Contents lists available at ScienceDirect

Appetite

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

Research report

I take therefore I choose? The impact of active vs. passive acquisition on food consumption

Rhonda Hadi^{a,*}, Lauren Block^b

^a University of Oxford, UK

^b Baruch College, City University of New York, One Bernard Baruch Way, New York, NY 10010, USA

ARTICLE INFO

ABSTRACT

Article history: Received 17 December 2013 Received in revised form 23 April 2014 Accepted 2 May 2014 Available online 6 May 2014

Keywords: Food consumption Eating behavior Embodied cognition Sensory perception Choice Need-for-control This research investigates the consequences of physically taking (actively acquiring) vs. receiving (passively acquiring) food items. Specifically, we demonstrate that the act of physically taking food can generate a false impression of choice, an effect we term "embodied illusion of choice." Across two studies, we document the mediating effect of this embodied illusion of choice on food evaluation and actual consumption, and show that these effects are moderated by an individual's need-for-control.

© 2014 Elsevier Ltd. All rights reserved.

Introduction

In general, we tend to take things we choose. A child, for example, reaches out to grab the toy she chooses to play with at the time. Adults display similar behavior: we reach out and grasp our desired snack from a refrigerator, our favorite book from a bookshelf, and our preferred brand from a store shelf. On the other hand, we are often given things we do not choose. A loved one might hand us a gift they have picked out for us; a child might find unsolicited vegetables piled onto his or her plate. Perhaps then, this distinction between taking and receiving has built a pattern in our minds: we take what we choose, but are given what we do not choose. Might it be the case that if this blueprint is cemented in our minds, the simple physical act of reaching for and taking an object makes us feel as though we are choosing that object? In other words, even in instances where there is no actual choice, might active acquisition of objects create an illusion of choice nonetheless?

This research investigates the consequences of physically taking (actively acquiring) vs. receiving (passively acquiring) equivalent food items. We demonstrate that physically performing such active vs. passive activities can alter an individual's perception of choice. Specifically, we show that even when there is no true choice available, the act of physically taking food items can generate a false

* Corresponding author. *E-mail address:* rhondahadi@gmail.com (R. Hadi). impression of choice, an effect we term "embodied illusion of choice." We further argue that this illusion can have meaningful consequences on an array of downstream variables including food evaluation and food consumption.

While there is a well-developed literature surrounding the provision of choice, our research adds to extant work by suggesting that a false sense of choice can manifest under non-choice conditions. Incorporating theories of embodied cognition, we contribute by documenting one particular means for creating an illusion of choice, suggesting that mere physical sensations can foster feelings of choice in an individual via active (vs. passive) acquisition. Importantly, by demonstrating the impact of this illusion on food evaluation and consumption, our work supplements existing literature on incidental cues that non-consciously impact eating behavior. In sum, we document the effects of such "embodied illusion of choice," establish boundary conditions for the effects, and examine the mediational role of illusion of choice.

Incidental influences on eating behavior

A growing body of research has documented the ability of incidental cues to impact eating behaviors, both in terms of food evaluation and consumption volume (how much one eats). In the area of taste perception, the existing literature has demonstrated that various extraneous variables impact both overall evaluations of foods and beverages, as well as flavor-specific perceptions. For example,







hedonic evaluations of food items differ when individuals are primed with health (Connell & Mayor, 2013), or depending on the time of day the food is consumed (Kramer, Rock, & Engell, 1992). In addition, variables associated with eating or drinking implements have also been shown to shape taste perceptions. Specifically, research has documented the ability of cutlery weight (Piqueras-Fiszman & Spence, 2011), plate/bowl color (Harrar, Piqueras-Fiszman, & Spence, 2011), glassware shape (Hummel, Delwiche, Schmidt, & Hüttenbrink, 2003), and other implement-specific factors to impact people's reported evaluations of foods and beverages. Further, the eating environmental itself has been shown to impact taste perceptions of identical foods (Meiselman, Johnson, Reeve, & Crouch, 2000). For example, people reported liking wine more when they tasted it under blue or red lighting than under green or white lighting (Oberfeld, Hecht, Allendorf, & Wickelmaier, 2009). Similarly, environmental auditory cues have also been shown to influence taste perceptions (Spence & Shankar, 2010).

Just as the literature has demonstrated the influence of extraneous variables on taste perceptions, there also exists a wealth of research that documents how such variables impact actual consumption (Stroebele & de Castro, 2004; Wansink, 2004). For example, atmospheric variables such as temperature (Brobeck, 1948; Westerterp-Platenga, 1999), lighting (Lavin & Lawless, 1998), audio stimulation (Bellisle, Dalix, & Slama, 2004; McCarron & Tierney, 1989), and the number of other people eating (Bell & Pliner, 2003) have all been shown to unknowingly impact the amount of food consumed by participants. Similarly, packaging (Krishna & Morrin, 2008; Xiaoyan & Srinivasan, 2013), serving bowl size (Wansink & Cheney, 2005; Wansink, van Ittersum, & Painter, 2006), and portion size (Edelman, Engell, Bronstein, & Hirsch, 1986; Rolls, Morris, & Roe, 2002) have also led to differences in consumption volume.

