CUSTOMER HAS REQUESTED:
Mail to Address
David Trafimow
Department of Psychology, MSC 3452
PO Box 30001
Las Cruces, NM 88003
Status: Faculty
Email: trafimow@crl.nmsu.edu

Notice:

The work from which this copy was made did not include a formal copyright notice. This work may be protected by copyright law. Uses may be allowed with permission from the rightsholder, or if the copyright on the work has expired, or if the use is "fair use" or within another exemption. The user of this work is responsible for determining lawful uses. (Title 17, US Code 1998.)
The Moderating Effect of Behavior Type on the Subjective Norm–Behavior Relationship

DAVID TRAFIMOW  
*Department of Psychology*  
*Virginia Polytechnic Institute and State University*

MARTIN FISHBEIN  
*Department of Psychology*  
*University of Illinois, Urbana-Champaign*

**ABSTRACT.** Three experiments were focused on the relationship between subjective norms and behavior. In Experiment 1, American college students were presented with an attitudinally or normatively controlled behavior and were instructed to suppose that the person most affected by the behavior approved or disapproved of the student's performing that behavior. This manipulation had a greater effect on intentions to perform the normatively controlled behavior than on intentions to perform the attitudinally controlled behavior. Experiments 2 and 3 were attempts to replicate the interaction, using a manipulation of the subjective norm rather than a manipulation of the normative proscriptions of a specific other. The findings indicate that the effect depends, to some extent, on the cognitive accessibility of behavior-specific important others.

**ACCORDING TO** the theory of reasoned action (Ajzen & Fishbein, 1980; Fishbein, 1967, 1980; Fishbein & Ajzen, 1975), behavior is determined by intentions, which in turn are determined by attitudes (toward performing the behavior) and subjective norms. These two components, however, may have different weights (as a function of the behavior under consideration and as a function of individual differences). Thus, in a given population, some behaviors may be more under attitudinal control (AC behaviors), and others may be more under normative control (NC behaviors). It follows that a change in attitude should affect intentions to perform AC behaviors more than intentions to perform NC behaviors.

Trafimow and Fishbein (1994) tested this hypothesis in two general ways. First, they manipulated participants' attitudes toward a behavior and then primed

Address correspondence to David Trafimow, who is now at the Department of Psychology, Dept. 3452, New Mexico State University, Las Cruces, NM 88003.
the participants with either an AC or an NC behavior that was irrelevant to the behavior in question. They found that manipulating participants’ attitudes had a much greater effect on intentions to perform the behavior in the presence of an AC behavior prime than an NC behavior prime. Second, participants were presented with either an AC or an NC behavior and were told to imagine that they liked or disliked (this was the attitude manipulation) performing the behavior. Participants given an AC behavior were more affected by the attitude manipulation than participants given an NC behavior. In sum, the attitude–behavior relationship was much stronger for AC behaviors than for NC behaviors, and this was true for a direct attitude manipulation, a priming manipulation, a between-subjects design, and a within-subjects design.

According to the theory of reasoned action, similar findings should be obtained with respect to the normative component: Just as an attitudinal manipulation should have a greater impact on AC behaviors than on NC behaviors, a normative manipulation should have a greater impact on NC behaviors than on AC behaviors. This hypothesis was explored in three experiments.

**Experiment 1**

Experiment 1 was an attempt to extend our previous research to normative manipulations. We could not use the same behaviors as before (i.e., seat belt use under different driving conditions) because in a state with mandatory seat belt laws, it made little sense to tell respondents that “most of their important others” would be opposed to their wearing a seat belt. Thus, we had to find similar behaviors (one AC and one NC) for which it made sense to tell participants that their important others either approved or disapproved of their engaging in that behavior. The behaviors selected were “going to a Korean restaurant alone” (AC) and “going to a Korean restaurant with a date” (NC). (We chose “going to a Korean restaurant” because we considered it a behavior with which American college students would be relatively unfamiliar. A familiar behavior might have activated previously held attitudes or subjective norms with the potential to interfere with the manipulations.)

We assumed that the opinions of important others would be more important when at least one of them would be directly affected by the behavior. Thus, it followed that intentions to perform the second behavior would be more susceptible to normative manipulations than would intentions to perform the first behavior.

**Method**

*Participants.* Twenty-one male and 21 female introductory psychology students participated in the experiment. Participation partially fulfilled a class requirement.
Procedure. Using a procedure similar to that used in our earlier research (Trafimow & Fishbein, 1994), we asked participants to respond to four scenarios, with each scenario having a different combination of a behavior and a subjective norm. In all scenarios, participants were told to suppose that they liked performing the behavior in question (to hold attitudes constant at a positive level); in other words, they were asked to assume that they liked “taking a date to a Korean restaurant” or that they liked “going alone to a Korean restaurant.” Then they were instructed to suppose that the “person most affected by this action” thought they should or should not perform the behavior (this was the normative manipulation). Finally, participants rated on a 7-point likely-unlikely scale whether they would or would not perform the behavior.

