



Research report

Effects of habit on intentional and reactive motivations for unhealthy eating



Shoji Ohtomo

Department of Psychology, Faculty of Human Sciences, Konan Women's University, 6-2-23, Morikita-machi, Higashinada-ku, Kobe, Japan

ARTICLE INFO

Article history:

Received 20 December 2012
 Received in revised form 24 March 2013
 Accepted 16 April 2013
 Available online 22 April 2013

Keywords:

Action control
 Behavioral intention
 Behavioral willingness
 Habit
 Unhealthy eating behavior

ABSTRACT

This study examined the effect of unhealthy eating habits on behavior within the dual-process perspective, including intentional and reactive motivation. Previous studies assumed that habits elicit behavior directly. However, this study hypothesized that habits affect behavior through their effect on action control and reactive motivation. Longitudinal data were available from undergraduate students ($n = 286$) who completed the first questionnaire assessing their habits, action control (internal and external), intentional motivation, and reactive motivation, and the second questionnaire assessing their actual eating behavior of high-calorie snacks in the 2 weeks following the first questionnaire. Structural equation modeling was used to examine the predictors of their eating behavior. The results showed that habits inhibited internal control and promoted external control. These two sources of control affected intentional and reactive motivations, respectively, which determine behavior. It is concluded that habitual unhealthy eating behavior results from a decrease in conscious control leading to a switch from an intentional to a reactive route.

© 2013 Elsevier Ltd. All rights reserved.

Introduction

There is a worldwide increase in the prevalence of overweight and obesity. According to the [World Health Organization \(2006\)](#), the overweight population will be 2.3 billion and the obese population will be more than 700 million by 2015. There is a need to improve modern lifestyles, characterized by over-consumption of high calorie-foods (e.g., fast foods and snacks), to decrease overweight and obesity. However, dieting is a difficult task in the food-rich environment of most societies. It has been suggested that a so-called “toxic environment” of exposure to high-calorie, heavily advertised, inexpensive, and highly accessible foods promotes unhealthy eating and the development of obesity ([Wadden, Brownell, & Foster, 2002](#)). Because people are exposed to the temptations of palatable high-calorie foods in a toxic environment, unhealthy eating behaviors occur frequently and become habitual. Habituated behaviors are difficult to change by individual's conscious intent or volition (e.g., [Aarts & Dijksterhuis, 2000](#); [Adriaanse, van Oosten, de Ridder, de Wit, & Evers, 2011](#); [Moldovan & David, 2012](#)).

Previous studies on health-risk behavior assumed that habits lead to unintentional behavior. For example, [Verplanken \(2006\)](#) reported that eating unhealthy snacks was predicted by habits, over and above deliberative behavioral determinants such as intention and perceived behavior control. Similarly, a study on drinking showed that the activation of drinking habits elicited behavior

automatically, regardless of a conscious intention ([Sheeran et al., 2005](#)). These studies suggest that a habit is characterized by automaticity: habitual behavior can be enacted with little awareness, self-control, and conscious intent. The feature of automaticity of a habit is considered as an alternative route to behavior, independent of conscious intent ([Danner, Aarts, & de Vries, 2008](#); [Verplanken, 2006](#)).

The automaticity of habit develops as people repeatedly perform a specific behavior in a given situation. According to [Orbell and Verplanken \(2010\)](#), the development of a behavioral habit results from the delegation of action control to behavioral context. Through the repetition of behavior in the same performance context, habitual behavior comes to be cued by the context and can be triggered by contextual cues. This is called a “cue-contingent habitual response.” The cue-contingent habitual response no longer requires conscious control, and sometimes operates automatically, inconsistent with conscious intent. While low controllability following the development of habit has been demonstrated, the process change in motivations induced by the delegation of action control to context has not been well examined. Such examination of the process change is important because the mechanisms underlying habitual behavior are relevant to the development of an intervention strategy.

Theoretical framework of motivational process

The theory of planned behavior (TPB; [Ajzen, 1991](#); [Ajzen & Madden, 1986](#)) has been one of most frequently cited models for

E-mail address: s.ohtomo@konan-wu.ac.jp

understanding some psychological determinants of health risk behavior (Ajzen, 2011) and eating behavior (Dunn, Mohr, Wilson, & Wittert, 2011; Kothe, Mullan, & Butow, 2012). According to TPB, psychological factors, such as attitude and action control, do not directly determine behavior, but do so only indirectly via a behavioral intention, which is a deliberative motivation. The TPB postulates that human actions are a result of a consciously controlled or intentional decision. However, recent studies have suggested that an intentional process has only a limited ability to predict behavior. A meta-analysis of health-risk behavior (Sheeran, 2002) concluded that the intention-behavior discrepancy was caused by people failing to carry out their intentions, not by people acting without an intention. That is, the intention does not always translate into behavior. In addition, the results of a meta-analysis of intervention study (Webb & Sheeran, 2006) indicated that changes in intentions engendered fewer changes in behavior. It was suggested that this inconsistency might be caused by a “non-intentional route to behavior,” regardless of intention. For example, Churchill, Jessop, and Sparks (2008) showed that impulsivity predicted snacking behavior over and above the intentional components of TPB. Moreover, Gibbons, Gerrard, Reimer, and Pomery (2006) suggested that health-impairing behaviors (e.g., drinking and smoking) are guided by the spontaneous reaction to the risk-conducive situation because these behaviors are not goal-directed. Thus, the intentional process assumed by TPB is insufficient to predict unintentional aspects of unhealthy behavior such as habitual behavior.

