The Unintentional Nonconformist: Habits Promote Resistance to Social influence

Asaf Mazar1, Guy Itzchakov2, Alicea Lieberman3, and Wendy Wood1

Abstract
This research tests a novel source of resistance to social influence—the automatic repetition of habit. In three experiments, participants with strong habits failed to align their behavior with others. Specifically, participants with strong habits to drink water in a dining hall or snack while working did not mimic others’ drinking or eating, whereas those with weak habits conformed. Similarly, participants with strong habits did not shift expectations that they would act in line with descriptive norms, whereas those with weak habits reported more normative behavioral expectations. This habit resistance was not due to a failure to perceive influence: Both strong and weak habit participants’ recalled others’ behavior accurately, and it was readily accessible. Furthermore, strong habit participants shifted their normative beliefs but not behavior in line with descriptive norms. Thus, habits create behavioral resistance despite people’s recognition and acceptance of social influence.

Keywords
habit, social influence, resistance, mimicry, social norms

Received September 19, 2021; revision accepted February 6, 2022

Social influence is an integral component of human interaction, spanning direct requests, persuasive appeals, and normative pressures (Prislin & Wood, 2005). However, people do not always conform. Classic experiments in social psychology show that, although people often align their judgments with those of other group members (e.g., Asch, 1955) they also resist normative pressures of others’ choices and behavior (e.g., Moscovici & Faucheux, 1972).

Resistance to influence arises from a variety of active and passive processes (Jost, 2015; Sagarin & Henningsen, 2017). For example, people might actively resist influence to maintain their own sense of freedom and control (Brehm, 1993) or might passively avoid exposing themselves to views that contradict their own (Hart et al., 2009). Although it is often assumed that resistance drives judgments as well as behavior, we propose that people with strong habits persistently repeat responses and thereby resist behaviorally, despite recognizing and accepting others’ alternative responses. Habits thus create a form of nonmotivated resistance as a behavioral outcome (Fransen et al., 2015; Knowles & Linn, 2004). By acting on habit, then, people might buck social influence without necessarily intending to do so.

Nature of Habits
Habits are context-response associations that develop when people repeat a rewarded response in a specific context (Mazar & Wood, 2018; Verplanken & Orbell, 2022). Initially, people might repeat actions as they pursue continuing goals (Wood & Rünger, 2016). However, as habits develop, responses become directly tied to context cues so that perception of these cues automatically brings the response to mind (e.g., Hardwick et al., 2019). This ready accessibility of habitual responses could produce behavioral resistance that does not involve active opposition but instead spontaneous, automatic responding that fails to align with others’ behavior. In this way, habit resistance could be evident in behavioral responses without affecting people’s recognition or understanding of social cues.

Although habit resistance has received little attention in theorizing about social influence, it features prominently in applied fields. In classic consumer behavior theory, Sheth (1981) proposed that “the strength of habit associated with an existing practice or behavior is hypothesized to be the single most powerful determinant in generating resistance to change” (p. 275). In one demonstration, households initially

1University of Southern California, Los Angeles, USA
2University of Haifa, Israel
3University of California, Los Angeles, USA
were influenced to decrease their energy consumption in response to a monthly report indicating that they were using more energy than their neighbors (Allcott & Rogers, 2014). However, households then quickly reverted back to their original use levels—an effect the researchers attributed to residents falling back on old energy use habits. A stable decline in energy use emerged only after repeated influence attempts. Even nudges might be less successful at changing strongly habitual behavior. For example, a small-sized teaspoon influenced British tea drinkers to use less sugar, except when they had strong habits to drink sugared tea (Venema et al., 2020). Habits thus could be a key to explaining why some social influence efforts fall flat in consistently guiding behavior.

In the present research, we test whether habits promote behavioral resistance to two different forms of social influence: mimicry and descriptive norms. Mimicry occurs when people imitate others’ physical mannerisms, posture, or speech (Chartrand & van Baaren, 2009; Palagi et al., 2020). Descriptive norms, or what people typically do, signal which behaviors are common and potentially effective (McDonald & Crandall, 2015). We predicted that strong habits in a given domain will shield behavior from such influences.

**Habits and Resistance**

We propose that habit resistance arises from the automatic activation of habitual responses by associated context cues. Although for simplicity, we refer to habits as strong or weak, habit strength is a continuum with stronger habits representing strong memory traces and activation of the response in mind. Demonstrating habit activation, habitual runners quickly recognized the words, “running” and “jogging,” after being primed with their own typical locations for running, such as “forest” or “track” (Neal et al., 2012). Suggesting that habit activation does not require intentions, jogging and running were not primed by participants’ personal goals for running (e.g., fitness, weight control). Thus, habitual responses were activated by contexts but not goals. Such accessibility can promote resistance through classic ideomotor effects in which “every mental representation of a movement awakens to some degree the actual movement which is its object” (James, 1890, p. 526). Given the mental accessibility of habits, along with the speed of habit activation, people may start to act on habit before they can decide to act otherwise (Hardwick et al., 2019; Luque et al., 2019). Thus, we propose that resistance to influence could emerge as a downstream consequence of the activation of habit context-response links in memory.

Preliminary evidence that habits promote influence resistance comes from research showing that habits moderate the influence of implementation intentions. In a series of experiments, Webb et al. (2009) found that participants who formed strong habits via task repetition were less successful at implementing alterations in task procedures (Study 1), and participants with strong smoking habits were less successful at implementing intentions to quit (Study 2). Also relevant, Webb and Sheeran’s (2006) meta-analysis revealed that interventions that successfully changed people’s behavioral intentions had little impact on repeated behaviors that could be performed habitually (e.g., wearing a bicycle helmet). In contrast, new intentions successfully guided occasional behaviors that were unlikely to be habitual (e.g., course registration).

More direct evidence that habits impede behavior change comes from a series of persuasion studies that successfully convinced participants about the health risks of sugar consumption (Itzchakov et al., 2018). When given a later opportunity to choose sugary beverages, those with stronger habits to consume sugary beverages continued to do so, at least when mental fatigue made it difficult to control their behavior. Those with weaker habits were guided by their new attitudes and drank little sugar. Thus, prior work suggests that habits could foster resistance to social influence and that this resistance could operate independently of intentions and attitudes.

