Do episodic counterfactual thoughts focus on controllable action?: The role of self-initiation

Neal J. Roese⁎, Rachel Smallman, Kai Epstude

Northwestern University, United States
Texas A & M University, United States
University of Groningen, Netherlands

ABSTRACT

Counterfactual thoughts refer to alternatives to the past. Episodic counterfactual thoughts have in past research been shown to be primarily goal-directed and to engender performance improvement. Some past research supports this perspective with the observation that episodic counterfactuals center mostly on controllable action, whereas other research does not show this. We offer a theoretical resolution for these discrepant findings centering on the role of self-initiation, such that counterfactuals more often focus on internally controllable action to the extent that the circumstance is one that was self-initiated rather than initiated by others. In doing so, we disambiguate two dimensions of causal explanation: locus (self vs. other) and controllability (high vs. low) that previous studies conflated, demonstrating that variation as a function of self-initiation in the content of episodic counterfactuals occurs primarily along the former but not the latter dimension. These results support the functional theory of counterfactual thinking.

1. Introduction

Counterfactual thinking refers to thoughts about what might have been, of how the past might have been different had some aspect been different (Byrne, 2016; Roese, 1997). Counterfactuals may be understood as instantiations of conditional propositions, containing an antecedent (“if”) and consequent (“then”), as in “If only I had studied, then I would have passed the exam.” Echoing recent contributions (e.g., De Brigard & Giovanello, 2012; Öztek, Bohn, & Berntsen, 2016; Schacter, Benoit, De Brigard, & Szpunar, 2015), we distinguish episodic counterfactuals from semantic counterfactuals, such that the former focus on personally meaningful alternatives to events that were experienced first-hand (as in the example of writing an exam), whereas the latter focus on alternative constructions derived from general knowledge of history, society, and the natural world (e.g., Quelhas & Byrne, 2003; Revin, Cate, & Rous, 2001; Thompson & Byrne, 2002). A prominent view of episodic counterfactual thinking is that they primarily serve a preparative function, which is to say that they contain insights as to how an alternative past action might have brought about goal success, which then feeds into subsequent action that facilitates goal success (Epstude & Roese, 2008; Roese & Epstude, 2017).

Recently, a discrepancy has emerged in terms of whether counterfactuals do or do not center mainly on internally controllable action. That episodic counterfactuals center mostly on controllable action is a key tenet of the functional theory of counterfactual thinking. As we review below, a substantial number of earlier studies supported this idea, but newer evidence contradicts it. The present research aims to account for this variability across research reports. We propose and demonstrate that episodic counterfactuals are more likely to focus on internally controllable action to the extent that the situation in question is self-initiated as opposed to other-initiated. We consider the theoretical basis for this contention in the next paragraphs.

1.1. The functional theory of counterfactual thinking

The operation of episodic counterfactual thinking may be usefully illuminated by the functional theory of counterfactual thinking (Epstude & Roese, 2008, 2011; Roese, 1994, 1997, 1999; Roese & Epstude, 2017), which seeks to describe observable patterns in terms of goal cognition. Episodic counterfactuals usually embody goals and specify means by which those goals may have been achieved. Counterfactuals relate directly to planning and action implementation, which may in turn guide behavior (i.e., a preparative function). Counterfactual thoughts may bring about performance improvement via either a content-specific pathway (in which the counterfactual...
insight directly informs behavior change by specifying the particular means or a content-neutral pathway (in which counterfactual thought activates cognitive procedures or negative affect that bring about behavior change independently of the specific informational content of the counterfactual itself).

One principle of the theory is that form fits function, which is to say that the form (e.g., direction or content) of a counterfactual thought will vary in terms of how useful it is for goal progress, such that those counterfactual forms most amenable to behavior change will become more numerous under circumstances in which performance improvement is possible. In particular, counterfactuals that focus on personally controllable action constitute a form that is better suited to serving the function of goal progress because only personally controllable actions can be deployed by the individual in the service of goal striving. In observing that counterfactual thoughts for the most part center on personally controllable action, the theoretical insight is that episodic counterfactuals primarily serve a preparative function (although other functions may also be served, albeit less frequently).

It is important to clarify that in recent writings, the term controllable counterfactual has been used as a generic category that conflates two distinct dimensions of 1) locus of causation (internal vs. external) and 2) controllability (controllable vs. uncontrollable) that were previously specified by causal attribution theorists, particularly Weiner (1985, 1986). In Weiner's view, the content of lay causal attributions can be characterized by three orthogonal dimensions (the third being stability), and that particular attributes differentially positioned along these dimensions will have different effects on emotion and motivation. Because counterfactuals imply causal relations (as captured by their if-then conditional structure), applying the past insights of attribution theorists may help to illuminate patterns of counterfactual thinking. Accordingly, one contribution of the present research is to specify whether episodic counterfactuals vary meaningfully in terms of all three dimensions of locus, controllability, and stability. Moving forward, we will use the term “internally controllable” to refer generically to current or past studies that do not distinguish the locus and controllability dimensions, or else we will specify the relevant dimension using Weiner's terminology.

