

CONSUMERS' SETTING AND KEEPING RESOLUTIONS: THE ROLE OF SCHEMA INCONGRUITY RISEN FROM COVID INFECTION CASES

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ABSTRACT

Disruptive life events such as those risen from COVID infection could develop out of expectation, causing incongruence with consumers' past experience. How will the "unexpectedness" in life events influence consumers' motivation in goal setting and striving? Drawing upon the literature of schema incongruity and personal control, the current research examines the impact of incongruity in consumers' goal pursuit process. Three experiments were conducted. Results indicate that intriguingly, individuals react to schema incongruity by setting more personal goals (i.e., a motivating effect of schema incongruity in study 1). However, after they consider their personal control over their life situations in general, high-control individuals refrain more from setting goals in face of schema incongruity (i.e., a demotivating effect of schema incongruity in study 2). The demotivating effect carries over to goal striving process by switching savers to spenders (study 3).

INTRODUCTION

Every time as the new year approaches, millions of Americans set personal goals to achieve in the coming year. Among a myriad of personal resolutions for 2022, most popular goals include living healthier (23%), getting happy (21%), and losing weight (20%) according to Brower (2021). How many goals are set up in the first place and how strongly people commit themselves to the goals? A good portion of consumer research has identified strategies helping with setting and keeping resolutions. For example, to bolster self-control, consumers are encouraged to delay gratification (Metcalf & Mischel, 1999), set up implementation plan (Gollwitzer, 1999), pre-commit to chosen goals (Ainslie, 1975), as well as use self-empowered refusal framing (Patrick & Hagtvedt, 2012). These behavioral strategies may work from the inside of consumers by enhancing their power of will. This article presents a different look at the iteration between internal power of will and external feedback, particularly the seemingly unrelated feedback in a different context (e.g., COVID infection). Specifically, the current research examines how individuals would change their goal-directed behavior when they observe that external situations do not always unfold as they expected. Will this impact differ between individuals with higher and lower personal control over their lives?

Imagine, for instance, Jay finds from the local news that several COVID patients without medical preconditions are hospitalized due to severe infection. Since most people would expect a lower risk of severe infection among individuals without preconditions or comorbidities (Honardoost et al., 2021; Singh & Misra, 2020; Shiels et al., 2022; Centers for Disease Control

and Prevention [CDC], 2021), how would this incidental exposure to an unexpected cause-and-effect relationship influence Jay's motivation for pursuing his life goals such as saving for becoming a homeowner, losing weight for an upcoming wedding, studying for enrolling himself in a longed-for post-graduate program. What if Jay perceives himself to have a strong personal control over external situations in general? Will this mitigate the impact from the unexpected COVID infection?

Previous literature implies two plausible paths. On one hand, goal literature suggests that people set up goals if they expect to achieve them (e.g., Mukhopadhyay & Johar, 2005; Tolman, 1932; Bouffard-Bouchard, 1990; Locke & Latham, 2005; Latham & Locke, 1991). This implies that people are likely to reduce their goal-directed behavior when they realize that external situations may not develop according to their expectation. On the other hand, literature of schema incongruity suggests that when consumers experience incongruity with their past experience (e.g., unexpected severity of COVID infection in the example), incongruity itself could actually elicit more motivation from consumers and they could manifest deeper and more extensive processing (Goodstein, 1993), even increase their incidental learning (Poynor & Wood, 2010). At the same time, consumers are urged to resolve the incongruity (Meyers-Levy & Tybout, 1989) by seeking for effective action (Noordewier et al., 2021). This stream of research implies that following an unexpected encounter, individuals, instead of turning more passive on pursuing goals, could be more motivated towards setting goals in general.

To reconcile the implications from previous literature, the current research examines the effect of schema incongruity (i.e., an unexpected cause-and-effect relationship in COVID infection cases) on how likely people would set goals in the first place as well as refrain from goal-inconsistent behavior when implementing goals.

Prior research of schema incongruity largely focuses on the effect of positive surprises (e.g., incidentally gained time [windfall time] in Chung et al., 2022) or valence-neutral incongruity (e.g., ads atypicality in Goodstein, 1993). Differently, the current research examines the effect of "unexpectedness" about a negative event (i.e., COVID infection). A need for more research about the impact of the 'surprises' associated with negative events may be warranted. Public health emergencies and natural disasters could bring about unexpected disruptions to consumers including rapidly declining health, physical isolation, and last-minute evacuation (e.g., DeBerry-Spence & Trujillo-Torres, 2022). Examining psychological consequence and coping mechanism following negative events could be critical for restoring mental health among consumers and individuals in general. Therefore, the current approach goes beyond previous research on the topic by empirically demonstrating the consequence on consumers' goal pursuit following schema incongruity in negative events. Furthermore, the current research examines the effect between the individuals with different levels of personal control. Thus, the research enhances our understanding of the mechanism underlining the effect and potentially suggests intervention measures to guide goal striving among consumers more effectively.

Three experiments demonstrate that, intriguingly, individuals set more personal goals (i.e., a motivating effect) after they are exposed to a cause-and-effect relationship which is inconsistent with their prior knowledge about COVID infection (i.e., schema incongruity) comparing to they are informed of a consistent cause-and-effect relationship (i.e., schema congruity) (study 1). The motivating effect of incongruity reverses after individuals are reminded of their varying degrees of self-agency in external outcomes (i.e., personal control). Supporting the moderating effect of personal control, the demotivating effect of incongruity exists only for the individuals with higher perceived personal control (study 2). To further implications for

consumers, study 3 examines the effect of “unexpectedness” (incongruity) when consumers have a specific consumer-related goal. The results demonstrate that consumers with a saving goal are more likely to switch to goal-inconsistent (i.e., spending) behavior following schema incongruity. In contrast, the consumers who are exposed to schema congruity are more likely to adhere to goal-consistent behavior (i.e., saving).