Cumulatively, the literature overwhelmingly suggests that people are continuously influenced by subtle factors that impact, often nonconsciously, both how much they eat and how good they think food tastes. In this paper, we propose a distinct extraneous factor that influences these food behaviors: active vs. passive acquisition. We argue that this is because actively acquiring food items induces an "embodied illusion of choice," and this feeling leads to increased evaluation and consumption. Thus, we contribute not only by documenting a new antecedent of food behavior, but also by addressing a recent call to explore the psychological mechanisms that drive such effects (Wansink, 2004). In the following sections, we draw from psychology literature to explain why the mere act of physically taking food items would produce this proposed effect.

Embodied gestures

Embodiment research reminds us that our thoughts and feelings are not independent of physical and somatic perception, and bodily sensations do indeed impact how we think and feel (Barsalou, 2008; Varela, Thompson, & Rosch, 1991). This idea may find its root in self-perception theory, which posits that individuals infer their attitudes from their actions, which may include bodily states (Bem, 1972). For example, research has examined the ability of physical gestures, facial expressions, and body postures to induce various feelings and attitudes (Chandler & Schwarz, 2009; Stepper & Strack, 1993; Strack, Martin, & Stepper, 1988; Wells & Petty, 1980; Williams, Huang, & Bargh, 2009). More recent research has documented an "approach-must-equal-pleasure" heuristic, in which embodied cognitions rising from bodily approach to an object lead to more favorable evaluations of the object (Labroo & Nielsen, 2010). Existing literature on grounded cognition has demonstrated the ability of physical gestures to trigger feelings and thoughts of pleasure, pride, and agreement, among other associations. Might then, certain physical gestures signal "choice"? We argue that the gesture of actively taking vs. passively receiving objects can serve to impact individu-

als' perceptions of choice. It is worth emphasizing that our conceptualization of active vs. passive acquisition differs meaningfully from that of approach vs. avoidance behavior (i.e. Cacioppo, Priester, & Berntson, 1993; Labroo & Nielsen, 2010). In the approach vs. avoidance distinction, the defining difference is arm flexion vs. arm extension, or physically moving toward vs. away from an object. However, in our studies, the target object is acquired under both conditions (both instances entail arm flexion). The major difference stems from the agent of initiation: in the active condition, the individual initiates the acquisition, while in the passive condition, an outside agent acts as the initiator. We argue that this distinction, between initiated (active) acquisition and un-initiated (passive) acquisition, is what drives differences in perceived choice, even when there is no actual choice available. Accordingly, we have coined the increase of such feelings of choice stemming from active acquisition as an "embodied illusion of choice."

If such physical gestures can indeed induce perceptions of choice, what would be the behavioral consequences of such embodied illusions of choice? Specifically, how would this illusion impact an individual's evaluation and consumption of food items? The following section explores the relevance and importance of choice.

The significance of choice on food behavior

Literature on choice supports the general conclusion that individuals react differently under conditions that propose themselves to be choice scenarios (Szrek & Baron, 2007). Choice, in this context, can be defined as a construct involving the presence or absence of the ability to select a preferred option (Averill, 1973). Generally speaking, choice is desirable, and the mere ability to choose is valuable to most individuals (Ryan & Deci, 2000, 2006).

Accordingly, general findings have shown that personallymade choices, as compared to those made by another, lead to more favorable consequences, including improved evaluations (Deci & Ryan, 1985). Among other domains, this effect has been documented in the area of food and beverage evaluation and intake (Botti & Iyengar, 2004; Weber, King, & Meiselman, 2004; Zeinstra, Renes, Koelen, Kok, & de Graaf, 2010). For example, Weber et al. (2004) found that participants ate more salad when given a choice of dressing, and Zeinstra et al. (2010) found that children presented with a choice of vegetables in a restaurant setting showed greater vegetable liking and intake. In fact, early research has even demonstrated that people perceive aversive foods (e.g. grasshoppers) to be less disagreeable if they have chosen to eat them (Zimbardo, Weisenberg, Firestone, & Levy, 1965). In all these examples, consumers were actually given a choice, which ultimately improved evaluations and increased consumption. In line with this research, we propose that a mere illusion of choice, via active acquisition, will similarly increase food evaluations and intake.

The moderating role of need-for-control

The above studies presuppose that choice and autonomy are fundamentally attractive. However, previous literature also suggests that the impact of providing choice may vary for different types of people, implying that perhaps not everybody has an equal desire to choose. For example, individuals who place a lower value on autonomy and the need to control seem to value choice less than those who place a high value on such factors (Snibbe & Markus, 2005). Measurable differences emerge in individuals' need-for-control (Burger & Cooper, 1979), and the construct is often conceptualized as a composite of four related dimensions: general/self-control, leadership/othercontrol, relinquishing of control and dependence avoidance (Gebhardt & Brosschot, 2002; Parker, Jimmieson, & Amiot, 2009). Unlike those high in need-for-control, individuals low in need-forcontrol do not always respond to the availability of choice in a posDownload English Version:

https://daneshyari.com/en/article/939427

Download Persian Version:

https://daneshyari.com/article/939427

Daneshyari.com