Health-risk behavior as a spontaneous reaction to circumstances is incorporated by an additional route embedded in the prototype model (Gibbons, Gerrard, Blanton, & Russel, 1998; Gibbons et al., 2004). The prototype model assumes that two types of motivations are involved in health-risk behavior. The first is the behavioral intention, which is a conscious deliberation leading to intended behavior (similar to Ajzen's TPB). The second is behavioral willingness, which is a reaction to a situation leading to unplanned or unintentional behavior. Behavioral willingness is considered as unintentional motivation elicited by the circumstances conducive to impulsive or spontaneous behavior, regardless of an individual's intention (Gerrard, Gibbons, Houlihan, Stock, & Pomery, 2008; Gibbons et al., 2006). A similar dual-motivation model, involving a reflective and an impulsive system was suggested by Strack and Deutsch (2004). Behavioral intention is regarded as a reflective system that induces behavior based on deliberative decisions, and behavioral willingness is regarded as an impulsive system that induces behavior through spreading activation originated by perception. It has also been suggested that behavioral expectation (Warshaw & Davis, 1985) may be similar to behavioral willingness. However, the studies of the prototype model (Gibbons, Gerrard, Blanton, et al., 1998; Gibbons, Gerrard, Ouellette, & Burzette, 1998) demonstrated that behavioral expectation and behavioral willingness predict reasoned and reactive behavior, respectively. Thus, behavioral willingness and behavioral expectation appear to be discriminable concepts. The dual-process perspective of the prototype model is able to predict both intended behaviors based on a conscious motivation and unintended behaviors based on a spontaneous reaction to a given context (Gibbons, Houlihan, & Gerrard, 2009). Previous studies have supported the dual-process perspective, via both behavioral intention and behavioral willingness, in relation to health-risk behaviors, such as risky sexual activities (Gibbons, Gerrard, Blanton, et al., 1998; Thornton, Gibbons, & Gerrard, 2002), substance use (Gerrard, Gibbons, Vande Lune, Pexa, & Gano, 2002; Gibbons et al., 2004), and high-calorie snack intake (Ohtomo, Hirose, & Midden, 2011). Moreover, behavioral willingness has been shown to be a significant predictor of non-habitual health risk behaviors, such as adolescent smoking (Pomery, Gibbons, Reise-Bergan, & Gerrard, 2009).

Thus, habits and behavioral willingness differ in their psychological mechanism. On one hand, habitual behavior is induced automatically only by situational cues that have already been associated with behavior through the repetition of behavior in the same situation. On the other hand, behavioral willingness induces behavior unintentionally through spontaneous reactions to situations affording health-risk behavior, irrespective of whether the behavior is frequently repeated. According to the framework of habit studies (Aarts & Dijksterhuis, 2000; Sheeran et al., 2005), a habit is a goal-directed behavior, and therefore, it cannot be elicited in the absence of goal activation. Habits may not in themselves serve directly as the motivational function that leads to behaviors. For example, although people have a strong habit of snacking, unintentional snacking is unlikely in a library because there are no snacking cues in that environment. However, in front of a TV in a living room, where people eat snacks routinely, unintentional snacking is likely to be elicited automatically because watching TV is one of the situational goal cues for eating snacks. If habit has a motivational function, then habit must induce behavior transcending situations. This study reconsidered that habit does not have a motivational function, but rather is an effect of behavioral willingness, which induces behavior through reactions to various situations. To integrate the prototype model and the habit perspective, this study assumed that the cue-contingent habitual response is mediated by behavioral willingness, which is an unintentional motivation based on a spontaneous reaction to risk-conducive situations. That is, behavioral willingness affords both habitual and non-habitual unintended risk behaviors, and habitual behavior elicited by the specific situation may be one of the effects of behavioral willingness.

Present study

This study adopted the dual motivation model (Fig. 1), based on the framework of the prototype model (Gibbons, Gerrard, Blanton, et al., 1998; Ohtomo et al., 2011), to examine the effects of the habit of high-calorie snacking on motivational processes. Automaticity of habitual behavior is a function of a mental shortcut that elicits behavior without conscious action control. According to Orbell and Verplanken (2010), the development of a behavioral habit results from the delegation of action control to behavioral context cues. Habitual behavior may be determined by the reactive process promoted by external environment, rather than the intentional process. Previous studies have indicated that the effect of intention on behavior was weakened when a habit was strong, and it was strengthened when a habit was weak (Ouellette & Wood, 1998; Verplanken, Aarts, van Knippenberg, & Moonen, 1998). This study hypothesized that the influences of the intentional and reactive processes were changed by the strength of habit and changes were mediated by the effect of action control and corresponding motivational factors. Previous studies have also indicated that internal and external controls do affect motivation and behavior (Armitage & Conner, 1999, 2001). Honkanen, Olsen, Verplanken, and Tuu (2012) reported that impulsive consumption of unhealthy snacks was increased when self-control was weak. Moreover, studies on the prototype model indicate that poor self-regulation promotes behavioral willingness and strong self-regulation promotes behavioral intention (Gibbons et al., 2006; Wills et al., 2007). Our model assumes that the habit affects behavioral willingness for unhealthy eating behavior through both internal and external control. The more frequently a behavior is performed in a given situation, the more it is said to habituate and come under the control of the situation. Thus, the delegation of action control to situational controls during the process of habit formation involves a shift from an internally controlled to an externally controlled process, and this

Download English Version:

<https://daneshyari.com/en/article/7310829>

Download Persian Version:

<https://daneshyari.com/article/7310829>

[Daneshyari.com](https://daneshyari.com)