Next, the extant literature of goal pursuit and schema incongruity is reviewed to offer a theoretical foundation for propositions, followed by empirical evidence. Finally, the theoretical and managerial implications for future research and practices involving managing consumer well-being in face of negative, unexpected events are discussed.

THEORY

Goal-directed Behavior and Schema Incongruity

Goal-directed behavior is often examined in two stages: goal setting and goal striving (Bagozzi & Dholakia, 1999; Thaler & Shefrin, 1981). Although goal setting and striving are independent processes but are often interrelated (Thaler & Shefrin, 1981). People tend to set goals if they expect to achieve them (Latham & Locke, 1991; Tolman, 1932). Prior literature identified both task and cognitive factors which enable individuals to see a clear path to goal attainment which in turn influences their goal-directed motivation. First, external feedback plays an important role in driving goal pursuit effort. People often need feedback that reveals progress in relation to their goals to better direct their effort (Locke & Latham, 2002). For example, task difficulty signals to individuals how likely they would attain goals, which in turn influences their level of effort exerted towards goals and eventually their goal attainment (Atkinson, 1958; Locke & Latham, 2002). Positive feedback often motivates goal pursuit because it increases goal commitment. Differently, negative feedback could be demotivating unless the feedback directly signals insufficient progress for their specific goal (Fishbach, Eyal, & Finkelstein, 2010). Combining these findings, people are sensitive to external feedback on their goals. They formulate their expectations on goal attainment and adjust their motivation accordingly. Following this thesis, in the case of receiving the information about a cause-and-effect relationship that they expect least, it should demotivate people from setting goals.

In contrast, literature about schema incongruity suggests the opposite. Schema theory in cognitive psychology suggests that people organize all available knowledge and experiences in memory-based structures, called schemata (Fiske & Taylor, 1991; Halkias & Kokkinaki, 2017). Schema *congruity* refers to the extent to which a piece of information conforms to expectations specified by its relevant schema (Areni & Cox, 1994; Heckler & Childers, 1992). Following this, schema *incongruity* occurs when consumers experience incongruity with their past experience (e.g., an unexpected cause-and-effect relationship). Incongruity is one aspect of external feedback perceived by individuals and it often causes individuals to feel surprised and aroused (Heckler & Childers, 1992; Meyers-levy & Tybout, 1989). Incongruity could elicit more motivation from people. For example, consumers are shown to increase their processing for schema-incongruent products relative to schema-congruent products (Meyers-levy & Tybout, 1989). Atypical ads (i.e., incongruity), comparing to typical ads (i.e., congruity), motivate more extensive evaluations by consumers (Goodstein, 1993). Restaurant menus in a format incongruent with customers' past experience promote more incidental learning by customers and lead to more satisfaction (Poynor & Wood, 2010). More relevant to goal pursuit, consumers are

urged to resolve the incongruity (Meyers-Levy & Tybout, 1989) by seeking for effective action (Noordewier et al., 2021). When inconsistency or unexpectedness is experienced, people are often motivated to make sense out of incongruity (Noseworthy, Murray, & Di Muro, 2018; Chung et al., 2022) by interpreting inconsistency (Yoon, 2013; Jurca & Madlberger, 2015) or engaging in attribution process to explain inconsistency (Alenazi, 2015). These previous findings suggest that schema incongruity may urge people to ‘correct’ incongruity by eliciting more actions towards improving the external situations. Following the thesis from schema incongruity, in the article, it is predicted that individuals will set a higher number of personal resolutions after they observe that an external situation does not unfold as they expect (i.e., schema incongruity). Since motivational effects often spill over across tasks (e.g., Gubler, Larkin, & Pierce, 2015), it is further suggested that the predicted effect could occur even when the unexpected encounter happens in a context irrelevant to the goals. For ease of demonstration, the predicted effect is termed *the motivating effect of incongruity* hence forth.

H1: Individuals set a higher number of personal goals following schema incongruity than schema congruity.