Design. The design was a 2 x 2 factorial with subjective norm (should vs. should not perform the behavior) and behavior type (NC vs. AC) as independent variables. The four scenarios were counterbalanced in a Latin-square arrangement.

Results

Responses on the 7-point likely-unlikely scale were coded on a scale ranging from -3 (extremely unlikely) to 3 (extremely likely). Because of the Latin-square arrangement, it was possible to analyze these data by using a between-subjects analysis of variance on the first scenario to which the participants responded and, in addition, to conduct a within-subjects analysis on all of the scenarios. Consequently, the data were analyzed both ways.

Between-subjects analysis. Participants were more likely to intend to go to a Korean restaurant when they were alone than when they were with a date ($M = 1.70$ and $0.45$, respectively), $F(1, 17) = 8.00, p < .02$. In addition, participants had stronger intentions to perform the behavior when the person most affected supported it than when that person opposed it ($M = 2.55$ and $-0.60$, respectively), $F(1, 17) = 42.55, p < .001$. More important, the predicted Subjective Norm x Behavior Type interaction was significant, $F(1, 17) = 7.52, p < .02$. Given an NC behavior, participants’ intentions to perform it were much stronger when the person most affected by the behavior supported such an action than when that person opposed the action ($M = 2.50$ and $-2.00$, respectively). Consistent with expectations, however, this effect was attenuated when an AC behavior was considered ($M = 2.60$ and $0.80$, respectively).

Within-subjects analysis. The within-subjects analysis replicated and strengthened the between-subjects findings. The data again indicated that participants were more likely to intend to go to a Korean restaurant when they were alone than when they were with a date ($M = 1.14$ and $0.50$, respectively), $F(1, 20) = 6.66, p < .020$. In addition, participants had stronger intentions when the person most
affected supported the behavior rather than opposed it \((M = 2.31\) and \(0.67,\) respectively), \(F(1, 20) = 61.25, p < .001.\) Finally, consistent with the between-subjects analysis, a significant Subjective Norm \(\times\) Behavior Type interaction was obtained, \(F(1, 20) = 16.18, p < .001.\) For the NC behavior type, mean intentions were \(2.48\) and \(-1.48\) for normative support and opposition, respectively. For the AC behavior type, this effect was attenuated \((M = 2.14\) and \(0.14,\) respectively).

**Experiment 2**

The main purpose of Experiment 2 was to extend the previous findings to a direct manipulation of the subjective norm. By telling the participants that “the person most affected by this action thinks you [should/should not] go to the Korean restaurant” we essentially manipulated a normative belief concerning a specific referent. Although this manipulation should have influenced participants’ subjective norms (i.e., their belief that most of their important others thought they should or should not perform the behavior in question), we also thought it should be possible to manipulate subjective norms directly.

**Method**

**Participants.** Nineteen male and 19 female introductory psychology students participated in the experiment. Participation partially fulfilled a class requirement.

**Procedure.** Procedures were identical to those used in Experiment 1 with the one exception just described. Participants were instructed to suppose that “most people who are important to you think you [should/should not] go to the Korean restaurant [with a date/alone].”

**Design.** The design was again a \(2 \times 2\) factorial with subjective norm (should vs. should not perform the behavior) and behavior type (NC vs. AC) serving as independent variables. The four scenarios were counterbalanced in a Latin-square arrangement.

**Results**

**Between-subjects analysis.** Consistent with Experiment 1, participants had stronger intentions to perform the behavior when their performance was supported rather than opposed by the subjective norm \((M = 2.11\) and \(0.10,\) respectively), \(F(1, 15) = 5.18, p < .04.\) In contrast to Experiment 1, however, participants were about as likely to intend to go to a Korean restaurant when they were alone as when they were with a date \((M = 0.89\) and \(1.20,\) respectively), \(F(1, 15) < 1.\) Even more important, the predicted Subjective Norm \(\times\) Behavior Type interaction was not significant, \(F(1, 15) < 1,\) indicating that the subjective norm
main effect was not qualified by behavior type. (For the NC behavior, the means were 2.40 and 0.00 for normative support and opposition, respectively; for the AC behavior, they were 1.75 and 0.20, respectively.)

