Journal of Experimental Social Psychology 56 (2015) 235–241

Contents lists available at ScienceDirect

Journal of Experimental Social Psychology

journal homepage: www.elsevier.com/locate/jesp

Loss of control stimulates approach motivation ☆

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HIGHLIGHTS

- Control deprivation stimulates approach motivation.
- Low control people become energized and motivated to achieve their goals.
- This tendency is argued to be both palliative and functional in restoring control.

ARTICLE INFO

Article history:
Received 13 November 2013
Revised 30 October 2014
Available online 7 November 2014

Keywords:
Control deprivation
Approach motivation
Goal pursuit
Arousal

ABSTRACT

The present research introduces a framework for understanding motivational reactions to control deprivation. Two experiments demonstrated that loss of control can stimulate approach motivation. Loss of control led to greater approach motivation in terms of enhanced motivation to achieve goals (Experiment 1) and greater self-reported high approach affect (Experiments 1 & 2). Experiment 2 additionally revealed that the effect of control deprivation on approach motivation was eliminated when participants misattributed their arousal to an external source. Overall, the findings demonstrate that loss of control can stimulate approach motivation as part of an adaptive motivational system aimed at coping with perceived lack of control.

Introduction

Control is the actual or perceived ability to alter events and achieve desired outcomes (Burger, 1989; Skinner, 1996). Given its definition, it is little wonder that feeling in control is a positive psychological experience with a range of personal benefits. As a result, individuals generally strive to feel in control (Burger, 1989; Rothbaum, Weisz, & Snyder, 1982; Skinner, 1996; Warburton, Williams, & Cairns, 2006) and fight forcefully against efforts to deprive them of control (Pittman & Pittman, 1980; Wortman & Brehm, 1975). Labeled a "fundamental human motivation" (Skinner, 1996), the desire for control is so strong that people sometimes perceive control over objectively uncontrollable events (Langer, 1975; Wortman, 1975). This desire means people are profoundly affected by loss of control, although research suggests that the effects may differ in their motivational impact in the short term compared to the long term.

In a seminal demonstration of the long-term effects of control deprivation, Seligman and Maier (1967) exposed dogs to a series of inescapable electric shocks. The dogs later experienced electric shocks that could be escaped by jumping over a low partition. Dogs that first were trained on uncontrollable shocks eventually stopped trying to avoid the pain, and later did not take available opportunities for escape. While those deprived of control became helpless, passive, and withdrawn, dogs that were exposed to the same aversive shocks over which they had control did not display the same evidence of learned helplessness.

This observation by Seligman and Maier (1967) fundamentally shaped the literature on control deprivation and formed the basis of a contemporary understanding of human depression (Alloy, Peterson, Abramson, & Seligman, 1984; Brown & Siegel, 1988). It is now generally accepted that long-term experiences of control deprivation ultimately sap individuals' energy, desire, and will to act. Yet, other research suggests that short-term reactions to control deprivation are quite different from the listless, helpless profile seen over the longer term in learned helplessness paradigms.

☆ Preparation of this paper was facilitated by an award to the lead author from the Canadian Institute for Advanced Research: Social Interactions, Identity, and Well-being Program.

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http://dx.doi.org/10.1016/j.jesp.2014.10.009
0022-1031/

The human aversion to control deprivation has spawned a large literature that documents reactions to perceived loss of control. For example, when deprived of personal control, people become attached to social ingroups (Agroskin & Jonas, 2013; Fritsche, Jonas, & Fankhanel, 2008; Fritsche et al., 2013); turn to secular and spiritual authorities (Kay, Gaucher, Napier, Callan, & Laurin, 2008; Kay, Shepherd, Blatz, Chua, & Galinsky, 2010; Kay, Whitson, Gaucher, & Galinsky, 2009; Knight, Tobin, & Hornsey, 2014; Shepherd, Kay, Landau, & Keefer, 2011); express prejudice (Greenaway, Louis, Hornsey, & Jones, 2014); emphasize scientific progress (Rutjens, van der Pligt, & van Harreveld, 2010; Rutjens, van Harreveld, van der Pligt, Kreemers, & Noordewier, 2013); endorse paranormal abilities (Greenaway, Louis, & Hornsey, 2013); engage in ritual behavior (Norton & Gino, 2013); and strive to perceive patterns in random noise (Whitson & Galinsky, 2008). In all, the literature shows that people find it aversive to be deprived of control and perform a range of psychological gymnastics to regain the perception that control is possible.

This vantage point suggests that loss of control can be mobilizing in the short-term. Indeed, researchers have theorized that loss of control leads to exhaustion and listlessness in the long term expressly because of a boost in motivation and effort in the short term (e.g., Sedek, Kofta, & Tyszka, 1993). For example, people exposed to uncontrollable aversive tones spend more time – not less – on challenging cognitive tasks like solving anagrams (Hiroto & Seligman, 1975). Control deprivation also changes people's cognitive style, causing them to process information in a more effortful and deliberate manner (Zhou, He, Lao, & Baumeister, 2012), which can improve performance on cognitive tasks (Pittman & D'Agostino, 1989). These initial boosts in activity appear to be short-lived: While brief experiences of no control facilitate ability and persistence on challenging puzzles, repeated control deprivation elicits learned helplessness (Roth & Kubal, 1975).