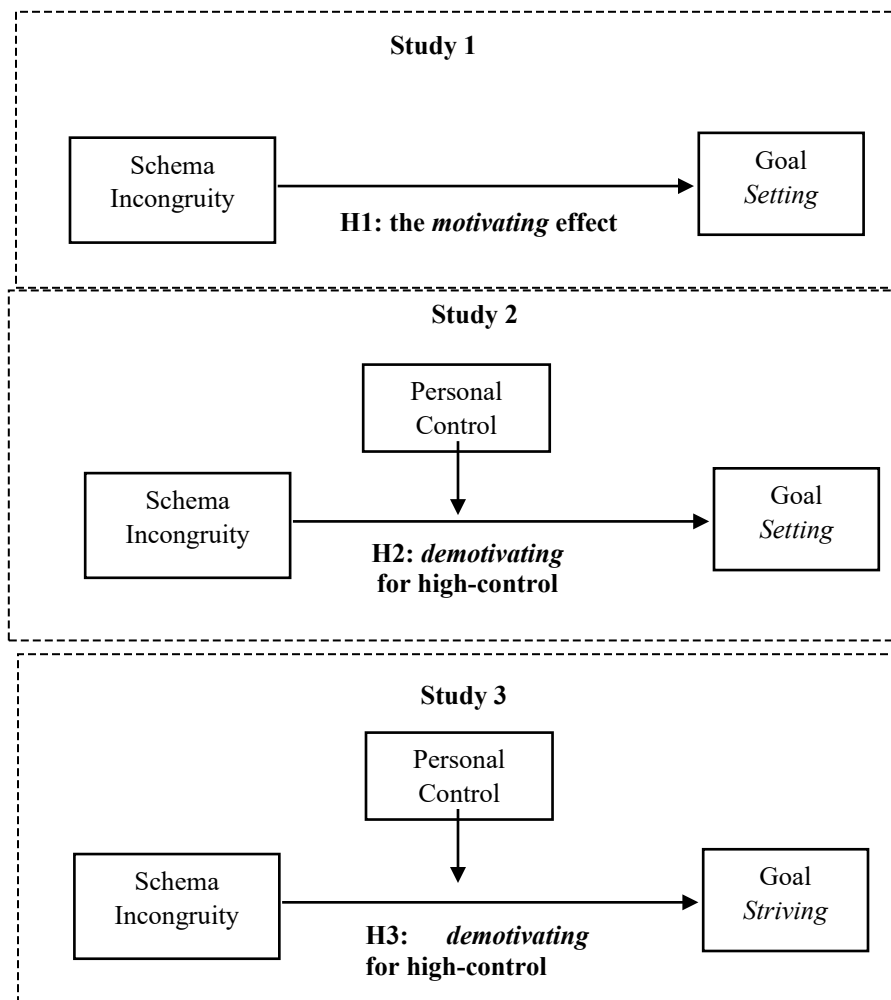
Goal-directed Behavior and Personal Control

In addition to schema incongruity, extant literature also reveals a few intrinsic factors which influence goal setting and striving. For example, goal-directed motivation is often associated with cognitive precursors. People are more motivated towards goal setting and striving when individuals have an implementation mind-set (Bayuk, Janiszewski, & Leboeuf, 2010; Gollwitzer, 1999; Gollwitzer & Sheeran, 2006) or they perceive that the means to goal are easy to process (Etkin & Ratner, 2013). Personal beliefs and lay theories largely influence goal pursuit too. For instance, people tend to set more goals if they have a stronger belief in their own competencies (Bandura, 1986; White & Locke, 2000), when they believe that their self-control is unlimited (vs. limited) (Mukhopadhyay & Johar, 2005). Similarly, in the current research context, people may edit their goal motivation depending on how likely they perceive their self-agency in external outcomes.

One of primary drivers of human behavior is the belief that one is in control of his/her outcomes in life (Kelley, 1971; Kelley, 1955; Heider, 1958). Personal control is defined as the perception that one can make things happen according to their will (i.e., self-agency) (Skinner, 1996). Personal control is often examined as a personal trait which varies among individuals (Pearlin & Schooler, 1978; Christie & Barling, 2009). However, the effect of personal control on behavior is more nuanced than “more personal control, stronger goal motivation”. Extant literature suggests that people actively seek for a sense of order and structure to maintain their individual-level baseline of perceived personal control (e.g., Kay et al., 2008; Cutright et al., 2011; Jia & Wyer Jr., 2022). In consequence, people seek to restore a sense of order when they feel their sense of control is threatened by seeking for structure from outside systems such as authorities (e.g., Kay et al., 2008; Cutright et al., 2011), inferring product quality from its price or a medicine’s effectiveness from its bad taste (Jia & Wyer Jr., 2022). In the current context, high-control people may feel more threatened on their sense of control than low-control people following an unexpected, incongruent event schema. As a result, they may feel more urged to restore a sense of order and structure by conforming to the external feedback while setting goals. Therefore, it is posited that high-control people, once reminded of their high personal control in general, will be more likely to set more (vs. less) goals following schema congruity (vs.

incongruity) to strive for a sense of order and structure. In contrast, there should be no difference in the effect among low-control people because they are possibly neither sensitive to external feedback nor feel as much urged as high-control people feel to cope with a deteriorating sense of order in face of schema incongruity. In other words, the motivating effect of schema incongruity in H1 will reverse for high-control people. According to the delineated thesis above, it is possibly because that schema incongruity evokes high-control people's stronger need for a sense of order and structure than low-control people and causes them to confirm to schema incongruity while adjusting their goal motivation. The effect is termed the *demotivating effect of schema incongruity* for high-control individuals.

Figure 1
Conceptual Model



H2: Individuals who are reminded of their personal control over external outcomes will set up a higher number of personal goals after they experience schema congruity (vs. incongruity). The effect is truer for those with a higher (vs. lower) sense of personal control.

For similar reasons above, a demotivating effect of schema incongruity is predicted to carry over from goal setting to goal striving. In other words, schema incongruity will trigger goal-inconsistent behavior whereas schema congruity will reinforce goal-consistent behavior. Following H2, the effect on goal striving is predicted to show only among individuals with a boosted sense of personal control.

H3: Consumers will be more likely to switch to goal-inconsistent (vs. consistent) behavior following schema incongruity (vs. congruity). The effect is truer for those with a boosted sense of personal control.

For a summary of hypotheses, see figure 1. Empirical evidence will be presented in the following section.