**Mechanisms of Habit Resistance**

Strongly habitual responses that are brought to mind automatically might generate resistance to influence directly, regardless of the extent to which people receive (i.e., attend to and comprehend) others’ behavior or accept it (i.e., attitudinally agree). In this way, habitual influences differ from individual differences such as self-monitoring (Snyder & Cantor, 1980) and consistency fit models (C. E. Seta et al., 2008; J. J. Seta et al., 2001), in which people resist influence due to informational and motivational pressures to act consistently with self-perceptions.

In prior research on social mimicry, behavioral influence sometimes occurred regardless of conscious reception of influence (Chartrand & van Baaren, 2009). For example, participants in some studies rubbed their face or shook their foot when a partner did so but later, during a funnel debriefing, did not spontaneously mention that their partners performed these actions (Chartrand & Bargh, 1999). These authors concluded that motor mimicry reflects an automatic process whereby observing others’ behavior creates a direct tendency to behave in similar ways oneself.

Conscious processes may similarly play a minimal role in habits resistance. If so, habits might create resistance independent of explicit reception (e.g., attention, comprehension, and cognitive accessibility of others’ behavior) or acceptance of influence (e.g., intentions and motivations).

**The Present Research**

We conducted three experiments to test whether participants with weak habits would align their behavior with that of their peers, whereas those with strong habits would not. In so doing, we test a component of resistance that could make
appeals appear (falsely) to be ineffective. Instead, it may be that appeals successfully influence understanding but fail to sway habitual behavior.

Our first two studies examined habit resistance to social mimicry. Study 1, a field experiment set in college dining halls, tested whether habits moderated students’ mimicry of an interaction partner’s water drinking. Study 2 tested whether participants working next to a confederate mimicked their consumption of snacks. In the final study, we assessed whether participants’ habit strength moderated their expectations to conform to or resist descriptive norms to bring a reusable water bottle to campus.

Each study assessed whether strong habits were related to the inaccurate recall of others’ behavior along with additional tests of reception and acceptance of social cues. Specifically, Study 1 assessed whether strong habits influenced behavioral intentions, Study 2 assessed whether habits reduced accessibility of others’ behavior, and Study 3 evaluated whether strong habits altered perception of normative information.

**Study 1**

Study 1 tested whether strong habits attenuate mimicry of another person’s water drinking. Pitting habit against mimicry in this design provides a powerful test of our hypotheses given that mimicry also seems to influence behavior outside of awareness (Chartrand & Bargh, 1999). The study was conducted as an interview in a university dining hall in which both the interviewer and the participant were given a glass of water. The interviewer took either many or few sips of water, and we recorded how often students drank. Participants with weaker habits to drink water in the dining hall should exhibit the standard social mimicry effects and take more (fewer) sips of water when the interviewer took many (few) sips. In contrast, participants with stronger habits to drink water in the dining hall should be unaffected by the experimenter’s drinking. This pattern should emerge in an interaction between participants’ drinking habits and the interviewers’ drinking.

We further tested several potential mechanisms of habit resistance to influence, including accuracy of recalling the interviewers’ behavior. In addition, we controlled for factors that could explain habit resistance, including thirst on entering the dining commons and intentions to drink water there. Finally, habit strength was assessed with an antecedent of habit formation—frequency of past behavior (Neal et al., 2013)—and a consequence—self-reported automaticity (Gardner et al., 2012).

**Method**

**Open practices statement.** All materials, data, and analytic code can be accessed using the following link: https://osf.io/68vkz/?view_only=28f9ed46fe2141d2bc336a589fabe282d1. Sample sizes for all studies were determined before data collection and analysis.

**Power analyses.** Power simulations revealed that a minimum sample size of 88 participants was necessary to obtain .80 power for a small-sized interaction term (incidence rate ratio [IRR]) = 0.75; see section 1.1 of the Supplemental Materials.

**Participants.** A total of 128 U.S. University students (62 female, 66 male) received US$5 compensation for participating in a study on their “dining hall experience.” An additional 7 participants requested their data be withdrawn, and an additional 15 participants were excluded for lack of drinking data due to a technical error. Random assignment checks are in the Supplemental Materials (see Sections 1.1, 2.1, and 3.1).

**Procedure.** Upon entering a campus dining hall, participants were approached by two experimenters of the same gender as the participant. One experimenter took the role of interviewer and the other coder. Participants sat across a dining table from the interviewer. The coder placed two full glasses of water in front of the participant and interviewer, using the standard 250 ml clear plastic dining hall water glasses. The glass was placed to the participant’s right (left) side if they were right/ left-handed. After giving informed consent, participants completed a short survey designed to obscure the study’s purpose (e.g., “How satisfied are you with the residential dining meal plan that you have?”) along with the frequency-in-context measure of habit strength for drinking water in the dining hall as well as a measure of thirst (see below).

During the ensuing 13-question oral interview (see Section 1.2 in the Supplemental Materials), participants reported on the dining hall experience (physical environment, seating preferences, entertainment shown on the dining hall televisions). Participants were randomly assigned to interviewers who took either many or few sips of water. In the *many sips* condition, the interviewer took a sip of water before each interview question, for a total of 13 sips. In the *few sips* condition, the interviewer took only two sips—before the first question and before the last one. During the interview, the coder ostensibly transcribed the participant’s answers but in fact recorded the participants’ number of sips.

After the interview, participants answered additional questions to further disguise the study’s purpose (e.g., “What was the noise level in the dining hall during the interview?”). Participants also completed the Self-Report Behavioral Automaticity Index, a measure of water drinking intentions, and a recall measure for the interviewer’s drinking (see below). Finally, participants were probed for suspicion, debriefed, and compensated.