Within-subjects analysis. The within-subjects analyses were consistent with the between-subjects analyses. Participants were not more likely to intend to go to a Korean restaurant when they were alone than when they were with a date ($M = 1.50$ and $1.68$, respectively), $F(1, 18) < 1$; they had stronger intentions to perform the behavior when the subjective norm was in support of rather than in opposition to their performance, ($M = 2.42$ and 0.76, respectively), $F(1, 18) = 21.11$, $p < .001$; and despite the increased power of the within-subjects design, the predicted Subjective Norm × Behavior Type interaction remained nonsignificant, $F(1, 18) < 1$. In fact, the similarity of the two conditions was quite striking. That is, for the NC behavior, mean intentions given normative support and opposition were 2.58 and 0.79, respectively. Under the AC behavior type, the corresponding mean intentions were 2.26 and 0.73.

**Experiment 3**

The findings from the two previous experiments can be summarized as follows. First, normative manipulations influenced intentions. Second, this relationship was moderated by behavior type when the normative prescription of a specific referent was manipulated (Experiment 1) but not when the normative prescription of the more generalized “most important others” was manipulated (Experiment 2). In contrast to expectations, manipulating the subjective norm directly appears to have had the same effect on intentions to perform AC behaviors as it did on intentions to perform NC behaviors.

There are two possible explanations for these findings. First, directly manipulating the subjective norm could have made normative considerations more salient, thereby decreasing the importance of behavior type. This explanation, however, is inconsistent with the findings of Trafimow and Fishbein (1994), who showed that the effect of a direct manipulation of attitude depended on the type of behavior under consideration. Clearly, if saliency temporarily influenced the relative weights placed on attitudinal or normative considerations, Trafimow and Fishbein (1994) should not have obtained a significant Attitude × Behavior Type interaction.

A second explanation focuses on the distinction between general and behavior-specific referents. That is, as Chung (1985) pointed out, some referents (e.g., mother, father, spouse, boyfriend, and girlfriend) are important irrespective of the behavior under consideration, whereas other referents become salient only with respect to specific behaviors and behavioral domains. For example, police becomes a salient referent if one is considering speeding or not wearing a seat
belt, and doctor and perhaps minister or priest or rabbi become salient when one is considering using birth control pills or other forms of contraception.

Clearly, when one makes a decision about going to a Korean restaurant with a date, the date is very likely to be a salient referent. Moreover, when participants were told about the normative prescriptions of “the person most affected by this action,” it seems reasonable to assume that the date came quickly to their minds. However, when the participants were told that “most people who are important to you think you [should/should not] go to a Korean restaurant with a date,” they most likely did not think about the date per se. Instead, it seems reasonable to assume that this manipulation led participants to think about more general referents (e.g., families, friends, etc.). By focusing on “most others who are important,” the participants may have considered people whose opinions were important to them in general, without taking into account the opinions of referents who would otherwise be salient in the context of the specific behavior under consideration. Because the normative prescriptions of behavior-specific referents are important determinants of individuals’ intentions to engage in NC behaviors (see Chung, 1985), the failure of such prescriptions to become salient (when participants were thinking about important others) could have greatly decreased the effect of the normative manipulation. If this was so, we thought it would then be possible to directly manipulate subjective norms and replicate the findings of Experiment 1 simply by telling participants to think about who is important to them in deciding whether or not to take a date to a Korean restaurant (i.e., by priming participants to include behavior-specific as well as general referents in their set of “most important others”). This procedure was used in Experiment 3.

Method

Participants. Twenty-seven male and 27 female introductory psychology students participated in the experiment. Participation partially fulfilled a class requirement.

Procedure. All participants were again given four scenarios, with each scenario representing a combination of a behavior and a subjective norm. In each scenario, participants were told that they felt positively about the behavior in question (to hold attitudes constant at a positive level). Once again, the behavior was either taking a date to a Korean restaurant (NC) or going alone to a Korean restaurant (AC). All participants were then told to “think about which people would be most important to you” in deciding whether or not to perform the behavior. Finally, for the subjective-norm manipulation, they were instructed to suppose that these important others thought they should or should not perform the behavior. After completing these steps, participants placed a mark on a 7-point scale to indicate how likely they were to perform the behavior in question.

Design. Once again, the design was a $2 \times 2$ factorial with subjective norm (should vs. should not perform the behavior) and behavior type (NC vs. AC) as indepen-
dent variables. The four scenarios were counterbalanced in a Latin-square arrangement.