EXPERIMENTS

Study 1

The purpose of study 1 was to test the hypothesis that prior exposure to schema incongruity causes individuals to set more life goals. To incur schema incongruity about a negative event, the design was set in the context of COVID infection. A good portion of literature across nations have identified that level of severity of COVID infection is positively associated with COVID patients' age, presence of comorbidities (e.g., Honardoost et al., 2021; Singh & Misra, 2020; Shiels et al., 2022). Similarly, CDC's vaccine guidelines for various age groups suggest that risk of severe infection correlates positively with one's age (CDC, 2021). Thus, by presenting COVID infection information which is inconsistent with people's expectation on its cause-and-effect relationship, it is expected to introduce schema incongruity about a negative event.

Participants and Experiment Design

A total of 150 college students (101 females, average age 22.52) of junior and senior standing from a mid-sized private university in the United States were recruited during May 2022. The design was a single factor between-subject design at two levels (schema congruity vs. incongruity). The participants were randomly assigned to either one of levels.

Procedure

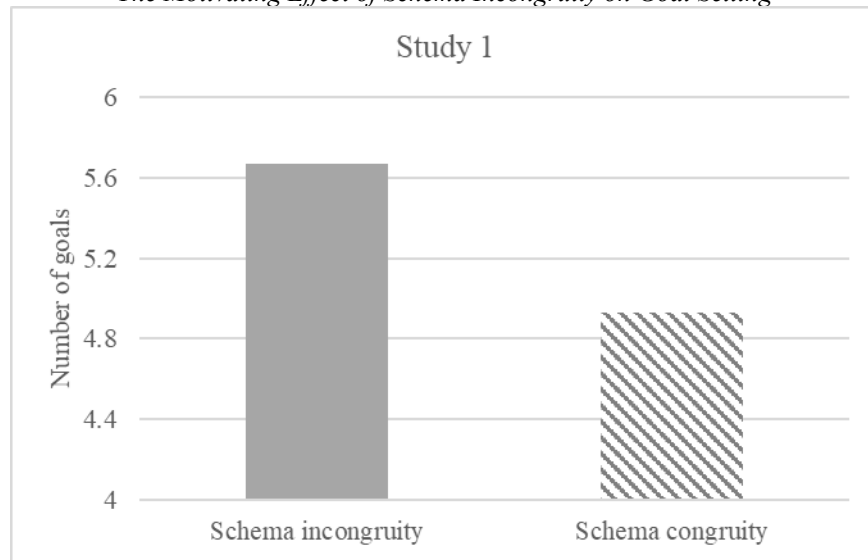
Participants were first asked to review the profiles of four COVID patients. Then the participants were presented three pieces of information about each patient: age, presence of comorbidities (yes or no) and severity of infection (mild, moderate, or severe). The schema congruity/incongruity factor was manipulated by reordering the three pieces of information such that age and presence of comorbidities are either positively (i.e., schema congruity) or negatively (i.e., schema incongruity) correlated with severity of COVID infection (see Appendix I). In specifics, the participants that were randomly assigned to schema *incongruity* condition ($n=75$) were presented with information showing that younger patients without comorbidities are severely infected whereas older patients with comorbidities were either moderately infected or their infection were mild. In contrast, participants assigned to the schema *congruity* condition ($n=75$) were presented with the information suggesting a positive correlation between age and severity of infection about the same COVID patients and that presence of comorbidities among

them is positively associated only with the severe infection cases. Explanation about comorbidities and exemplar preconditions are provided to all participants at the beginning of the experiment. As a manipulation check on schema incongruity, participants were asked: to what extent severity of infection of these patients fit their expectation given the patients' age and presence of comorbidities. Responses were collected on a seven-point scale with one being "least expected" and seven being "most expected". Then, following the procedure modified from Mukhopadhyay and Johar (2005), all participants were asked to list their current personal, academic, or financial/consumption-related goals as many as they can think of for the upcoming year and separate them by typing them in different textboxes provided. Lastly, participants reported their demographic information.

Results and Discussion

The number of self-generated personal goals was analyzed as a function of schema incongruity. An analysis of variance (ANOVA) revealed a main effect of schema incongruity on number of personal goals set by participants ($F(1, 148) = 4.50, p = .03$; see Figure 2). Specifically, participants exposed to schema incongruity generated a higher number of personal goals ($M_{\text{schema incongruity}} = 5.67, SD = 2.98$; $M_{\text{schema congruity}} = 4.93, SD = 2.98$). Manipulation check confirmed that the participants exposed to schema incongruity found the provided cause-and-effect relationship more unexpected than those exposed to schema congruity ($M_{\text{schema incongruity}} = 3.53, SD = 1.82$; $M_{\text{schema congruity}} = 5.78, SD = 1.82$).

Figure 2
The Motivating Effect of Schema Incongruity on Goal Setting



The results showed that exposure to an unexpected cause-and-effect relationship (i.e., schema incongruity) risen from COVID infection cases influences individuals' motivation to set personal goals in general. The direction of the effect is contrary to popular belief and supports H1 showing a *motivating* effect of schema incongruity. As discussed earlier, this phenomenon is consistent with implications from prior schema incongruity literature and will be likely

moderated by individual's different degrees of sense of personal control. Study 2 was designed to provide evidence for this account.

Study 2

The focus of study 2 was to demonstrate that the motivating effect of schema incongruity in goal setting will reverse after individuals consider their own level of personal control over situational outcomes and that only high-control people are sensitive to schema incongruity. It is predicted for a *demotivating* effect of schema incongruity for high-control people.

Participants

A total of two hundred and twelve (111 females, average age 41.22) Amazon Mechanical Turk (MTurk) workers from the United States were recruited in July 2022 from the online survey panel CloudResearch (<https://www.cloudresearch.com/>).