**Measures**

**Habit strength (frequency in context, Neal et al., 2013).** Participants indicated whether they usually drink water when in the residential dining halls (1 = strongly disagree, 5 = strongly agree).
Table 1. Means (M), Standard Deviations (SD), and Correlations for Key Variables: Study 1.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Few sips</th>
<th></th>
<th>Many sips</th>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Number of sips</td>
<td>2.23 (2.89)</td>
<td>2.75 (3.33)</td>
<td></td>
<td></td>
<td>.11</td>
<td>.56**</td>
<td>.72**</td>
<td>-.07</td>
</tr>
<tr>
<td>2. Habit strength (frequency in context)</td>
<td>3.44 (1.61)</td>
<td>3.58 (1.41)</td>
<td></td>
<td></td>
<td>.02</td>
<td>.68**</td>
<td>.72**</td>
<td>-.04</td>
</tr>
<tr>
<td>3. Habit strength (SRBAI)</td>
<td>2.86 (1.27)</td>
<td>3.18 (1.30)</td>
<td></td>
<td></td>
<td>.00</td>
<td>.68**</td>
<td>.72**</td>
<td>-.04</td>
</tr>
<tr>
<td>4. Intentions to drink</td>
<td>3.66 (1.42)</td>
<td>3.89 (1.31)</td>
<td></td>
<td></td>
<td>.17</td>
<td>.68**</td>
<td>.72**</td>
<td>-.07</td>
</tr>
<tr>
<td>5. Thirst</td>
<td>3.20 (1.06)</td>
<td>3.08 (1.03)</td>
<td></td>
<td></td>
<td>.17</td>
<td>.68**</td>
<td>.72**</td>
<td>-.07</td>
</tr>
</tbody>
</table>

Note. The possible range for all variables except the number of sips was 1 to 5, with higher numbers reflecting more participant drinking, stronger habits, greater perceived habit automaticity, stronger intentions to drink water in the dining commons, and greater thirst. SRBAI = Self-Report Behavioral Automaticity Index.

*p < .05. **p < .01.

Habit strength (Self-Report Behavioral Automaticity Index, Gardner et al., 2012). This subset of 4 items from the Self-Report Habit Index (Verplanken & Orbell, 2003), evaluated the automaticity of drinking water in the dining commons (1 = strongly disagree to 5 = strongly agree). Scores were averaged into a composite (α = .93).

Behavioral intentions. At the end of the interview, participants rated, “I intend to drink water when I am in the residential dining halls” (1 = strongly disagree to 5 = strongly agree).

Thirst. At the beginning of the interview, participants rated how “thirsty [they were] right now” (1 = not at all thirsty to 5 = very thirsty).

Recall. At the end of the interview, participants indicated whether the interviewer drank water during the interview (Yes, No, Don’t remember). Participants answering “Yes” indicated how much water the interviewer drank (A few sips, Half a glass, Full glass, or more). Answers of A few sips in the few sips condition as well as answers of Half a glass and a Full glass or more in the many sips condition were coded as correct. Other answers were coded as incorrect. Qualitatively identical results emerge when considering either only “half a glass” or only “full glass or more” as correct in the many sips condition (see Section 1.5 in Supplemental Materials).

Suspicion probe. Participants described the purpose of the study, and two coders independently coded answers as aware or unaware for mentioning that drinking behavior could be part of the study or unaware otherwise. Coders displayed high interrater reliability, agreeing on 126 out of 128 cases (98% agreement, Cohen’s k = .85), with disagreements resolved by discussion. Eight participants (6%) were aware of the study’s purpose. Including awareness as a covariate in the main models did not meaningfully alter the results (see Tables S3 and S4 in Supplemental Materials).

Fidelity. Three female experimenters (in random pairs) and two male experimenters conducted the sessions. Each experimenter was extensively trained to follow the study protocol. Welch’s independent samples t tests revealed that, unexpectedly, male participants (M = 3.36, SD = 3.38) took more sips than female participants (M = 1.56, SD = 2.53), t(120.21) = −3.42, p < .001. This could be due to males’ longer interview times (M = 6.70 min, SD = 2.27) than females (M = 3.29 min, SD = 0.97), t(89.22) = 11.18, p < .001. In support, participants took more sips in longer interviews, r(126) = .43, p < .001.

Drinking. Along with the number of sips, the amount of water left in participants’ glasses was recorded. Given that (a) the influence manipulation involved frequency of drinking and not amount consumed, (b) the amount of water consumed per sip varied considerably between person, and (c) some participants started drinking before the interview, it is no surprise that the number of sips and amount of water consumed were not strongly correlated (for those who drank at all), r(76) = .38, p < .001. Thus, the analyses below focus on the number of sips.

Results

Descriptive statistics and correlations are shown in Table 1.

Mimicry. Results were analyzed using Poisson regression, which is particularly suited for our count outcome (number of sips) as well as its zero-inflated distribution in which 38% of participants took no sips. The model predicted participant number of sips from interviewer sips (few vs. many; effect-coded), habit strength, and an interviewer sips × habit strength interaction.

Using habit strength as frequency-in-context, the analyses revealed a significant main effect of habit strength, b = 0.09, SE = 0.04, incidence rate ratio (IRR) = 1.09, 95% confidence interval (CI) = [1.01, 1.18], z = 2.27, p = .023, as well as a significant main effect of interviewer sips, b = 0.12, SE = 0.06, IRR = 1.12, 95% CI = [1.00, 1.26], z = 2.03, p = .042. These main effects were qualified by the predicted significant interaction between habit strength and
interviewer’s drinking, SD pants (1 below mean habit strength) mimicked the participant’s sips, b = −0.09, SE = 0.04, IRR = 0.92, 95% CI = [0.85, 0.99], z = −2.18, p = .029 (see Figure 1). As anticipated, simple effects tests revealed that weak habit participants (1 SD below mean habit strength) mimicked the interviewer’s drinking, b = 0.25, SE = 0.09, IRR = 1.28, z = 2.78, p = .005, but strong habit participants (1 SD above the mean) were unaffected by the interviewer’s behavior, b = −0.01, SE = 0.08, IRR = 0.99, z = −0.17, p = .866.

The predicted effects similarly emerged using habit strength reflected in automaticity of water drinking (SRBAI). That is, the interaction between SRBAI and interviewer sips was significant, b = −0.17, SE = 0.04, IRR = 0.84, 95% CI = [0.77, 0.92], z = −3.89, p < .001. Simple effects analyses confirmed that the manipulation affected weak habit participants (1 SD below the mean), b = 0.33, SE = 0.08, IRR = 1.39, z = 4.01, p < .001, but barely achieved marginal significance for strong habit participants (1 SD above the mean), b = −0.13, SE = 0.08, IRR = 0.89, z = −1.65, p = .099. In this analysis, the main effect of habit strength was not significant, b = 0.03, SE = 0.04, IRR = 1.03, 95% CI = [0.94, 1.12], z = 0.61, p = .54, and the main effect of interviewer sips was marginally significant, b = 0.11, SE = 0.06, IRR = 1.11, 95% CI = [1.00, 1.25], z = 1.91, p = .056.

