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THE IMPLICATIONS OF SUCCESS FOR HIERARCHICALLY AND PARTIALLY RESTRICTIVE ABILITY DIMENSIONS

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Recent research (e.g., Trafimow & Schneider, 1994) suggests that successes lead to more correspondent ability attributions than do failures. However, this research leaves open the possibility that the differential importance of successes versus failures is greater for some ability dimensions than for others. Three experiments were conducted to test a hypothesis that what distinguishes these two types of ability dimensions is the expected probability that a person without the ability could perform a relevant behavior. In Experiment 1, participants' ability judgments following a target person's successful performance of relevant behaviors correlated with judgments of how likely a person without the ability would have been to successfully perform the behaviors. However, there was no correlation between ability judgments and judgments of how likely a person with the ability would have been to fail to perform the behaviors. Experiment 2 resulted in similar findings, but with a different set of behaviors and a different experimental paradigm. In Experiment 3, participants were told about an ability with which they were unfamiliar, and led to believe that someone without the ability could either never or sometimes perform the relevant behavior. They then made ability judgments about someone who either successfully or unsuccessfully performed the behavior. Consistent with the hypothesis, the strongest correspondent inferences were made following a successful performance when participants had been led to believe that someone without the ability could never perform the behavior.

Reeder and Brewer (1979) proposed a distinction between two different kinds of trait dimensions that has proven useful to attribution researchers. Partially restrictive (hereafter, PR) trait dimensions are symmetrical with regard to how easily different expectancies are disconfirmed by behavior. For example, if someone believes a person to be friendly, occasional unfriendly behaviors are still tolerated. Similarly, an unfriendly person may act friendly at times. In contrast, hierarchically
restrictive (hereafter, HR) trait dimensions are asymmetrical with regard to behavior. For example, although a dishonest person may perform an occasional honest behavior, an honest person may not perform any dishonest behaviors. One dishonest behavior spoils the trait attribution that the person is "honest." Recent research (Brycz & Wojciszke, 1992; Rothbart & Park, 1986; Skowronski & Carlston, 1987) indicates that the PR-HR distinction is a matter of degree rather than absolute (e.g., it may take two or three dishonest behaviors to disconfirm that the target person is honest), so perhaps it is more accurate to speak of "relatively" PR or HR dimensions (i.e., there is a PR to HR continuum along which trait dimensions can vary). Given this qualification, several findings are consistent with the basic premise (Reeder, 1997; Schneider, 1991; Trafimow & Schneider, 1994).

Inferences can go not only from traits to behaviors, but in the reverse direction as well. However, the most strongly correspondent inferences occur in the presence of behaviors inconsistent with traits at the restrictive pole of a relatively HR dimension. For example, the performance of a dishonest behavior strongly indicates that the target person is dishonest (because an honest person would not have done it), but the performance of a friendly, unfriendly, or an honest behavior is less informative (because friendly and unfriendly behaviors can be performed by both friendly or unfriendly people; and honest behaviors can be performed by both honest or dishonest people). The assertion is not that these latter behaviors are totally uninformative, only that they lead to less strong correspondent inferences than do dishonest behaviors.

Given that several researchers have obtained findings consistent with the PR-HR distinction (Birbaum, 1973; McGraw, 1985; Reeder, 1997; Reeder & Coovert, 1986; Reeder & Spores, 1983; Rothbart & Park, 1986; Schneider, 1991; Trafimow & Schneider, 1994), it is not very surprising that generalizations have been made about what kinds of trait dimensions tend to be of the PR versus relatively HR variety. For example, Reeder, Pryor, and Wojciszke (1992, p. 49; also see Wojciszke, Brycz, & Borkenau, 1993) asserted that "trait-behavior relations along morality dimensions tend to be asymmetric" (relatively HR). Further, Trafimow and Schneider (1994, p. 366) summarized the literature as indicating that "there is general implicit agreement that trait dimensions that have a strong morality or ability component will tend to be hierarchically restrictive." The reason this is true of trait dimensions with a strong morality component seems definitional. That is, by definition, moral people do not perform immoral behaviors (but see Trafimow & Trafimow, 1997 for an exception).