Design and Procedure

The experiment started with a measure of perceived personal control over external situations by rating six statements which were adapted from Lachman and Weaver (1998). Responses were collected on a seven-point scale with one being "strongly disagree" and seven being "strongly agree" (see Appendix II). Six statements in the personal control measure were presented to participants one at a time in a randomized order. After this, participants were randomly assigned to either one of conditions (schema congruity vs. incongruity) following the same procedure as in study 1. Similarly, participants generate their personal goals for the coming year. Different from study 1, participants were also measured on their fear for death towards the end of the experiment in order to rule out the possibility that the effect in study 1 was confounded by the fear for death which could be possibly incurred by the unexpected COVID infection cases. The measure of the fear for death includes six statements which were adapted from (Boyar, 1964) (See Appendix II). In the end, participants reported their demographic information.

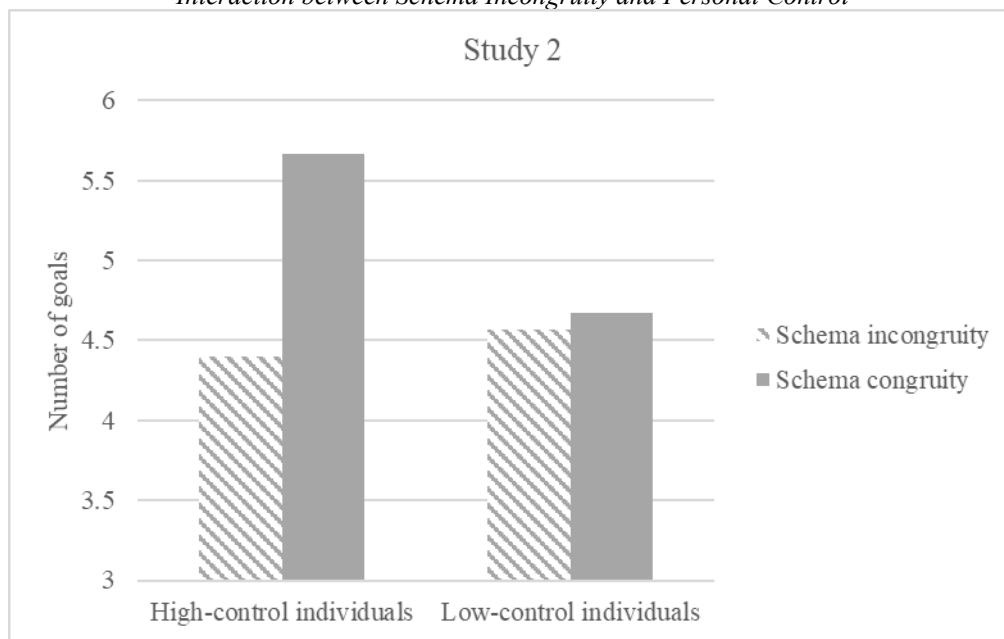
Results and Discussions

The manipulation check again confirmed the successful manipulation of schema incongruity ($M_{\text{schema incongruity}} = 3.54, SD = 1.58; M_{\text{schema congruity}} = 5.83, SD = 1.58$). Consistent with H2, an ANOVA analysis revealed a main effect of schema incongruity on number of personal goals set by participants ($F(1) = 4.64, p = .03$), suggesting a *demotivating* effect of schema incongruity after participants were reminded of their own level of personal control over life situations in general. Specifically, in contrast to the effect shown in study 1, after reporting their own perceived personal control over their life situations in general, participants exposed to schema incongruity generated less personal goals than those exposed to schema congruity ($M_{\text{schema incongruity}} = 4.49, SD = 3.28; M_{\text{schema congruity}} = 5.17, SD = 3.23, F(1) = 4.64, p = .03$). To examine the moderating effect of personal control, the data collected from the six-item personal control measure were averaged to form a personal control composite score for each participant. Following the procedure of median split widely used in consumer and psychology research (e.g., Lacobucci et al., 2015; Moorman et al., 2004), participants were grouped into either high- or low-control group depending on whether their self-reported composite score was above or below the median score 4.83 for all. Then, an ANOVA analysis was carried out on a 2 (schema

incongruity vs. congruity) x 2 (high vs. low personal control) between-subject design. Consistent with H2, the analysis revealed a marginally significant interaction effect between schema incongruity and personal control factors ($F(1, 208) = 5.26, p = .06$; see Figure 3). The demotivating effect only presents for the high-control participants. In other words, only for the participants with a higher sense of personal control, schema incongruity will demotivate them from setting personal goals ($M_{\text{schema incongruity}} = 4.40, SD = 3.38$; $M_{\text{schema congruity}} = 5.67, SD = 3.11, p = .01$) whereas for those with a relatively lower sense of personal control, there is no difference in their goal setting behavior as a function of schema incongruity ($M_{\text{schema incongruity}} = 4.57, SD = 3.16$; $M_{\text{schema congruity}} = 4.67, SD = 3.33$; *NS*).

To rule out the alternative account of the effect by the fear for death which could be possibly evoked by unexpected severe COVID infection cases, an ANOVA analysis regressed the fear-for-death composite rating on schema incongruity and personal control factors. The analysis showed a null effect of schema incongruity on participant's fear for death ($M_{\text{schema incongruity}} = 3.99, SD = 1.62$; $M_{\text{schema congruity}} = 4.03, SD = 1.60$; *NS*) and a null effect of interaction between schema incongruity and personal control ($F(1, 208) = .60, NS$).