To probe whether the effect represented behavioral resistance rather than a more motivated process, each of the primary analyses was recalculated controlling for participants’ thirst at the beginning of the session and their intentions to drink water. Suggesting that habit resistance did not depend on motivation or intention, the predicted interaction persisted even when these covariates were entered into the model (see Tables S1 and S2 in Supplemental Materials). Instead, intentions and thirst separately drove behavior, as participants with stronger intentions and greater thirst took more sips of water (ps < .05). Nonetheless, these analyses revealed that neither intentions nor thirst accounted for the effects of habit strength on behavior (using either measure of habit).

Mechanisms of resistance: Recall of interviewer’s behavior. The majority (69%) of participants accurately recalled the interviewer’s drinking. To assess whether participants with stronger habits paid less attention to the interviewer’s behavior, we computed logistic regressions predicting recall accuracy (0 = incorrect, 1 = correct) from habit strength (mean-centered), interviewer sips (effect-coded), and the interaction between interviewer sips and habit strength. Neither measure produced a main effect of habit strength on recall of the interviewer’s behavior, odds ratio (OR) = 0.99, 95% CI = [0.77, 1.28], p = .939 (frequency-in-context), OR = 1.26, 95% CI = [0.94, 1.73], p = .132 (SRBAI). No other effects in the model reached statistical significance. Therefore, strong habit participants did not differ from weak habit participants in their reception of social cues.

Discussion
Study 1 examined participants’ behavior in their usual eating and drinking environment, providing an ecologically valid test of habit resistance. As anticipated, participants with weak habits of drinking water in the dining hall mimicked the interviewer’s behavior: They drank more when the interviewer took many sips of water and less when the interviewer took only a few sips of water. In contrast, the interviewer’s behavior did not affect participants with strong habits. Note that this is not plausibly a ceiling effect given that interviewers who drank frequently took 13 sips of water, which could readily influence strong habit participants to drink more than their three sips on average. To our knowledge, these findings are the first to show that strong habits are triggered and enacted regardless of the pressures of social mimicry.

The effects of habit strength were established using two different measures: the frequency-in-context measure assessed habit from past water drinking behavior in the dining hall and the SRBAI captured self-reported automaticity of water drinking. As expected, these two measures were substantially correlated, with frequent behavior associated with greater experienced automaticity. The comparable effects across these two measures provide convergent validity for our claim that habit strength increased behavioral resistance to mimicry. To ensure conceptual validity, our measure assessed habit strength only for the target behavior, drinking water, and not alternatives (e.g., not drinking at all, drinking soda).

Our findings also address alternative explanations in which people with strong habits resist social influence simply because they hold strongly favorable attitudes toward drinking water. If strong attitudes toward drinking water in the dining hall were responsible for habit resistance, then these would be reflected in behavioral intentions (Fishbein & Ajzen, 2010). However, the predicted interaction between habit strength and the

Figure 1. Number of sips during the interview as a function of habit strength and frequency of interviewer sips.

Note. Higher numbers for participant drinking reflect greater numbers of sips. Habit strength assessed with the frequency-in-context measure. Weak, moderate, and strong habits represent mean ± 1 SD habit strength.
interviewer's drinking behavior remained significant even when controlling for participants' drinking intentions. This is consistent with classic models that treat habits as a separate predictor of future behavior from attitudes and intentions (e.g., Eagly & Chaiken, 1993; Triandis, 1979). By ruling out intentions as an alternative explanation for habit-based resistance, we contribute to the growing evidence that habits do not derive their impact from attitude or intention strength (Itzchakov et al., 2018). Similarly, habit resistance to influence did not implicate momentary drive states such as thirst on entering the dining hall. Again, the interaction between habit strength and mimicry remained significant even after controlling for participants' initial level of thirst.

We did not find evidence that behavioral effects were tied to awareness of others' behavior. This is consistent with prior research on mimicry, in that social influence effects were not driven by differential recall of the interviewers’ behavior (Chartrand & van Baaren, 2009). However, our participants were mostly accurate in recalling whether the interviewer took a couple of sips of water or many sips during the interview. Our findings thus speak to the potential mechanisms behind motor mimicry. When directly queried, participants were aware of the interviewer’s drinking behavior, despite that some prior mimicry studies failed to find such awareness using indirect, funnel-debriefing procedures (Chartrand & Bargh, 1999). Our findings are thus consistent with appraisal and embodiment analyses of mimicry in suggesting that people often have some conscious awareness of others’ responses in mimicry contexts (Palagi et al., 2020).

Finally, it is worth noting that habits will not always override mimicry. Because our research was designed to isolate the effect of habits, we did not manipulate motivations that could fuel mimicry. However, we anticipate that when affiliation motivations are sufficient, even people with strong habits will mimic to some extent.

**Study 2**

The primary goal of this study was to replicate Study 1 using a typical behavior among undergraduates (and researchers!)—snacking while working on the computer. Participants completed a series of surveys while seated next to an ostensible fellow participant (actually, a confederate), each with their snack bowl. As in Study 1, we manipulated how frequently the confederate reached into their own bowl. We predicted that participants with weak habits of snacking while working on the computer would mimic the confederate's snacking behavior, whereas strong habit participants would not engage in mimicry.

As a secondary focus of this study, we tested a potential mechanism by which habits might moderate social influence effects, namely, by reducing the accessibility of others’ behavior. It may be that strong habits do not alter the reception of social cues per se (following the recall measure in Study 1) but instead render these cues less accessible. Therefore, in addition to measuring recall accuracy for others’ behavior (as in Study 1), we also measured the behavior’s accessibility. If habits reduce the accessibility of social cues, then strong habit participants should be slower to report on the confederate’s snacking behavior, compared with their own. Nonetheless, based on the results of Study 1, we did not expect that habit resistance would involve reduced accessibility. Finally, we assessed a motivational variable, restricting calories through dieting, that might be associated with snacking habits and might account for the effects of habit strength on snack consumption (see pre-registration at http://aspredicted.org/blind.php?x=jy937a, and an early iteration of the study in Section 2.3 of the Supplemental Materials).

**Method**

**Participants.** A total of 102 Israeli undergraduates (61 female, 41 male, \(M_{\text{age}} = 26.53, SD_{\text{age}} = 4.99\)) participated in exchange for course credit. Of the initial 118 participants, 12 refused the snack bowl and four had extreme scores on snacking, reaching into the bowl more often than 2 SDs above the mean. Participants who refused snacks did not differ from participants who accepted snacks on habit strength (either measure) or dieting, all \(p > .10\). Furthermore, the results of the analysis did not meaningfully change when including all participants (imputing a value of 0 on the dependent variable for participants who refused the snack bowl).