In the case of abilities, it seems more a matter of the range of the behavioral repertoire that is open to the person. For example, a person who has good singing ability can either sing well or sing badly. In contrast, a person who does not have this ability simply cannot perform
the behavior. Thus, if an observer notices that a person sings well, it is easy to make the correspondent attribution that he or she is a good singer. But if the person sings badly, he or she may be a bad singer, or may be a good singer having an off day. More generally, people who have a particular ability can succeed at performing the relevant behavior (e.g., singing well) or they can fail to do so, but people who do not have the ability are simply unable to perform the behavior.

A close scrutiny of abilities, however, suggests that a qualification of this assumption is needed. Consider, for example, free-throw shooting ability. Although it is clear that some people are good at shooting free-throws and sink most of them, other people are less good and miss most of them. But what is important for the HR-PR distinction is that even good free-throw shooters will miss some of them (consistent with the singing example), and even bad free-throw shooters will sink some of them (inconsistent with the singing example). Thus, free-throw shooting ability seems to be a PR rather than a relatively HR trait dimension. More generally, it seems that the following principle may allow us to identify whether trait dimensions pertaining to ability are hierarchically or partially restrictive: Relatively HR ability dimensions are those where a person without the ability is judged by an observer to have a relatively low probability of successfully performing the behavior; and PR ability dimensions are those where a person without the ability is judged by an observer to have a relatively greater probability of successfully performing the behavior (but a lesser probability than someone who is presumed to have the ability). Three experiments were performed to test this hypothesis.

EXPERIMENT 1

If it is true that ability inferences are mediated by judgments of how likely a person without the ability of concern would be to successfully perform a relevant behavior, then a straightforward prediction can be made. Specifically, judgments about people without the ability of concern should correspond negatively with ability inferences. The more people without the ability are expected to be unable to perform a relevant behavior, the stronger an ability inference can be made when a person actually performs it. Experiment 1 tests this prediction.

METHOD

PARTICIPANTS

Forty-four undergraduate students volunteered to participate in the experiment.
TABLE 1. Mean Confidence Judgments and Beliefs About Probabilities as a Function of Condition

<table>
<thead>
<tr>
<th>Ability</th>
<th>WITH</th>
<th></th>
<th>WITHOUT</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Confidence</td>
<td>Beliefs</td>
<td>Confidence</td>
<td>Beliefs</td>
</tr>
<tr>
<td>Free-throw shooting</td>
<td>1.38&lt;sup&gt;a&lt;/sup&gt;</td>
<td>54.52&lt;sup&gt;a&lt;/sup&gt;</td>
<td>1.35&lt;sup&gt;a&lt;/sup&gt;</td>
<td>51.09&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Slam-dunking</td>
<td>2.00&lt;sup&gt;b&lt;/sup&gt;</td>
<td>56.19&lt;sup&gt;b&lt;/sup&gt;</td>
<td>2.13&lt;sup&gt;b&lt;/sup&gt;</td>
<td>27.65&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Creativity</td>
<td>2.03&lt;sup&gt;b&lt;/sup&gt;</td>
<td>56.48&lt;sup&gt;b&lt;/sup&gt;</td>
<td>2.22&lt;sup&gt;b&lt;/sup&gt;</td>
<td>19.48&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Singing</td>
<td>2.62&lt;sup&gt;c&lt;/sup&gt;</td>
<td>50.95&lt;sup&gt;c&lt;/sup&gt;</td>
<td>2.74&lt;sup&gt;c&lt;/sup&gt;</td>
<td>19.35&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
<tr>
<td>Passing</td>
<td>1.24&lt;sup&gt;a&lt;/sup&gt;</td>
<td>62.81&lt;sup&gt;a&lt;/sup&gt;</td>
<td>1.43&lt;sup&gt;a&lt;/sup&gt;</td>
<td>42.22&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

Note: Superscripts refer to column-wise comparisons. Entries with different superscripts are significantly distinct from each other.

PROCEDURE

Participants were asked five questions. For example, the first question asked “Suppose you saw a person successfully shoot a free-throw. How confidently would you conclude that this person has good free-throw shooting ability? Circle one of the following”: Then the participants circled “extremely confident,” “quite confident,” “slightly confident,” or “not at all confident.” The other four questions were similar but concerned slam-dunking a basketball and slam-dunking ability, inventing a new kind of drug to combat AIDS and creative ability, singing a Mozart aria perfectly and singing ability, and (5) throwing a “Hail Mary” pass at the end of a football game and passing ability.

