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Strategic regulation of mimicry effects by implementation intentions ☆

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HIGHLIGHTS

- Mimicry effects are difficult to regulate as people are not usually aware of their influence.
- In two studies, planning with implementation intentions regulated mimicry effects.
- Planning how to be unprejudiced strengthened the mimicry–liking effect for unlikable others.
- Planning how to be thrifty weakened the persuasive effects of being mimicked on spending.
- Mere goal intentions to be unprejudiced or thrifty did not regulate mimicry effects.

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ABSTRACT

Although mimicry generally facilitates social interaction, sometimes mimicry effects can hamper pursuit of focal goals. Two studies tested whether the self-regulation strategy of forming implementation intentions (i.e., planning in advance the when, where, and how of one's goal striving) can be used to regulate mimicry effects. In Study 1, implementation intentions to be non-prejudiced ensured that mimicking increased attraction even for an unlikable person. In Study 2, implementation intentions to be thrifty reduced participants' susceptibility to the persuasive effects of being mimicked. Mere goal intentions to be non-prejudiced and to be thrifty did not suffice to regulate mimicry effects. We conclude that the strategic automaticity accomplished by implementation intentions allows people to intentionally strengthen (Study 1) and weaken (Study 2) mimicry effects in line with their goals. Implications for the effective self-regulation of mimicry effects are discussed.

Introduction

Behavioral mimicry is pervasive in human interaction and has been shown to powerfully affect thoughts, feelings, and actions (reviews by Chartrand & Lakin, 2013; Chartrand & van Baaren, 2009). It has been defined as two or more people engaging in the same behavior (i.e., motor movements like mannerisms, gestures, and postures) at the same time (Chartrand & Lakin, 2013). When working together on a joint photograph description task, for example, participants have been observed to shake their foot more often when with a foot-shaking rather than a face-touching confederate, and to touch their face more often when with a face-touching rather than a foot-shaking confederate (Chartrand & Bargh, 1999, Study 1). Most of the time, people mimic others or are being mimicked by others without being consciously aware of this mimicry. And even if they are consciously aware of such mimicry, they are often unaware of its downstream consequences (Chartrand & Lakin, 2013).

The automaticity of mimicry and its downstream effects are commonly considered to be unproblematic as mimicry has positive downstream consequences on social relations and cooperation. For example, being mimicked by others and mimicking others promote affiliation and interpersonal rapport (e.g., LaFrance, 1979; Lakin & Chartrand, 2003; Stel & Vonk, 2010) as well as people's prosocial behavior such as donating money to charities (e.g., van Baaren, Holland, Kawakami, & van Knippenberg, 2004). At other times, however, the downstream effects of mimicry might interfere with the pursuit of personal goals. For instance, it was observed that people who mimicked an unfriendly person were consequently rated as less competent than people who did not mimic him/her (Kavanagh, Suhler, Churchland, & Winkielman, 2011). Moreover, being mimicked by another person enhances stereotype-threat effects on performance (e.g., women performed worse on a math test when a confederate had mimicked them before taking the test; Leander, Chartrand, & Wood, 2011). Given that the effects of mimicry may at times interfere with people's wants and wishes, successful goal

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pursuit may sometimes require the effective self-regulation of mimicry effects. Strengthening or weakening of mimicry effects may be called for, depending on the situation at hand. For example, when one's conversation partner is not liked much from the beginning, one might like to strengthen the facilitating effects of mimicry in order to support a constructive conversation in such a difficult social interaction (e.g., Leighton, Bird, Orsini, & Heyes, 2010; Likowski, Mühlberger, Seibt, Pauli, & Weyers, 2008; Stel et al., 2010). Alternatively, when a salesperson is likely to bias one's attitudes towards a product by mimicking, one might like to weaken the persuasive effects of mimicry in order to support unbiased consumer decisions in such a manipulative social interaction (Jacob, Guéguen, Martin, & Boulbry, 2011; Tanner, Ferraro, Chartrand, Bettman, & Van Baaren, 2008; see also Bailenson & Yee, 2005; Maddux, Mullen, & Galinsky, 2008; van Baaren, Holland, Steenaert, & van Knippenberg, 2003).

But how can people effectively regulate mimicry effects, given that mimicking and its downstream effects are characterized by features of automaticity (e.g., efficiency; Dalton, Chartrand, & Finkel, 2010; see also Bargh, 1994)? The present research explores whether people can intentionally regulate the influence of mimicry on their goal pursuits by forming implementation intentions (i.e., planning in advance the when, where, and how of one's goal striving), even though these influences stay outside of awareness. As implementation intentions have been shown to create automatic action control on the spot (reviews by Gollwitzer, Bayer, & McCulloch, 2005; Gollwitzer & Oettingen, 2011), we wondered whether people can use implementation intentions to counter (i.e., outrun) the automatic effects of mimicry.