**Procedure.** Participants showed up in ostensible pairs (with the other participant an experimental confederate). After giving informed consent, participants chose one of the following snacks, supposedly provided given the lengthy session: M&Ms, potato chips, pretzels, or peanuts. After participants chose their preferred snack, the confederate requested the same snack. The experimenter then went to the kitchen and prepared and weighed two bowls of the snack. Participants could request an additional snack bowl (none did).

The participant and confederate sat in front of computers located on opposite sides of an office table. The snack bowls were located so that each could see the other eating. During the study, the confederate pretended to complete the surveys but in actuality recorded the number of times the participant reached for the snack bowl. Participants were randomly assigned to one of two conditions: In the many snacks condition, the confederate reached for their own snack bowl 5 times during the study, whereas in the single snack condition, the confederate only reached once.

The computer tasks included questionnaires and a brief writing task, both intended to capture typical working activities. Afterward, participants completed measures of habit strength for eating while working on a computer. Finally, participants reported their dieting levels, demographics, and were debriefed.

**Measures.** All text below is translated from Hebrew.
Table 2. Means (M), Standard Deviations (SD), and Correlations for Variables: Study 2.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Single snack</th>
<th>Many snacks</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Habit (frequency in context)</td>
<td>2.84 (1.27)</td>
<td>3.06 (1.21)</td>
<td>.52**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Habit (SRBAI)</td>
<td>1.63 (1.57)</td>
<td>1.92 (1.77)</td>
<td>.30*</td>
<td>.39**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Snacking (times reached)</td>
<td>2.08 (2.97)</td>
<td>3.53 (3.00)</td>
<td>.23*</td>
<td>.30**</td>
<td>.66**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Snacking (weight)</td>
<td>17.06 (28.70)</td>
<td>22.98 (22.77)</td>
<td>.23*</td>
<td>.30**</td>
<td>.66**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Relative accessibility (ms)</td>
<td>−499 (578)</td>
<td>−551 (748)</td>
<td>−.01</td>
<td>.02</td>
<td>.11</td>
<td>.08</td>
<td></td>
</tr>
<tr>
<td>6. Dieting</td>
<td>2.56 (1.47)</td>
<td>2.75 (2.08)</td>
<td>.00</td>
<td>−.05</td>
<td>.12</td>
<td>.09</td>
<td>−.12</td>
</tr>
</tbody>
</table>

Note. Higher numbers reflect stronger habits (1–5 scale for frequency in context; 1-7 scale for SRBAI, Self Report Behavioral Automaticity Index), greater accessibility of confederate’s behavior compared with one’s own (log-transformed reaction time difference in milliseconds), more grams of snacks consumed, and more dieting (1–7 scale).

*p < .05. **p < .01.

Habit strength (frequency in context, Neal et al., 2013). Participants rated, “Eating while I’m working on the computer is something that I do ___” (1 = never/almost never, 5 = always/always). In addition, to mask the purpose of the study, participants completed the same measure for (a) riding the bus, (b) talking on the phone, and (c) cleaning.

Habit strength (SRBAI, Self-Report Behavioral Automaticity Index, Gardner et al., 2012). Participants completed the 4-item SRBAI for eating while working (e.g., “Eating while working is something that I do without thinking”; 1 = not at all agree to 7 = strongly agree; α = .93). Participants again completed this measure for riding the bus, talking on the phone, and cleaning.

Snacking. The difference between the initial and final weights of the snack bowl was assessed in grams, \( M_{\text{difference}} = 20.02, SD = 25.95 \). In addition, we tallied the number of times the participant reached for the bowl, \( M = 2.80, SD = 3.05 \). The two behavioral measures were strongly correlated, \( r(100) = .66, p < .001 \).

Recall of confederate’s behavior. Participants reported the amount that the confederate ate during the study (1 = did not eat at all to 5 = ate a lot). Although our original plan called for only coding participants as incorrect if they noted that the confederate did not eat at all, we instead chose a more conservative coding, coding answers of 2 (a little bit) as correct in the single snack condition and answers of 2 or 3 (a moderate amount) as correct in the many snacks condition.

Relative accessibility of own versus others’ snacking. Participants’ reaction times to indicate (in random order, on two separate pages), “How much did [you/the person in front of you] eat during the study” (1 = did not eat to 5 = ate a lot) were log-transformed to reduce skewness. Although our initial protocol outlined additional inverse-transforming response times, this second transformation was omitted because it substantially skewed response time distributions. Relative accessibility scores were formed by subtracting response times for reporting the confederate’s snacking from response times for reporting one’s own snacking. Thus, higher scores represent greater accessibility of the confederate’s (vs. one’s own) behavior, whereas lower scores represent the reverse.

Dieting. Participants indicated if they were currently on a diet and if they had been dieting regularly in the past year (1 = not at all agree to 7 = strongly agree). Item ratings were averaged to compute a dieting score.

Suspicion probe. Participants indicated the purpose of the study, and two coders independently coded each participant’s answer as aware if it mentioned that their snacking behavior during the study could be part of the study, or unaware otherwise. Two participants did not answer the suspicion probe. Coders’ initial ratings were in agreement in 87 of 100 cases, (87% agreement, Cohen’s \( k = .63 \), reflecting moderate interrater reliability). Disagreements were resolved by discussion. Although 21 participants (21% of the sample) were aware of the study’s purpose, the results were not meaningfully altered when awareness was included as a covariate.

Results

The descriptive statistics and correlations between key variables are shown in Table 2.

Mimicry. A Poisson regression predicted the number of times participants reached for the snack bowl from habit strength (frequency in context; mean-centered), confederate’s snacking condition (effect-coded), and an interaction between habit and confederate’s snacking. A main effect for habit strength indicated that participants with stronger snacking habits ate more during the study, \( b = 0.29, SE = 0.05 \), incidence rate ratio (IRR) = 1.34, 95% CI = [1.21, 1.49], \( z = 5.56, p < .001 \). A main effect of confederate snacking revealed that participants ate more when the confederate snacked more often, \( b = 0.31, SE = 0.07 \), IRR = 1.37, 95% CI = [1.20, 1.56], \( z = 4.66, p < .001 \). These main effects were accompanied by the predicted interaction...
between habit strength and confederate snacking, $b = -0.16, SE = 0.05, IRR = 0.85, 95\% CI = [0.77, 0.94], z = -3.10, p = .002$ (see Figure 2). As anticipated, simple effects tests revealed that participants with weak habits (1 SD below average) mimicked the confederate’s behavior, $b = 0.51, SE = 0.11, IRR = 1.66, z = 4.67, p < .001$, but not participants with strong habits (1 SD above average), $b = 0.11, SE = 0.07, IRR = 1.11, z = 1.43, p = .152$.