After making these judgments, participants then reviewed the five questions and made one of the following types of judgments about each of them (this was the manipulation). Participants in the without condition were instructed to “Go back over the items you just completed, and indicate how likely it would be that a person without the ability might still successfully perform the behavior. Use a scale from 0% probability to 100% probability. Write a number from 0% to 100% in each blank to indicate your answer.” Participants in the with condition rated the probability that “a person with the ability might still fail to successfully perform the behavior.”

RESULTS

Participants’ initial responses to the five items were coded on a scale ranging from 0 (not at all confident that a person successfully performing the behavior has the ability) to 3 (extremely confident). Table 1 indicates that participants in both conditions were less confident in making a correspondent inference in the free-throw shooting and passing scenarios than in the others (p < .01 in all comparisons), which indicates that
these are (relatively speaking) PR abilities and those with higher ratings are HR abilities.

According to the hypothesis, what differentiates relatively HR from PR abilities is the observer’s belief about whether or not an actor without the ability could perform the behavior. If someone without the ability cannot perform the behavior, then one can confidently conclude that someone who has performed the behavior really has that particular ability.

Note that beliefs about an actor who has the ability are less relevant in making this determination. Thus, mean beliefs should correspond negatively with confidence judgments in the without condition, but not in the with condition. As Table 1 indicates, beliefs corresponded well—and negatively—with confidence judgments in the without condition but not in the with condition. More specifically, mean beliefs were greater for the PR (free-throw shooting and passing scenarios) than for the HR scenarios ($p < .05$ in all comparisons) in the without condition, but not in the with condition (no differences were significant).

Another test of the hypothesis can be made by looking at the average correlation between confidence judgments and beliefs about what a person with or without the ability would do. Because participants indicated their confidence judgments and beliefs about all five ability dimensions, it was possible to calculate the correlation between the two variables with regard to each participant. According to the hypothesis, the two variables should be negatively correlated in the without condition, but not in the with condition. Consistent with expectations, the average within-participant correlation was -.43 in the without condition and .01 in the with condition, $t(42) = 2.55$, $p < .02$.

It should not only be the case that average within-participant correlations be more negative in the without than with condition, but there should also be a greater frequency of negative correlations in the without condition than in the with condition. To test this prediction, each participant was scored as a “success” if within-participant correlation was less than zero and as a “failure” if greater than zero. According to the hypothesis, there should be a disproportionately large number of successes in the without condition, but not in the with condition. Consistent with the hypothesis, binomial analyses indicated that the proportion of successes was significantly greater than 50% in the without condition (86.96%, $p < .01$), but not in the with condition (49.99%). Further, a Fisher’s Exact Test comparing the proportion of successes obtained in the without versus with conditions indicates that the difference in proportions between the two conditions is significant ($p < .01$).
ABILITIES

EXPERIMENT 2

Experiment 2 was conducted to provide another test of the hypothesis, but in the context of the following issues. First, Reeder et al. (1992) suggested that some traits can be classified as being frequency based, indicating that whether or not a target person is judged to have that trait depends upon how often the relevant behavior is exhibited (e.g., the free-throw shooting scenario in Experiment 1). This classification implies that even individuals who do not have the trait may perform the relevant behavior at times—just not often enough to be thought of as having the trait. Thus, at least as they pertain to single behaviors, frequency-based ability dimensions should exhibit PR qualities. However, an additional implication is that they can be made to result in strong correspondent inferences if the experiment is set up in such a way as to make them pertain to a large number of behaviors. For example, although a bad free-throw shooter might be successful on a particular attempt, only a good free-throw shooter will make 30 consecutive free-throws. Despite the fact that Reeder et al. (1992) placed frequency-based traits in a separate category from abilities (Reeder et al. termed them “capacities”), the dimensions to be explored in Experiment 2 can be considered to be a hybrid. For example, free-throw shooting may be both a frequency-based trait and an ability. One goal of Experiment 2 is to test whether there are frequency based ability dimensions with strong PR qualities.