Figure 3
Interaction between Schema Incongruity and Personal Control



The results of study 2 supported H2 demonstrating that, different from the results in study 1, schema incongruity demotivates individuals from setting personal goals when they are reminded of their perceived personal control over their life situations in general. This implies that schema incongruity may pose an incidental threat to people's general sense of order and structure. As the incidental threat is more prominent for high-control people, as a result, schema incongruity may cause high-control people to restore a sense of order by conforming to external feedback (i.e., schema incongruity in COVID cases). In other words, high-control people may be more urged to cope with a threat to their sense of order risen from schema incongruity by setting less life goals in general. The results also suggest that schema incongruity in the context of

COVID infection will unlikely cause fear for death among individuals to the point that it systematically contributes to the effect in studies 1 and 2.

As discussed earlier, goal-directed behavior is often studied in two stages -goal setting and goal striving. Studies 1 and 2 focused on exploring the effect of schema incongruity on the first aspect of goal-directed behavior – goal setting. Study 3 was designed to examine the consequence of schema incongruity in the other aspect of goal pursuit which is goal striving.

Study 3

Study 3 was intended to offer more implications in consumer-related issues when consumers have a specific goal to achieve. It also aims to provide further evidence on the *demotivating* effect of schema incongruity on goal striving which is often found a challenge for consumers (Mukhopadhyay & Johar, 2005; Tolman, 1932; Bouffard-Bouchard, 1990; Locke & Latham, 2002). Therefore, different from studies 1 and 2, study 3 will examine consumers' intention to switch to goal-inconsistent behavior while bearing a specific goal. Since saving is one of the most common resolutions that people in the U.S. have in 2021 (Pattman, 2021), the design was set in the context where consumers have a saving goal for the upcoming year.

Participants

The experiment recruited a total of two hundred (112 females, average age 42.21) Amazon Mechanical Turk (MTurk) workers during August 2022. In order to recruit the individuals who have a saving goal in mind for the upcoming year, the recruiting advertisement specifically asked for only savers to sign up for the experiment. Later in the experiment, participants were asked to report their saving motivation on a three-item measure to further ensure that a saving goal is equally salient among all participants.

Design and Procedure

The experiment was a 2 (schema incongruity vs. congruity) x 2 (high vs. low personal control) between-subject design. Differently, a sense of personal control was temporarily primed with participants in study 3 depending on which level of personal control condition they were randomly assigned to. The experiment used the same priming procedure for personal control in extant literature (e.g., Cutright & Samper, 2014; Jia & Wyer Jr., 2022) by asking participants to describe an incident for which they had (vs. did not have) control over the situation. After this, participants rated on a three-item manipulation check about their sense of personal control. The following manipulation on schema incongruity is the same as in studies 1 and 2. To measure motivation for goal striving behavior, following the similar procedure in Fishbach and Dhar (2005), all participants were asked to imagine they were halfway from reaching their saving goal and then indicate how likely they would engage themselves in the following behavior. Two specific behaviors were presented to all participants then. One is the saving behavior consistent with the saving goal: saving more money than planned for the next few days. The other is the spending behavior which is inconsistent with the saving goal: buying something unneeded only for a different color or a better design. Responses on intention for each behavior were collected on a seven-point scale with one being “very unlikely” and seven being “very likely”. Towards the end of the experiment, participants reported their saving motivation via a seven-point scale on three statements (See Appendix II).

Results and Discussions

The manipulation check again confirmed the successful manipulation of schema incongruity ($M_{\text{schema incongruity}} = 3.16$, $SD = 1.60$; $M_{\text{schema congruity}} = 6.04$, $SD = 1.60$, $p < .001$). The manipulation check on control priming also verified a successful manipulation on perceived personal control ($M_{\text{high control}} = 6.36$, $SD = 1.11$; $M_{\text{low control}} = 1.64$, $SD = 1.11$, $p < .001$).

Partially supporting H3, an ANOVA analysis revealed a *demotivating* effect of schema incongruity on intention for a specific goal-*inconsistent* behavior (i.e., spending behavior). Participants exposed to schema incongruity is more likely to switch to goal-*inconsistent* behavior comparing to those exposed to schema congruity ($M_{\text{schema incongruity}} = 2.76$, $SD = 1.64$; $M_{\text{schema congruity}} = 2.16$, $SD = 1.64$; $F(1) = 6.47$, $p = .01$). However, the temporarily boosted sense of personal control did not moderate the demotivating effect of schema incongruity as predicted in H3 ($F(1, 196) = .97$, *NS*). The results also show that participants exposed to schema congruity is marginally more likely to engage themselves in goal-*consistent* behavior ($M_{\text{schema incongruity}} = 5.32$, $SD = 1.51$; $M_{\text{schema congruity}} = 5.63$, $SD = 1.52$, $p = .16$). Again, varying levels of personal control primed with participants did not interact with schema incongruity to make a difference in the participants' intention for goal-*consistent* behavior ($F(1, 196) = .34$, *NS*). Lastly, an ANOVA analysis shows no difference in the saving goal salience among participants as a function of schema incongruity ($F(1) = .33$, *NS*), personal control level ($F(1) = .39$, *NS*), or interaction of these two factors ($F(1, 196) = .68$, *NS*). In other words, a saving goal is shown to be equally salient among participants in study 3 ($M = 6.43$).