The predicted effects again emerged in a Poisson regression using the perceived automaticity (SRBAI) measure of habit strength. Main effects for habit strength, $b = 0.25, SE = 0.04, IRR = 1.29, 95\% CI = [1.20, 1.38], z = 7.14, p < .001$, and confederate snacking, $b = 0.29, SE = 0.07, IRR = 1.34, 95\% CI = [1.17, 1.52], z = 4.35, p < .001$, were qualified by the predicted interaction between habit strength and confederate snacking, $b = -0.10, SE = 0.04, IRR = 0.91, 95\% CI = [0.84, 0.97], z = -2.81, p = .005$. Simple effects tests revealed that participants with weak habits (1 SD below average) mimicked the confederate’s behavior, $b = 0.46, SE = 0.10, IRR = 1.58, z = 4.34, p < .001$, but the effect was only marginally significant for participants with strong habits (1 SD above average), $b = 0.12, SE = 0.07, IRR = 1.13, z = 1.80, p = .072$.

Although we initially anticipated that the interaction between habit strength and confederate behavior would be significant when predicting snack bowl weight change (initial weight − final weight), linear regressions revealed only main effects of habit strength, $b = 4.59, SE = 2.04, \beta = .22$, 95\% CI = [0.3, 0.4], $t(98) = 2.25, p = .027$ (frequency-in-context measure), $b = 4.67, SE = 1.50, \beta = .30, 95\% CI = [1.1, 0.49], t(98) = 3.21, p = .002$ (SRBAI). It may be that the four different snacks introduced variability into the bowl weight measure given that a single potato chip weighs twice as much (~1.87g) on average as a single mini-pretzel or M&M (~0.86g and ~0.88g, respectively). This variability appears to have rendered weight an unreliable indicator of mimicry effects.

Finally, we tested an alternative explanation for the moderating effects of habit on mimicry, in which resistance to influence is driven by dieting motives. To this end, we refit the regression model using dietary restraint as a covariate in analyses using each habit measure. The predicted interaction between habit and confederate snacking remained significant in both cases, suggesting that the effect did not merely reflect dieting concerns (see Tables S5 and S6 in Supplemental Materials).

**Awareness of social influence.** Half (50\%) of the participants accurately recalled the confederate’s snacking. Furthermore, two logistic regression models predicting recall accuracy (correct/incorrect) from habit strength (mean-centered frequency-in-context/SRBAI), confederate’s snacking (effect-coded), and the interaction yielded significant effects for condition indicating that participants were more likely to correctly recall the confederate’s behavior when they reached for the bowl 5 times as opposed to once, OR = 2.03, 95\% CI = [1.35, 3.12], $p = .001$ (frequency-in-context), OR = 2.07, 95\% CI = [1.37, 3.19], $p = .001$ (SRBAI). However, suggesting that habit resistance did not depend on recall of other’s behavior, habit strength was unrelated to recall, OR = 0.98, 95\% CI = [0.69, 1.38], $p = .909$ (frequency-in-context), OR = 0.86, 95\% CI = [0.66, 1.11], $p = .247$ (SRBAI), and the interactions between habit and condition were not significant with either measure of habit strength, both $p > .1$. In models using the original preregistered definition of habit, the main effect of habit maintained, although was marginally significant, OR = 0.64, 95\% CI = [0.37, 1.01], $p = .078$ (frequency-in-context), OR = 0.76, 95\% CI = [0.56, 1.02], $p = .069$ (SRBAI), further suggesting that the predicted interaction effect did not depend on awareness, and the interaction remained significant when recall was entered as a predictor of snack consumption.

Awareness was also assessed from cognitive accessibility, or latency to report the confederate’s behavior compared with one’s own. Two linear regressions predicting relative accessibility score from habit strength, confederate snacking, and their interaction produced nonsignificant main effects for habit strength, $b = 0.00, SE = 0.05, t(98) = -0.08, p = .936$, and SRBAI, $b = -0.02, SE = 0.04, t(98) = 0.41, p = .685$, and no other significant effects, all $p > .1$. Thus, strong habits did not reduce the accessibility of social cues (see also moderated mediation analysis, Section 2.3 of the Supplemental Materials).

**Discussion**

Study 2 provided a conceptual replication of Study 1, demonstrating that strong habits promoted resistance to social influence. Participants with weak snacking habits were influenced to mimic the confederate’s behavior more than participants with strong snacking habits: They ate more when the
confederate snacked 5 times than when the confederate snacked only once. Participants with strong habits, however, did not align their behavior with the confederate’s and instead snacked a lot regardless of the confederate’s actions.

As in Study 1, all participants were reasonably accurate in recalling the confederate’s snacking in the two experimental conditions. Thus, habit resistance emerged despite the reception of others’ behavior. Furthermore, our novel measure of the relative accessibility of others’ behavior similarly suggested that habits impeded behavioral compliance without diminishing awareness of social cues. In addition, motivation to diet did not explain the effects of habit on snacking mimicry. Thus, like Study 1, this second study demonstrated habit-driven behavioral resistance despite participants’ awareness of and motivation to snack while working.

**Study 3**

In this final study, we tested whether habits promote behavioral resistance to a different form of social influence—descriptive norms. Participants were informed that a new water dispenser was being installed in their school and that the majority of students using the system either brought their own reusable water bottle or used disposable cups. We hypothesized that participants with weaker habits to bring their own water bottle to campus would align their expectations for their future behavior with these social norms, reporting stronger expectations to use a water bottle when it (as opposed to cup use) was the norm. In contrast, stronger habits should attenuate the effect of social norms on expected behavior such that habitual participants should not change their behavioral expectations in response to the norm. This prediction should emerge in an interaction between habit strength to bring a bottle and social norms of bottle use.