A second issue concerns the definition of an HR ability dimension. Much research (e.g., Brycz & Wojcieszke, 1992; Rothbart & Park, 1986; Skowronski & Carlton, 1987) suggests that the HR-PR distinction is more a matter of degree than an absolute (i.e., it is a continuum). In addition, it is possible to argue that, according to a strict definition of HR (one successful performance of a relevant behavior leads to a strong correspondent inference), there are no strictly HR ability dimensions. In other words, there are no ability dimensions where one successful performance of a relevant behavior would strongly demonstrate that the target person has the ability.

To address these issues, participants in Experiment 2 were presented with three ability dimensions assumed to be frequency based, and one presumed HR ability dimension. Further, participants were given scenarios involving target persons successfully performing the behavior either one time or 30 times. The three ability dimensions were expected to result in weak correspondent inferences in the context of only one instance of a behavior, but in strong ones in the context of 30 behaviors. In contrast, the HR behavior was expected to result in strong correspondent inferences, regardless of the number of relevant behaviors performed by the target person. Finally, to test whether there are any strictly
HR ability dimensions, participants were asked how many successes it would take to result in strong correspondent inferences with regard to various ability dimensions.

METHOD

PARTICIPANTS

Twenty-eight undergraduate students volunteered to participate in the experiment.

PROCEDURE

Participants were asked two sets of four questions for a total of eight questions. In one set of questions, participants responded to single behaviors; in the other set of questions they responded to 30 behaviors. Three of the questions in each set pertained to frequency-based ability dimensions while the other pertained to an HR ability dimension. For example, one question pertaining to a frequency-based ability dimension asked: “Suppose you saw a person win one (30) hand(s) of poker. How confidently would you conclude that this person has good poker playing ability?” Then the participants circled “extremely confident,” “quite confident,” “slightly confident,” or “not at all confident.” The other questions were similar but asked about a person who successfully answered “one (30) multiple-choice question(s) in quantum physics” and who made “one (30) successful prediction(s) about whether or not the stock market would go up.” The HR question asked about a person who successfully played “a (30) Mozart violin concerto(s).” Finally, there was one manipulation. Approximately half of the participants responded to the set of four questions referring to one behavior first, and then the set of four questions referring to 30 behaviors. The other participants responded to the two sets of questions in the reverse order. The order of the questions within the sets was random.

After making these judgments, participants then reviewed the questions and made the following types of responses about each of them. First, they performed a without task similar to that in Experiment 1. Specifically, they were instructed to “Go back over the items you just completed, and indicate how likely it would be that a person without the ability might still successfully perform the behavior. Use a scale from 0% probability to 100% probability. Write a number from 0% to 100% in each blank to indicate your answer.” All of the participants then performed a with task. They rated the probability that “a person with the ability might still successfully perform the behavior.” Note that the with task was
slightly different from Experiment 1 where participants rated the probability that "a person with the ability might still fail to successfully perform the behavior." The reason for this change was to insure against the possibility that the failure of the with task to correspond with confidence judgments in Experiment 1 was due to participants’ inability to think in terms of failure. The present with task frames the question in terms of the probability of success, similarly to the without task. Consequently, if the results are analogous to those obtained in Experiment 1, the framing of the with items cannot be held responsible. The other difference from Experiment 1 is that every participant made without and with probability judgments.

There was also a final exploratory phase of the experiment. Participants rated all of the ability dimensions from Experiments 1 and 2 on "how many successful performances of the behavior it would take to make you reasonably confident that the person has the ability."

**RESULTS**

Participants’ initial responses to the eight items were coded on a scale ranging from 0 (not at all confident that a person who successfully performs the behavior has the ability) to 3 (extremely confident). These confidence judgments, as well as without and with responses, were submitted to $2 \times 2 \times 2$ mixed ANOVAs. The between-participants factor was the order in which they responded to the two sets of questions. One within-participants factor was whether the questions were in Set 1 or Set 2, and the other within-participant factor was the individual scenarios. All of the means are presented in Table 2.
There was a main effect of the between-participants factor on confidence judgments that the target person had the ability; these judgments were higher when scenarios pertaining to single behaviors were presented first rather than last (M = 2.09 and M = 1.70), F(1, 26) = 7.33, p < .05. There was also a main effect on with responses; these judgments were also higher when scenarios pertaining to single behaviors were presented first rather than last (M = 86.64 and M = 77.42), F(1, 24) = 15.31, p < .01. However, there was no main effect on without responses (M = 22.81 and M = 34.54). Most importantly, the between-participants factor was not involved with either within-participants factor in an interaction on confidence, with, or without responses. Thus, participants were collapsed across this factor for specific tests of the hypotheses.