1.2. Evidence that counterfactuals center mainly on internally controllable factors

Supporting the functional theory of counterfactual thinking, much early research indicated that counterfactuals centered mainly on internal and controllable factors. For example, Mandel and Lehman (1996) presented participants with a scenario describing an automobile accident with various aspects of the episode varying in the degree to which they could be controlled by the focal actor. Participants’ counterfactual responses to the scenario tended to alter the more controllable of those aspects. Girotto, Legrenzi, and Rizzo (1991) presented participants with a scenario describing a medical mishap along with a variety of antecedents that varied in their controllability by the protagonist. Counterfactual thoughts (collected in response to an “if only” prompt) more often focused on controllable than uncontrollable antecedents. McCloy and Byrne (2000) used a modification of the Girotto et al. (1991) scenario and reported similar results. McEleney and Byrne (2006) used a scenario along with a diary-creation dependent measure from which instances of counterfactual thinking were coded; participants produced more counterfactual thoughts for controllable than uncontrollable outcomes. Morris, Moore, and Sim (1999) presented participants with a scenario involving an industrial accident and found that resulting counterfactuals typically undid the accident by focusing on human error rather than systemic or organizational factors. Roese and Olson (1995) and Rye, Cahoon, Ali, and Daftary (2008) manipulated controllability in a scenario and found that more counterfactuals followed from controllable than uncontrollable outcomes.

Thus, several scenario studies showed that counterfactual thoughts tend to focus on personally controllable actions. However, subject speculations from scenario studies are not the same as episodic counterfactuals, which are better examined via self-reports of experienced episodes, either recalled from daily life or reported in light of laboratory tasks. It is to this type of evidence that we turn next.

Mandel (2003) asked participants to recall negative experiences, manipulated to focus either on an academic or interpersonal event. Participants then reported whether they had had any counterfactual thoughts, and if so, details about them. These reported counterfactuals tended overall to be internal (i.e., self-focused vs. other-focused). Participants also provided a scale rating of perceived control; availability of self-focused counterfactuals correlated significantly with controllability ratings. Further, Davis, Lehman, Wortman, Silver, & Thompson (1995, Study 2) conducted interviews among bereaved parents who had lost their infant to Sudden Infant Death Syndrome. Counterfactual thinking was common among these parents and, pivotally, 90% of their counterfactuals specified actions they personally could have taken (or not taken) to have prevented their tragic loss. Finally, Epstude and Jonas (2015) found that HIV+ individuals who reported counterfactuals about their infection also indicated having more control over their infection compared to those who did not report having counterfactuals.

As an example of a study using a laboratory task to assess counterfactuals as they occur in response to an evoking episode, Hammell and Chan (2016) had their participants play Nintendo Wii console video games. Counterfactual thinking was prompted and then coded by raters; counterfactuals focusing on controllable aspects outnumbered those focusing on uncontrollable aspects by a factor of 2 to 1 (however, the underpowered statistical tests were non-significant). Two decades earlier, Markman, Gavanski, Sherman, and McMullen (1995) used a gambling task in which participants played a computer-simulated “wheel of fortune” game, with their degree of control over the task experimentally manipulated to involve either control of which of two wheels dictated their payoff or control of the stopping point of the wheel. The game was fixed so that payoffs were constant yet would generate varying degrees of counterfactual thinking based on how close the wheel came to a larger payoff. Counterfactual thinking was assessed via direct prompts; these counterfactuals tended to focus on that aspect of the game (wheel choice vs. stopping point choice) over which participants believed they had controlled.

Thus, substantive evidence accumulated over twenty years of published research suggests that counterfactual thinking is most likely to focus on factors that are internal (vs. external) and controllable (vs. uncontrollable). Next, we turn to evidence to the contrary, and here the evidence is almost entirely based on laboratory experiences.

1.3. Evidence that counterfactuals do not center mainly on internally controllable factors

Girotto, Ferrante, Pighin, and Gonzalez (2007) described eight experiments that each manipulated whether participants experienced first-hand versus read about a laboratory outcome centering on task performance. The procedure typically involved a blind choice of task selection, task completion, and then bogus failure feedback. The dependent variable was counterfactual thinking, prompted to focus on the upward direction of comparison. These authors drew the conclusion that counterfactuals tended to “alter uncontrollable events ... rather than controllable ones” (p. 515); however, no direct contrasts between proportions of counterfactuals centering on more versus less controllable aspects were presented. Pighin, Byrne, Ferrante, Gonzalez, and Girotto (2011) did provide these contrasts and showed that participants who directly experienced the outcome reported fewer counterfactuals centering on their controllable actions than did those who read about the experience. This research therefore captures episodic counterfactual thoughts, and suggests a possible difference between results from scenario studies (which produce greater focus on controllable actions)
دریافت فوری متن کامل مقاله

امکان دانلود نسخه تمام متن مقالات انگلیسی
امکان دانلود نسخه ترجمه شده مقالات
پذیرش سفارش ترجمه تخصصی
امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
امکان دانلود رایگان ۲ صفحه اول هر مقاله
امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
دانلود فوری مقاله پس از پرداخت آنلاین
پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات