulatory impact. On one hand, we thought high self-esteem individuals might be especially responsive to complimentary consensus information (because it confirms their generally high opinions of themselves) and especially resistant to threatening consensus information (because it is inconsistent with their favorable self-images). On the other hand, we thought that high-self-esteem individuals might be more willing to use threatening consensus information than low-self-esteem individuals because they might be better able to handle the negative implications for self-esteem of

incorporating this information into a prediction regarding their own behavior.

Thus, we postulated two competing forces, the desire for self-image confirmation and the capacity to accept threatening information. Our failure to find any evidence of self-esteem effects may have occurred because these two competing forces each regulated the behavior of different individuals and cancelled each other out in the aggregate analyses we conducted. Only future studies that distinguish between these two forces empirically can begin to assess the validity of this speculation.

The failure of need for social recognition to identify individuals most responsive to complimentary consensus information is perhaps the most surprising failure of all. Individuals high in need for social recognition say that they have especially substantial needs to be viewed favorably, to be liked, and to be respected by others. Thus, they would presumably be most inclined to accept complimentary consensus information and least inclined to accept threatening consensus information when predicting their own behavior. Self-monitoring also presumably involves a component of desire to be liked by others, but among high self-monitors this desire is accompanied by an ability to adjust one's behavior to fit situational demands. The failure of need for social recognition to regulate consensus information use as self-monitoring did suggests that this ability to exercise control over one's social behavior may be a necessary component of the observed effect on consensus information use.

Similarity and Predictability

In Study 1, we explored whether subjects would be more influenced by consensus information based on similar others than by that based on very dissimilar others. We were surprised to find that similarity did not regulate consensus information use, especially in light of previous studies that found people are more willing to make predictions from one person or group to another person or group when the two are more similar, even when the self is involved (e.g., Cohen et al., 1988; Kunda & Nisbett, 1988). However, our failure to find an effect of similarity is consistent with other studies showing people to be insensitive to indicators of similarity (e.g., Hamill, Wilson, & Nisbett, 1980). Hamill et al.'s (1980) reasoning suggests that our finding may have occurred because subjects made memory-mediated generalizations from the consensus information to themselves without conscious processing of similarity information. Perhaps we would have observed a similarity effect here if we had made the similarity information more salient to subjects.

Within-Subjects Versus Between-Subjects Designs

A number of previous studies have found that use of base-rate information in social judgment is enhanced in within-subjects designs relative to between-subjects designs (Birnbaum & Mellers, 1983; Fischhoff et al., 1979). This could be so because (a) varying the base rate within subjects makes it and its relevance more salient to subjects and is therefore taken into account more in judgment processes, or (b) within-subjects designs could entail demand characteristics that lead subjects to infer that they are expected to use the base-rate information.

Because of a variety of differences between the procedures used in the two studies reported here, it is inappropriate to make strict comparisons between the results of our studies. However, it is interesting to note in passing that consensus information use in the between-subjects study, Study 2, appears to have been at least as strong if not stronger than consensus information use in the within-subjects study, Study 1 (compare Tables 1 and 2). Our within-subjects study did not actually vary consensus information across repeated trials, so the justification for expecting a difference between the two studies is a bit weaker as a result. However, our finding in this regard is consistent with another recent study that involved stricter controls (Lynch & Ofir, 1989, pp. 178–179), so it seems that within-subjects designs may not necessarily always produce stronger effects of base-rate information.

General Conclusions

From a more general perspective, the present results reinforce the emerging view that people often use consensus information and other sorts of base rates when making social judgments. Our findings also reinforce the claim that reasoning about the self is often shaped by self-protective biases (e.g., Mullen & Riordan, 1988; Taylor & Brown, 1988). More specifically, the evidence reported here offers support for the notion that people maintain positive self-images by using or rejecting specific pieces of information in making self-relevant decisions and predictions (Kunda, 1987), perhaps by altering the inference rule they choose to employ (Pyszczynski & Greenberg, 1987). However, our evidence suggests that it is inappropriate to assume that all individuals uniformly show self-protective biases in social judgment processes. This finding and others showing that some people have stronger self-protective biases in judgment than others (e.g., Beggan, Messick, & Allison, 1988) suggest that theories of social judgment and decision making should pay greater attention to disposition-based and situation-based heterogeneity among people in terms of reasoning styles and motives.

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