I assumed that the violin-playing scenario pertained to an HR ability dimension and that the others referred to frequency-based ability dimensions. A series of planned comparisons was performed to test specific implications of these assumptions. First, when only those scenarios involving a single behavior were considered, the HR scenario was expected to result in greater confidence judgments than the frequency-based scenarios, but an attenuation of this effect was expected for those scenarios involving 30 behaviors. Consistent with these predictions, the HR scenario involving a single behavior resulted in significantly greater confidence judgments than did the frequency-based scenarios involving a single behavior (M = 2.46 and M = .82), F(3, 81) = 141.17, p < .01; and this was also true when the scenarios involved 30 behaviors (M = 2.93 and M = 2.47), F(3, 81) = 10.99, p < .01; however, the effect was significantly weaker when the scenarios involved 30 behaviors rather than a single behavior, F(3, 81) = 55.41, p < .01.

According to the original hypothesis, what differentiates relatively HR abilities from PR abilities is the observer’s belief about whether or not an actor without the ability could perform the behavior. If someone without the ability cannot perform the behavior, then one can confidently conclude that someone who has performed the behavior actually has the ability.

Note that beliefs about an actor who has the ability are less relevant in making this determination. Thus, while confidence and without responses were expected to correspond negatively, this was not true of confidence and with responses. Consistent with this prediction, without responses were smaller for the HR scenario involving a single behavior than for the frequency-based scenarios involving a single behavior (M = 18.69 and M = 47.00), F(3, 75) = 26.81, p < .01; this was also true when the scenarios involved 30 behaviors (M = 19.62 and M = 32.32), F(3, 78) = 12.04, p < .01; and this effect was significantly weaker when the scenarios involved 30 behaviors rather than a single behavior, F(3, 75) = 6.18, p < .01. However, none of these effects were
significant for with responses. In sum, ability, without, and with responses all follow patterns similar to those obtained in Experiment 1.

The average correlations between confidence judgments and responses about what a person without or with the ability would be likely to do were also considered as in Experiment 1. Because all participants indicated their without and with beliefs, as well as confidence judgments, it was possible to calculate the relevant correlations within each participant across the eight scenarios. According to the hypothesis, without responses should be negatively correlated with confidence judgments but with responses should not be. Consistent with expectations and with Experiment 1, the average within-participant correlation between confidence and without responses was -.33 ($p < .01$); and the correlation between confidence and with judgments was .17 (not significant). 1

It should not only be the case that the confidence-without correlations should be more negative than the confidence-with correlations; additionally, negative confidence-without correlations should be particularly frequent (as in Experiment 1). To test this prediction, each participant was scored as a “success” if the within-participant correlation was less than zero, and as a “failure” if it was greater than zero. According to the hypothesis, there should be a disproportionately large number of confidence-without successes, but not confidence-with successes. Consistent with the hypothesis and Experiment 1, binomial analyses indicated that the proportion of confidence-without successes was significantly greater than 50% (76.9%, $p < .01$), but this was not true of confidence-with successes.

EXPLORATORY ANALYSES

It is possible to argue (see Skowronski & Carlston, 1992) that a strictly HR ability would be one where the successful performance of a single relevant behavior results in an attribution that the target person possesses the ability. Up to this point, a distinction has not been made between ability dimensions that are strictly HR versus those that are relatively HR. Are there any that are strictly HR? To explore this question, Table 3 presents the percentage of participants indicating that a single success was sufficient for a corresponding ability attribution. Note that, although this was a low number for most of the abilities, it was greater than 50% for “singing” and “violin playing,” and 40% for “creativity.” Thus, it seems that, although not many abilities qualify as being strictly HR for a majority of participants, a few such abilities do exist.