In addition, at the end of the study, we assessed participants’ recall of descriptive norms and their perception of injunctive norms. Building on findings that habit resistance in the first two studies did not involve impaired reception (reduced memory or accessibility) of social cues, we anticipated a comparable effect in Study 3 for behavioral expectations. That is, participants with stronger bottle-use habits should change their perceived norms in line with the manipulation of normative feedback, even as their behavioral expectations remain unchanged. Note that this effect of normative information should emerge over and above any existing tendency for students to view reusable bottles as an injunctive norm. Finally, we measured embarrassment and guilt as potential alternative explanations of the effect, given that both emotions have been implicated in reactions to perceived norm violations (e.g., Keltner & Anderson, 2000).

**Method**

**Power analyses.** Power analyses were conducted using the “pwr” package in R, using a small effect size of $f^2 = .05$ for the predicted interaction. These indicated that a minimum of 218 participants would be required to obtain .80 power.

**Participants.** A total of 444 U.S. undergraduate students (263 male, 178 female, three other, $M_{age} = 21.08, SD_{age} = 2.69$) completed the survey for course credit. An additional 20 (4%) participants did not pass an attention check and thus were excluded from the analyses unless otherwise noted. Nevertheless, the results did not meaningfully change when these participants were included.

**Procedure.** Participants read that the school’s behavioral lab was considering installing a new filtered water dispenser. Another lab on campus had supposedly installed a similar dispenser, and a report from the other lab (see below) delivered the normative information. Participants were randomly assigned to conditions in which the norm was either to bring reusable bottles (bottle-norm condition) or to use disposable cups (cup-norm condition). The bottle-norm and cup-norm conditions were established with the following: “I’ve noticed that most students bring their own water bottles and very few use the disposable cups/use the disposable cups and very few bring their own water bottles.” Students were then informed that the water dispenser would be installed in the lab’s public front lobby, observable by peers.

**Measures**

**Habit strength (frequency in context).** Participants indicated, “When on campus, do you typically bring a reusable water bottle?” (1 = I typically do not bring a water bottle to 6 = I typically bring a water bottle).

**Water bottle expectations.** Using a standard measure of behavioral expectations (Warshaw & Davis, 1985), participants rated, “How likely would you be to bring your own water bottle?” (1 = not at all to 7 = very).

**Social norms.** Participants rated descriptive norms by the following: “Out of every 100 students in the lab, how many do you think will use their own water bottles rather than use a disposable cup?” (0–100). Participants rated injunctive norms by the following, “How much do you think the research assistants and other students in the lab expect students to bring their own water bottles rather than use disposable cups?” (1 = not at all to 7 = very much).

**Emotions.** On separate scales, participants reported how embarrassed and how guilty they would feel if they did not bring their own water bottle but used a disposable cup (1 = not at all to 7 = very).

**Attention check.** Participants indicated the typical behavior of most students in the report that they read by checking one of the following: “Most students bring their own water bottles,” “Most students use disposable cups,” “About
half the students bring water bottles and half use disposable cups,” “They didn’t mention the behavior of other students,” and “I don’t remember/I’m not sure.” Participants were excluded if they responded that the opposite response (than was presented in their stimuli) was the most frequent.

Demographics. Participants reported their age, how well they spoke English, gender, and race.

Results
Table 3 shows the descriptive statistics and correlations between the variables.

Expectations to bring own bottle. A linear regression predicted bottle-use expectations from habit strength (mean-centered), norm condition (effect-coded), and the interaction between them. The analysis revealed a main effect of water bottle habit strength, indicating that stronger habit participants reported stronger expectations to bring a water bottle, \( b = 0.71, SE = 0.03, \beta = .72, 95\% CI = [.65, .8], t(440) = 20.95, p < .001 \). In addition, a main effect of norms revealed that participants reported more favorable bottle-use expectations when bottle use was described as normative, \( b = 0.23, SE = 0.07, \beta = .12, 95\% CI = [.05, .19], t(440) = 3.48, p = .001 \). As displayed in Figure 3, the predicted interaction was significant, \( b = -0.09, SE = 0.03, \beta = -0.09, 95\% CI = [-.15, -.02], t(440) = -2.56, p = .011 \). In simple effects analyses to explore this interaction, scores of “2,” “4,” and “6” (prior to mean centering) on the scale reflected weak, moderate and strong habits, respectively (values of habit strength chosen to address the negative skew in the data). As anticipated, participants with weak habits to bring their own bottle reported stronger expectations to bring a bottle in the bottle-norm compared with the cup-norm condition, \( b = 0.45, SE = 0.11, t(440) = 4.13, p < .001 \), and a similar pattern emerged for those with moderate habits, \( b = 0.27, SE = 0.07, t(440) = 3.97, p < .001 \). Those with stronger habits, however, reported similar expectations regardless of the norm, \( b = 0.10, SE = 0.08, t(440) = 1.16, p = .247 \). Comparable results were obtained when habit strength was dichotomized (see Table S7 in the Supplemental Materials).

Figure 3: Expectations to bring a reusable bottle as a function of habit strength and social norms.
Note. Expectations were assessed on a 7-point scale with higher numbers reflecting stronger expectations to bring a water bottle. Weak, moderate, and strong habits represent scores of 2, 4, and 6 on the 7-point scale.

Bringing a water bottle is largely the injunctive norm on the college campus. Thus, we tested whether projected embarrassment and guilt for not using a water bottle could explain habit resistance. Analyses revealed that habit resistance did not arise from these emotions: When both variables were entered into the main regression model, the results remained comparable to those reported in the text (see Table S8 in the Supplemental Materials).

Normative beliefs. Suggesting that the descriptive norms manipulation was successful, participants in the bottle-norm condition expected 62% of students to use a reusable water bottle, as opposed to 39% in the cup-norm condition. Thus, participants overall recognized the manipulated social norm.

To assess whether habit effects on behavior extended to reduced attention to social norms, we computed linear regressions predicting descriptive and injunctive norms from habit strength, effect-coded norm condition, and the interaction. Main effects of water bottle habit strength in analyses on descriptive norms, \( b = 3.61, SE = 0.52, \beta = .28, 95\% CI = [.20, .36], t(440) = 6.98, p < .001 \), and injunctive norms,
b = 0.10, SE = 0.04, β = .13, 95% CI = [.04, .22], t(440) = 2.71, p = .007, revealed that participants with a stronger habit perceived their own behavior to be more normative. Main effects of norm condition on descriptive, b = 12.25, SE = 1.00, β = .49, 95% CI = [.41, .57], t(440) = 12.20, p < .001, and injunctive norms, b = 0.32, SE = 0.07, β = .21, 95% CI = [.12, .30], t(440) = 4.51, p < .001, indicated that participants recognized the normative manipulation. Importantly, the interaction was not significant in either model, ps > .10, revealing that strong and weak habit participants did not differentially perceive the normative manipulation.