The results in study 3 suggest that schema incongruity plays a larger role in goal striving behavior than personal control since a main effect only of schema incongruity is observed. Consistent with the effect on goal setting in study 2, the result in study 3 demonstrated that a *demotivating* effect of schema incongruity carries over to goal striving after consumers are temporarily primed with varying degrees of personal control. Going beyond studies 1 and 2 in a more general setting for all, study 3 extends the implications for consumer research by demonstrating a replicate of the effect on goal striving when consumers have a specific goal to achieve.

GENERAL DISCUSSION

Theoretical Contributions and Limitations

Consumer behavior is largely goal-driven (Campbell & Warren, 2015). Goal-directed behavior plays an important role in consumers' well-being in modern society as achievement of many personal goals determines our health and financial status etc. Whereas a significant portion of consumer research examined a myriad of factors influencing goal setting and striving (e.g., Fishbach & Dhar, 2005; Locke & Latham, 2002; Campbell & Warren, 2015), relatively few studies have empirically explored the impact of exposure to schema incongruity in goal-driven effort. The shortage of such studies is even more surprising given that schema incongruity is a well-studied aspect of the interaction process between consumers and brands (e.g., Yoon, 2013; Dimofte, Forehand, & Deshpande, 2003; Hailkias et al., 2017). Incongruity is part of everyone's life too. Partly due to the proliferation of social media, consumers are far more likely nowadays to expose themselves to events which unfold in an unexpected way (Dupuis, Chhor, & Ly, 2021). Therefore, it is much needed to empirically examine the downstream effect of exposure to schema incongruity in consumers' goal pursuing effort.

The results of the current research suggest that consumers tend to feel more motivated towards setting goals after they observe the events which are inconsistent with their expectation on the cause-effect relationship involved in that context (study 1; H1 is supported). However, if they are reminded of their personal control over life situations in general, high-control people get backfired by their high sense of self-agency by conforming to the incongruent message from event schemas, leading to a diminished motivation towards setting goals (study 2; H2 is supported). The pattern of the effect on goal setting continues to goal striving. In general, consumers exposed to schema incongruity would be demotivated from goal-consistent behavior and are more likely to switch to goal-inconsistent behavior i.e., savers tend to switch to spending behavior after they experience schema incongruity (study 3; H3 is partially supported). However, the moderating role of personal control in goal setting (study 2) was not replicated in goal striving (study 3). It could be because that personal control was measured as a personal trait in study 2 whereas it was temporarily primed with participants in study 3. Given that individuals have varying but consistent levels of personal control, personal control may exert stronger influence on one's attitudes and behavior when it operates as a long-lasting personal trait than when it is primed with participants as a temporary self-view.

The current research contributes to extant literature in several ways. First, the research advances literatures of both goal pursuit and schema incongruity by showing the effect of the latter on consumers' general goal setting and striving. This may be the first study ever examining the connection between these two factors. Second, the results from study 1 documents an intriguing motivating effect of schema incongruity on goal setting. The finding helps reconcile the implications from two streams of research – schema incongruity and goal motivation. It may also deviate from the popular belief that people are often discouraged from setting goals after they expose themselves to surprising, unexpected cause-effect relationship. Third, the research contributes to consumer research about personal control by examining its role in the demotivating effect of schema incongruity beyond a variety of behavioral consequences of personal control documented in extant consumer literature (e.g., Cutright & Samper, 2014; Mukhopadhyay & Johar, 2005). Lastly, the research may open a path for future research to further examine the role of personal control and generates a possible intervention measure to restore individuals' motivation towards life goals following surprising life events.

The current research is limited in its empirical exploration. First, the research only examines the role of schema incongruity in a context of COVID infection cases. The effect may not hold in other contexts where schema incongruity is presented to consumers. In the future research, the effect could be further testified in more consumer-related contexts such as advertisement, retailing environment in extant literature (e.g., Poynor & Wood, 2010, Goodstein, 1993). At the same time, the documented effect of schema incongruity in the context of COVID infection cases may vary as a function of consumers' perception about severity of the pandemic. For example, the federal and/or local government's COVID policy may influence consumers' perception about severity of the pandemic. In return, the surprising COVID infection cases may be perceived as more inconsistent for those consumers who feel more threatened by the pandemic than those who feel less disturbed by the situation. As a result, the effect of schema incongruity may encourage them to set up more personal goals, consistent with H1. Important to point out, the current research did not empirically examine such a difference in the effect as a function of consumers' varying reactions to the COVID pandemic. Second, the result reveals both motivating and demotivating effects of schema incongruity and suggests possible reasons for the difference in the effect after individuals consider their personal control over life situations

in general. However, the current research did not empirically examine the suggested processes. For example, the differential motivating (study 1 with participants at an average age of 22) and demotivating (studies 2&3 with an average age of 41-42) effect could be partially attributed to age of consumers. Extant research demonstrates that younger people tend to act more harshly towards terror of death than older people (Maxfield et al., 2007). Although the results in study 2 ruled out the confounding effect of fear of death on goal motivation, it is plausible that younger individuals may be more responsive than older ones to schema incongruence in the surprising COVID infection cases. Again, the current research did not make a prediction and offer empirical evidence in this aspect due to a lack of sufficient theoretical ground. Given personal control is a widely studied concept in consumer research and a basic need among individuals for daily living, it could be another highly relevant and fruitful research path for the future. For example, the extant literature shows that affiliating oneself with a religious body could help enhance one's personal control over external situations in general (Kay et al., 2008). In line with this thesis, the effect in the current research could be moderated by one's religious belief too. The future research may explore in this direction. Furthermore, a temporarily boosted sense of personal control did not cause the effect in study 3 to the same extent as personal control as a personal trait in study 2. Future research may focus on examining the mechanism underlying such a differential impact of personal control and as a result, may help identify more active ways of intervening than measuring personal control to facilitate consumers in goal striving. In addition, the current research did not examine the factors which could influence consumers' sentiment towards a saving goal (study 3). For example, consumers who are unemployed could be more careless about a saving goal than those who are currently employed. Similarly, the group who receives government subsidies may respond to a saving goal differently than the group who does not. The current research examined the net effect of all these possible factors by measuring salience of a saving goal among all participants instead of examining the effect of each factor respectively. Lastly, the current research did not examine locus of control (Lefcourt, 1991) because the research focused on the incongruent cause-effect relationship risen from a context which is distantly related to the goals, deviating from the setting that the research of locus of control usually examines. However, it could be potentially fruitful for future research to examine the iteration of locus of control and schema incongruity on goal-directed behavior.