1. Likelihood ratios were also computed ($LH = \text{with/with} + \text{without}$) for each participant and correlated with confidence judgments. Although this correlation was significant ($r = .35$), its absolute value was not discernibly different from the correlation between confidence and without responses ($r = -.33$).
TABLE 3. Proportion of (valid) Participants for whom a Single Successful Performance of a Relevant Behavior was Sufficient for a Reasonable Level of Confidence that the Person has the Ability

<table>
<thead>
<tr>
<th>Ability</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free-throw shooting</td>
<td>4.0</td>
</tr>
<tr>
<td>Slam-dunking</td>
<td>12.0</td>
</tr>
<tr>
<td>Creativity</td>
<td>40.0</td>
</tr>
<tr>
<td>Singing</td>
<td>56.0</td>
</tr>
<tr>
<td>Passing</td>
<td>12.0</td>
</tr>
<tr>
<td>Poker playing</td>
<td>4.0</td>
</tr>
<tr>
<td>Violin playing</td>
<td>52.0</td>
</tr>
<tr>
<td>Quantum physics</td>
<td>8.0</td>
</tr>
<tr>
<td>Stock market</td>
<td>4.0</td>
</tr>
</tbody>
</table>

EXPERIMENT 3

Experiment 3 was conducted to provide a more extreme test of the hypothesis. Specifically, the hypothesized mediator of ability inferences—namely, judgments about the probability with which people without the ability would succeed at a relevant behavior—was manipulated. Specifically, participants were told about an ability with which they were unfamiliar, led to believe that beings (human target persons were not used) low in the ability could sometimes or never perform a relevant behavior, and confidence judgments were obtained. According to the hypothesis, if participants are led to believe that beings low in the ability are simply unable to perform behaviors that exemplify the ability, then they should be very confident in their trait attributions for beings who successfully perform such behaviors. However, if participants are led to believe that beings low in the ability might still successfully perform these behaviors, then less-confident trait attributions should be made.

METHOD

PARTICIPANTS

Forty-six undergraduate students participated in the experiment.

PROCEDURE

All participants were given one of the following scenarios. They were told: “On the planet Saysheul, the inhabitants have an ability that they call ‘bink’ ability. Those who are low in this ability are simply unable to ‘bink.’” (Participants in the other condition were told “Those who are low in this ability usually fail to ‘bink,’ but sometimes they are success-
ful"). "Those who are high in this ability can 'bink' but sometimes they fail to 'bink' even though they want to do it. One of these inhabitants, named Ool, attempted to 'bink' and did it successfully. How confident are you that Ool is high in 'binking' ability? Indicate how confident you are by writing a number in the blank below from 0% (completely confident that Ool does not have the ability) to 100% (completely confident that Ool does have the ability)."

Participants were then presented with a second scenario about "another inhabitant of Sayshell named Aal, who also attempted to 'bink' but failed." And participants made a similar confidence judgment about whether Aal has the ability.

Thus, Experiment 3 was a 2 (never or sometimes) × 2 (Ool or Aal) mixed factorial design. Whether participants were told that beings low in the ability never succeed (never) or sometimes succeed (sometimes) was the between-participants factor, and whether the scenario was about a being who succeeded (Ool) or failed (Aal) was the within-participants factor.

RESULTS

Not surprisingly, participants were more confident that the being had "binking" ability when it succeeded than when it failed ($M = 74.37$ and $M = 44.76$), $F(1, 44) = 37.84, p < .01$. In addition, there was no main effect for whether participants were presented with the never or sometimes scenario, $F(44) < 1$. Most importantly, however, there was a significant interaction between these two variables, $F(44) = 5.30, p < .03$. Participants in the never condition were much more confident in making an attribution after a success than after a failure ($M = 82.27$ and $M = 40.91$), $t(22) = 5.47, p < .001$; but for participants in the sometimes condition, this difference was significantly attenuated ($M = 67.13$ and $M = 48.29$), $t(22) = 2.99, p < .01$. In sum, the data suggest that manipulating whether low-ability beings are considered able to perform the behavior affected confidence in their trait attributions in a way consistent with the HR-PR distinction.

DISCUSSION

The results can be summarized as follows. In Experiment 1, some relatively HR (e.g., singing) and PR (e.g., free-throw shooting) ability dimensions were identified on the basis of participants' confidence in making correspondent inferences for successful behaviors. Further, several results were consistent with the hypothesis. Specifically, (1) mean without responses corresponded negatively with mean confidence judgments; (2) mean within-participant correlations between confidence judgments and beliefs were strongly negative in the without condition, but not in
the *with* condition; and (3) a large proportion of participants had negative within-participant correlations in the *without* condition but not in the *with* condition.