Results

Between-subjects analysis. Consistent with the findings in Experiment 2, participants were equally likely to intend to go to a Korean restaurant when they were alone and when they were with a date \((M = 1.22\) and \(1.23\), respectively), \(F(1, 23) < 1\). And, as in both of the previous experiments, participants had stronger intentions to perform the behavior when important others supported rather than opposed their performance \((M = 1.86\) and \(0.59\), respectively), \(F(1, 23) = 9.93, p < .005\). Most important, and consistent with Experiment 1, the predicted Subjective Norm \(\times\) Behavior Type interaction was again significant, \(F(1, 23) = 4.61, p < .05\). When the subjective norm supported performance of the NC behavior, participants' intentions were much stronger than when the subjective norm opposed it \((M = 2.29\) and \(0.17\), respectively). For the AC behavior type, however, the effect of the normative manipulation was attenuated \((M = 1.43\) and \(1.00\), respectively).

Within-subjects analysis. Perhaps as a result of the increased power of the within-subjects analysis, and consistent with our earlier findings in Experiment 1, the participants were more likely to intend to go to a Korean restaurant alone than with a date \((M = 1.26\) and \(0.45\), respectively), \(F(1, 26) = 4.94, p < .04\). The remaining results were consistent with the between-subjects analyses: Participants had stronger intentions to perform the behavior when it was supported, rather than opposed, by their important others \((M = 2.09\) and \(0.11\), respectively), \(F(1, 26) = 71.15, p < .001\), and, most important, both of these main effects were qualified by a significant Subjective Norm \(\times\) Behavior Type interaction, \(F(1, 26) = 6.48, p < .02\). When important others supported the NC behavior, participants' mean intention to perform it was 2.11. In contrast, when important others opposed performance of the NC behavior, the participants' mean intention was -0.22. For the AC behavior type, this effect was attenuated \((M = 2.07\) and \(0.44\), respectively).

General Discussion

Consistent with the theory of reasoned action and the distinction between AC and NC behaviors, the present series of experiments shows that behavior type can moderate the subjective norm–behavior relationship. More specifically, normative manipulations had a greater impact on intentions to engage in NC behaviors than on intentions to engage in AC behaviors. However, this effect only occurred when the normative prescription of a behavior-specific referent was manipulated or when it was ensured that participants included behavior-specific referents in their set of most important others. Directly manipulating the subjective norm (i.e., the
normative prescriptions of participants' most important others) without first priming the participants to include behavior-specific referents in their set of important others did not produce greater effects on intentions to perform NC behaviors than on intentions to perform AC behaviors.

These findings have potentially important implications for the theory of reasoned action. Even a cursory review of the literature based on the theory shows that, with respect to most of the behaviors that have been studied to date, attitudinal considerations have been found to be more important determinants of intentions than have normative considerations. The present series of studies suggests that these findings may, at least in part, be due to a methodological artifact. Fishbein and Ajzen (1975; see also Ajzen & Fishbein, 1980) recommended measuring subjective norms by asking participants to indicate the extent to which their "most important others" think they should or should not perform the behavior in question. On the basis of the present series of experiments, it now appears that this terminology may lead respondents to consider general but not behavior-specific referents. Because behavior-specific referents are important determinants of intentions to engage in a given behavior, the use of the "most important other" terminology may have resulted in an underestimation of the relative contribution of normative considerations as determinants of behavioral intentions.

It is interesting to speculate about the extent to which the effects of our manipulations on behavioral intentions, performed in an admittedly artificial context, would predict behavior in real life or in other societies. Several researchers have explored this issue by measuring intentions in a way similar to that used in the present studies and by measuring behaviors. The obtained correlations vary depending on the behavior. For example, Ajzen (1971) found that intentions to cooperate in a prisoner's dilemma game correlated .82 with actual cooperative behavior. Smetana and Adler (1980) found that intentions to have an abortion correlated .96 with actually having an abortion. King (1975) found that intentions to attend church during the Easter holiday correlated .90 with actual attendance. (For other correlations found between intentions and behaviors, see the review by Ajzen, 1988.)

There is a cross-cultural aspect to our data that should also be considered. There are differences between individualistic and collectivist cultures (Trafimow, Triandis, & Goto, 1991; Triandis, 1989), and one such difference might be the degree of emphasis placed on norms by these two types of societies. In fact, Trafimow et al. showed that thoughts about group membership are more accessible in collectivist cultures than in individualistic ones. Consequently, it is possible that there are more NC behaviors in collectivist cultures than in individualistic ones. If so, then manipulations of subjective norms should generally be more effective in collectivist cultures.

The obtained findings have important implications for developing interventions designed to produce behavior change. More specifically, the present study provides additional support for the argument that interventions must be tailored
to the specific population and the specific behavior one wishes to change. Clearly, to be maximally effective within a given population, normative messages should be used to influence NC behaviors and attitudinal messages should be used to influence AC behaviors. In addition, the utilization of behavior-specific referents should increase the effectiveness of interventions directed at changing NC behaviors.

REFERENCES


Received March 28, 1994