Managerial Implications

In addition to the above-mentioned theoretical implications, the current research generates managerial implications for both firms and policy makers.

From the perspective of providing external feedback to drive goal pursuit effort (Locke & Latham, 2002), firms may modify their communication campaigns up to schema (in)congruity depending on which route fits better to guide consumers' efforts. For example, firms may facilitate consumers in setting new goals or switching and re-prioritizing goals by utilizing atypical advertisements (Goodstein, 1993) and displaying products in an incongruent format in retailing context (Poynor & Wood, 2010). Specifically, based on the results of study 1, consumers tend to generate more personal goals to cope with inconsistency perceived in the consumption context. Accordingly, if firms guide consumers appropriately by exposing them to atypical advertisements or product display formats, it may trigger consumers to generate more New Year resolutions and as a result, feel more motivated and purposeful about their holiday

purchases. Similarly, study 3 documented that consumers are more likely to switch to a different goal (goal-inconsistent behavior) after they experience schema incongruity. Following this, when firms' offerings have the potential to encourage consumers to switch from a pleasure to health goal, mild incongruity in product communication format may help nudge consumers to switch gear in goal setting in general. Alternatively, since high-control individuals are more sensitive to schema incongruity and tend to demotivate themselves from setting goals after experiencing incongruity (study 2), firms may need to organize brand/product information consistent with consumers' expectations to maintain their goal motivation especially among the consumer groups who usually assume themselves to have a large control over life situations in general. In contrast, low-control customer groups may not react as sensitively as high-control groups to schema incongruity in terms of goal setting. As implied in the results where low-control individuals are not as easily discouraged as high-control ones by schema incongruity (study 2) but could be motivated towards goal setting in general by schema incongruity (study 1), marketing communication could be more effective if marketers remind the low-control customer groups about how often external situations developed out of expectation in the past.

Disruptive events (e.g., public health emergency, mandatory evacuation following natural disasters) often develop unexpectedly (DeBerry-Spence & Trujillo-Torres, 2022). To restore mental health and encourage goal striving after adversity, policy makers may need to respond quickly to take advantage of individual's instant, natural reactance to schema incongruity in terms of more goal setting and striving. Specifically, individuals tend to increase their goal motivation immediately after they experience/observe disruptive, incongruent events (i.e., the *motivating* effect of schema incongruity in study 1). Policy makers should take advantage of this temporary boost of goal motivation and strive to quickly offer detailed guidance on the most important actions/goals which may help the public quickly recover from adversity.

From a broader perspective, in addition to paying attention to consumer's sensitivity to and sentiment about the "incongruity" element in public events, policy makers and marketers need to take consumer's own sense of personal control into consideration when firms are taking actions. For example, for those high-control consumers, policy makers or marketers need to do more work to encourage goal striving when public events unfold unexpectedly because the results suggest that high-control people are more responsive to incongruity and their higher need for order and structure may backfire in terms of demotivating them from setting goals.

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APPENDIX I

Manipulation of schema congruity vs. incongruity (Studies 1-3)

Schema Incongruity

Age	Presence of Comorbidities	Severity of COVID Infection
68	Yes	Moderate
29	No	Severe
38	No	Severe
73	Yes	Mild

Schema Congruity

Age	Presence of Comorbidities	Severity of COVID Infection
68	Yes	Severe
29	No	Mild
38	No	Moderate
73	Yes	Severe

Note: The information is presented to participants for one patient at a time. Four patients are presented in a randomized order.

APPENDIX II

Measures of personal control (Study 2)

1. I have much control over the way my life turns out.
2. I can do just about anything I really set my mind to.
3. What happens to me in the future mostly depends on me.
4. I often feel helpless in dealing with the problems of life.
5. There are many things that interfere with what I want to do.
6. I sometimes feel I am being pushed around in my life.

Measures of fear for death (Study 2)

1. I have moments when I get really upset about dying.
2. The idea of never thinking again after I die frightens me.
3. The pain involved in dying frightens me.
4. What will happen to my body after death does not concern me.
5. I am not at all disturbed by the finality of death.
6. Some people are afraid to die, but I am not.

Measures of salience of a saving goal (Study 3)

1. I plan to save for the year.
2. Saving is important for me to realize my personal goal (s).
3. My life will improve a lot if I reach my saving goal \$\$.

Note:

1. Participants were asked to rate on one statement at a time. Responses were collected on a seven-point scale with one being “strongly disagree” and seven being “strongly agree”.
2. The statements were presented in a randomized order.
3. The last three items for the measures of personal control and fear for death were reverse coded.