In addition, the data obtained in Experiment 2 extended these findings to frequency-based ability dimensions and suggested some additional speculations that will be addressed shortly. Finally, in Experiment 3, participants were led to believe that beings without a particular ability were unable to perform a relevant behavior or that they sometimes could perform that behavior. According to the hypothesis, the ability should be perceived as HR in the former case, and PR in the latter case, and extremely strong correspondent inferences should be made for a success only at times when the ability is perceived as being relatively HR. In fact, the data strongly supported this prediction. The strongest correspondent inferences were made when a being successfully performed a behavior relevant to an ability perceived to be relatively HR.

One interesting characteristic of the present hypothesis is that it fits nicely with an argument by Skowronski and Carlston (1987; 1989), namely that stronger correspondent inferences are made for behaviors "diagnostic" of the trait under concern. These researchers also assumed that, generally speaking, successes are more diagnostic than failures. However, the present research extends this idea by suggesting those conditions under which successes are more or less diagnostic. Specifically, successes are particularly diagnostic when people without the ability of concern cannot be expected to perform the behavior.

A closer look at abilities and behaviors suggests that matters may not be quite as simple as either the diagnosticity argument or the present hypothesis seem to suggest. Consider the ability of passing a football. When the behavior of concern is "completing a Hail Mary pass," it seems obvious (as participants indicated) that even people who are without much passing ability might get lucky and successfully perform this behavior. Thus, passing seems to be a PR-ability dimension, and participants should (and did) make relatively weak correspondent inferences. However, suppose that the behavior had been "complete 70% of passes attempted during a season." Here it seems clear that a person without good passing ability should be extremely unlikely, even if lucky, to perform this behavior. Consequently, when passing ability is considered in relation to "completing a Hail Mary pass," it is a PR ability; but when passing ability is considered in relation to "completing 70% of passes during a season," a stronger correspondent inference can be made. Thus, whether or not an ability dimension is relatively HR or PR may depend, in part, upon the behavior considered in relation to the dimension.

The Reeder et al. (1992) notion that some trait dimensions are fre-
quency-based seems relevant to this discussion. Data from Experiment 2 indicate that frequency-based ability dimensions are PR in the context of single behaviors; a single success did not lead to a strong correspond
dent inference but 30 successes did result in such an outcome. More generally, in the context of a single relevant behavior, frequency-based ability dimensions are easily distinguishable from relatively HR ability dimensions; but this is much less true within the context of a large number of relevant behaviors. More research efforts in the future might be devoted to understanding ability attributions in the context of large numbers of successes or failures.

Another complication is suggested by the possibility that there may exist some behaviors usually performed successfully—even by people without the relevant ability. For such behaviors, the difference between people with low and high ability parallels the difference between usually being successful and almost always being successful. For example, a person with moderate secretarial ability usually puts the right letters in the right faculty mailboxes, while a person with good secretarial ability almost always does so. In this case, a failure to successfully perform the behavior might lead to a stronger correspondent inference than a success. That is, one failure (or a few failures) may indicate that the person is not a good secretary; but, because we expect the right letters in the right mailboxes, a series of successes may not lead to a correspondent inference. We might term such ability dimensions as “reverse” HR dimensions.

In conclusion, the present research suggests some speculations about person perception pertaining to HR ability dimensions. Specifically, negative expectations about other people’s abilities can be mitigated or reversed by only a few successes (or one success for a strictly HR ability dimension). Further, positive expectations about other people’s abilities, even if they are based upon only a few successes, should be relatively immune to a subsequent series of failures. In sum, people consider successes to be more diagnostic than failures.

This contrasts with person perception as pertaining to PR ability dimensions, where successes and failures are given an approximately equal amount of attributional weight. And it contrasts even more with HR morality dimensions (e.g., honest-dishonest), in which negative (e.g., dishonest) behaviors lead to particularly strong correspondent inferences. Thus, people who focus on HR ability dimensions, where positive behaviors lead to strong correspondent inferences, may be particularly likely to have positive impressions of other people. Or, concerning impression management, people who can induce others to think about them in terms of HR ability dimensions may be particularly successful at creating good impressions. More generally, al-
though the present focus has been on attributions, the resulting implications should interest researchers with primary interest in other domains.

REFERENCES