To understand these effects as related phenomena that are linked by an underlying motivational force we turn to work in the threat compensation literature. Recent attempts to unify numerous examples of threat compensation argue that violations of expectation can stimulate aversive arousal that people respond to by engaging in compensatory behaviors (Jonas et al., 2014). These compensatory behaviors are generally considered to be efforts to regulate the experience of arousal (e.g., Heine, Proulx, & Vohs, 2006; Proulx & Inzlicht, 2012; Proulx, Inzlicht, & Harmon-Jones, 2012). Research suggests that approach motivated states are activated in order to mute the aversive arousal stimulated by experiencing threat (McGregor, Nash, Mann, & Phills, 2010; McGregor, Nash, & Prentice, 2010). Building on this theorizing, we hypothesized that control deprivation might stimulate approach motivation as individuals attempt to cope with loss of control and perhaps act to regain control.

Approach motivation

Two basic forces are thought to guide human behavior: The behavioral activation system (BAS), which regulates approach tendencies and behavior, and the behavioral inhibition system (BIS), which regulates conflicts between desires to approach and avoid (Corr, DeYoung, & McNaughton, 2013; Gray, 1982, 1990). The BAS is activated by the prospect of attaining a desired object or state and in turn stimulates approach behavior and associated feelings of desire, eagerness, and excitement. Approach motivation has therefore broadly been defined as energization by and physical or psychological direction toward an incentive or reward (Elliot, 2008; Elliot & Covington, 2001). The approach system activates an "impulse to move toward" goal-relevant stimuli regardless of the valence of the stimulus or target of behavior (Harmon-Jones, Harmon-Jones, & Price, 2013). Approach motivation can therefore be stimulated by negative stimuli as well as positive stimuli.

Some researchers have distinguished between high and low approach states, which are activated prior to goal completion and following goal completion, respectively (e.g., Gable & Harmon-Jones, 2008, 2011). *High approach* characterizes feelings of energy and excitement observed when people are in pursuit of a goal or reward. When goal pursuit is thwarted, high approach tendencies are activated and intensified as the individual attempts to accomplish the goal (Harmon-Jones et al., 2013). In contrast, *low approach* characterizes feelings of satiation and contentment observed after a goal has been achieved. Control is the perception that if people pursue a goal, their effort will be met with success. Control deprivation therefore represents a decoupling of effort from reward, such that even if individuals were to try to achieve a goal they would not succeed. If one is deprived of control, people may be motivated in the short term to redouble their efforts and put more energy into goal pursuit. We therefore propose that loss of control will stimulate feelings of high approach as individuals increase efforts toward achieving their goals to combat the frustration of control deprivation.

Overview

The issue of motivation has long been in the theoretical background of research on control deprivation. Original work on this topic showed evidence that loss of control can lead to amotivation and even avoidance behavior. More recent work has shown that loss of control can boost motivation in the short term, leading to increased effort and active compensation attempts. In the present research we propose that this motivational lift may be underpinned by the initial stimulation of approach motivation following control deprivation. This perspective is consistent with recent theorizing on threat compensation (e.g., Jonas et al., 2014), although no direct evidence yet exists to demonstrate that loss of control indeed evokes an approach motivational state.

The present research presents experiments demonstrating that loss of control stimulates approach motivation. Experiment 1 assessed approach using self-report measures of high approach affect and motivation to achieve goals. In addition, in Experiment 2 we assessed a potential mechanism of the control–approach effect. Work in the broader threat defense literature has shown that expectancy violations (like, for example, loss of control) create arousal that can evoke compensatory reactions (e.g., Jonas et al., 2014; McGregor, Nash, Mann, et al., 2010; McGregor, Nash, & Prentice, 2010). In line with this view, we assessed whether arousal acted as a mechanism for the control–approach effect by manipulating this variable using a classic misattribution of arousal paradigm. We hypothesized that control deprivation would stimulate high approach affect and enhanced goal pursuit in Experiment 1, but that the effect of control deprivation on high approach affect would be eliminated when participants misattributed their arousal to a pill in Experiment 2.

Experiment 1

In Experiment 1 we measured approach through self-reported motivation to achieve goals. Motivation to achieve goals is a key hallmark of approach motivation (Carver & White, 1994), and we therefore hypothesized that participants in the low control condition would report greater goal pursuit motivations than participants in the high control condition. Insofar as individuals are pursuing goals (i.e., are prior to goal attainment), we expected that they would show greater evidence of high approach feelings – which are observed before a goal is completed – compared to low approach feelings, which are observed after a goal is completed (e.g., Gable & Harmon-Jones, 2008). Accordingly, we hypothesized that participants in the low control condition would report greater high approach feelings than participants in the high control condition, but not greater low approach feelings. Given that high approach feelings represent affect that is experienced prior to goal achievement, we hypothesized that these feelings might be channeled