Self-regulation by goals and implementation intentions — effects and processes

One might argue that being committed to the focal goal (i.e., "I want to achieve goal X!") would suffice to regulate mimicry effects. However, accumulated evidence indicates that there is a substantial gap between even strong goal commitment and subsequent goal attainment (e.g., Sheeran, 2002; Sheeran & Webb, 2012; Webb & Sheeran, 2006). For instance, a medium-to-large change in goal commitment led to only a small-to-medium change in behavior in Webb and Sheeran's (2006) meta-analysis. Moreover, although automatic processes can contribute to action control by goal intentions (e.g., the induction of mindsets; Gollwitzer, 1990, 2012; Wyer & Xu, 2010), action control by goal intentions mainly depends on effortful reflective processes (e.g., Ajzen, 1991; Fishbein & Ajzen, 1975, 2010) which are known to be slow (Strack & Deutsch, 2004) and easily depleted (Baumeister, Bratslavsky, Muraven, & Tice, 1998), and thus are unlikely to effectively counter fast and efficient influences like mimicry effects (Adriaanse, Gollwitzer, De Ridder, de Wit, & Kroese, 2011). Clearly, therefore, an alternative strategy is needed to help people close the gap between their commitment to and their enactment of their personal goals.

One effective strategy is to form an implementation intention (meta-analyses by Adriaanse, Vinkers, De Ridder, Hox, & De Wit, 2011; Bélanger-Gravel, Godin, & Amireault, 2013; Gollwitzer & Sheeran, 2006). It is known that action control by implementation intentions is fast and efficient; this should make it possible to effectively shield a focal goal pursuit from the fast and efficient processes underlying the effects of mimicry. Implementation intentions spell out the when, where, and how of goal striving in advance using the format of an if (*critical situation*)–then (*goal-directed response*) plan. For instance, if someone holds the goal of saving money, she could form the if–then plan, "And if I am tempted to buy something, then I will tell myself: I will save my money for important investments!" to shield her saving goal from the effects of being mimicked by a salesperson. Thus, rather than just committing to a desired end-state (i.e., forming a strong goal intention), making an if–then plan commits the person to performing a goal-directed behavior when the specified critical situation is encountered.

Implementation intentions facilitate the attainment of personal goals through psychological mechanisms that pertain to the specified situation in the if-part, and to the mental link forged between the if-part and the specified goal-directed response in the then-part of the plan (Gollwitzer & Oettingen, 2011). Because forming an implementation intention entails the selection of a critical future situation, the mental representation of this situation becomes highly activated and hence more accessible. This heightened accessibility of the if-part of the plan has been observed in several studies using different experimental tasks (e.g., cue detection, dichotic listening, cued recall, lexical decision, flanker; e.g., Aarts, Dijksterhuis, & Midden, 1999; Achtziger, Bayer, & Gollwitzer, 2012; Parks-Stamm, Gollwitzer, & Oettingen, 2007; Webb & Sheeran, 2004, 2008; Wieber & Sassenberg, 2006). Forming implementation intentions not only heightens the activation (and thus the accessibility) of the mental representation of the situational cue specified in the if-component, but it also forges a strong associative link between the mental representation of this cue and the mental representation of the specified response. These associative links are quite stable over time (Papies, Aarts, & de Vries, 2009), and ensure that the critical situational cues specified in the if-component will activate the mental representations of the responses specified in the then-component (Webb & Sheeran, 2007, 2008).

The upshot of these strong associative links between the if-part (situational cue) and the then-part (goal-directed response) created by forming implementation intentions is that–once the critical cue is encountered–the initiation of the goal-directed response exhibits features of automaticity. These features include immediacy, efficiency, and redundancy of conscious intent (Bargh, 1994). Compared to goal intentions, implementation intentions have been found to facilitate the immediate initiation of goal-directed responses (e.g., presenting counterarguments to racist comments more quickly; Gollwitzer & Brandstätter, 1997, Study 3) and to help people to deal more efficiently with cognitive demands (i.e., speed-up effects are still evident under high cognitive load; e.g., Brandstätter, Lengfelder, & Gollwitzer, 2001). Moreover, action control by implementation intentions does not need a conscious intent to act in the critical moment (e.g., implementation intention effects are still evident when the critical cue is presented subliminally or when the respective goal is activated outside of awareness; Bayer, Achtziger, Gollwitzer, & Moskowitz, 2009; Sheeran, Webb, & Gollwitzer, 2005). This strategic automation hypothesis (i.e., in a conscious act of will the person delegates action control to situational cues that produce fast and efficient action initiation without the need for further conscious intent) has recently received further support by brain studies on the localization and timing of action control by implementation intentions and by studies addressing the modification of already existing automatic responses.

The localization of action control by implementation intentions was addressed by Gilbert, Gollwitzer, Cohen, Oettingen, and Burgess (2009) in a functional magnetic resonance imaging (fMRI) study. They observed that participants with mere goal intentions showed activation in the brain regions used by top-down, goal-driven action control that is slow and effortful, whereas the brain activity of participants with implementation intentions was observed in regions known for bottom-up, stimulus-driven action control that is fast and effortless. The timing of action control by implementation intentions was addressed by Schweiger Gallo, Keil, McCulloch, Rockstroh, and Gollwitzer (2009, Study 2) in an EEG study. They demonstrated that individuals with spider phobia who furnished their goal not to get frightened with the implementation intention "And if I see a spider, then I will ignore it!" reported significantly less negative affect after viewing spider pictures than both no-intention and goal intention spider phobic controls. Importantly, spider phobic participants with implementation intentions exhibited as little fear as a group of control participants that did not suffer from spider phobia. Dense-array EEG data showed that this