**Discussion**

Expected responses to norms for an environmentally relevant behavior provided additional evidence for habit-based resistance. Consistent with Studies 1 and 2, descriptive norms shifted personal expectations primarily for participants with weak habits of bringing a reusable water bottle. Demonstrating habit resistance, those who habitually carried a reusable bottle with them expected to use a water bottle regardless of others’ behavior.

One possible explanation for strong habit participants being less influenced is that they simply did not pay attention to the normative information. However, participants with strong and weak habits were equally accepting of the descriptive normative information. Although participants showed social projection by assuming that others would act similar to themselves, the norm manipulation shifted perceptions similarly for all participants. Thus, participants with strong habits failed to behaviorally comply but reported normative beliefs about common and appropriate behavior.

This study additionally demonstrated that the effects of habit were independent of projected emotional responses. That is, the predicted interaction between habit and norm manipulation persisted even when embarrassment or guilt was entered into the model. In sum, we conclude that habits create behavioral resistance to influence despite participants receiving the appeal and changing their normative beliefs.

In general, this final experiment showed that participants’ expectations for their future behavior functioned comparably to the actual behavioral measures in Studies 1 and 2. This is understandable given that expectations, as people’s subjective assessments of the likelihood of acting, likely reflect automated drivers such as habit and not just deliberate intentions (Warshaw & Davis, 1985).

**General Discussion**

The present research demonstrated a novel source of resistance to social influence—the automatic activation of habits. In two field experiments and a scenario study, participants with weaker habits conformed to others’ behavior, whereas those with stronger habits persisted in responding habitually. This pattern emerged in each study regardless of whether habit strength was measured by frequency-in-context or experienced automaticity, bolstering the convergent validity of these findings. Furthermore, each study design used a symmetrical influence appeal such that participants were exposed to an appeal to respond either more or less often than their current response levels. Thus, all participants were exposed to influence to change the frequency of their behavior (or behavioral expectations), regardless of their own initial performance frequency.

All three studies suggested that the activation of habitual responses influenced behavior directly without altering perceptions of social cues or beliefs in social norms. Participants with strong and weak habits were equally accurate at recalling others’ behavior in all studies. Study 2 further demonstrated that habit strength did not reduce the accessibility of others’ behavior. Finally, in Study 3, participants with strong and weak habits alike shifted their perceived norms in response to others’ behavior. Thus, it appears that habits guided behavior relatively directly, independent of belief and intention mechanisms.

The behavioral resistance driven by habits did not impede the success of influence appeals more broadly. Even participants with strong habits received others’ behavior and changed their perceptions accordingly. This disconnect between participants’ own actions and awareness of others’ behavior is understandable from the perspective of multiprocess theories in social psychology (Amodio, 2019; Melnikoff et al., 2021). Given the multiple ways in which people can process and respond to information, participants acted automatically out of habit while simultaneously being aware of and accepting what others were doing.

In additional support for a dissociation between habit resistance and more motivated reactions to social influence, the effects of habit were not explained by a wide range of motivations. In Study 1, habits conferred resistance in models that controlled for momentary drive states (i.e., thirst) and behavioral intentions. If habits reflected strong attitudes in favor of drinking water in the dining hall, then this should have been evident in behavioral intentions, (Fishbein & Ajzen, 2010). In Study 2, habit resistance emerged despite participants’ motivation to diet. Finally, in Study 3, habit resistance was evident even when controlling for the norm-relevant emotions of guilt and embarrassment.

Our findings reveal a source of resistance that could falsely suggest that influence appeals are ineffective. Specifically, habit resistance could impede behavioral compliance even when appeals successfully change people’s understanding of what is useful or desirable. Indeed, we suspect that habit resistance could explain the often mixed success that even highly persuasive influence campaigns show in changing behavior (e.g., Abrahamse et al., 2005).

Yet habit resistance can also be beneficial in shielding desirable behaviors from outside interference. In support, lab research on forming healthy food choice habits helped people resist unhealthy temptations (Lin et al., 2016). Similarly, travel surveys have shown that cyclists defaulted to their habitual travel mode even for complex trips and when they...
could afford to commute by car instead (Wyer, 2018). Thus, habit resistance is a double-edged sword, insulating both bad and good habits from change.

Although habits attenuated the influence of mimicry and social norms in the present research, these effects will not always be obtained. Habits drive responding in everyday performance contexts when they are activated automatically by recurring context cues. People also rely on habits when lacking the motivation and opportunity to actively control their behavior (Wood et al., 2022). Yet even people with strong habits might conform to others when in novel contexts and when acting thoughtfully. In addition, other forms of influence, including direct requests and obedience to authority, might often be sufficiently strong to override habits. Nonetheless, Itzchakov et al. (2018) found that strongly habitual behavior persisted even after an explicit persuasive appeal that successfully changed relevant attitudes. Thus, it remains to be seen how much our present results generalize to other forms of social influence.

Also worth noting is that our research involved undergraduate students in the United States and Israel, and generalizability is not assured to other populations. It could be that habit resistance is most evident in individualistic cultures (such as the United States) and ones that are a mix of individualism and collectivism (such as Israel). Yet, given that habits are a basic part of human and nonhuman cognition (Thrailkill & Bouton, 2015), there is reason to believe that the effect might hold with other populations.

Conclusion
Habits permeate much of our daily behavior but most psychological research on social influence has overlooked habit resistance. It is interesting that applied researchers have long recognized that habits promote resistance (e.g., Sheth, 1981). As Cialdini (1993, p. iv) argued, applied practitioners “know what works and what doesn’t; the law of survival of the fittest assures it. Their business is to make us comply, and their livelihoods depend on it.” It is no surprise, then, that habit features prominently in applied analyses of behavior. Our research highlights the payoff of adapting such practical insights into the theoretical understanding of social influence.

Authors’ Note
The authors thank Grace Park, Laura Emmons, and Zachary Kelly for their help in data collection.

Declaration of Conflicting Interests
The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding
The author(s) received no financial support for the research, authorship, and/or publication of this article.

ORCID iDs
Guy Itzchakov https://orcid.org/0000-0003-1516-6719
Wendy Wood https://orcid.org/0000-0002-6117-558X

Supplemental Material
Supplemental material is available online with this article.

References