



## Less may be more when choosing is difficult: Choice complexity and too much choice

Rainer Greifeneder<sup>a,b,\*</sup>, Benjamin Scheibehenne<sup>c,d</sup>, Nina Kleber<sup>b</sup>

<sup>a</sup> University of Nijmegen, Department of Social Psychology, PO Box 9104, 6500 HE Nijmegen, The Netherlands

<sup>b</sup> University of Mannheim, Mikrosoziologie & Sozialpsychologie, A5, 68131 Mannheim, Germany

<sup>c</sup> Indiana University, Cognitive Science Program, 1101 E. 10th St., Bloomington, IN 47405, USA

<sup>d</sup> Max Planck Institute for Human Development, Lentzeallee 94, 14195 Berlin, Germany

### ARTICLE INFO

#### Article history:

Received 23 January 2008

Received in revised form 24 August 2009

Accepted 25 August 2009

Available online 19 September 2009

#### PsycINFO classification:

3040

3900

#### Keywords:

Choice behavior

Consumer behavior

Consumer satisfaction

Complexity

### ABSTRACT

Although consumers readily seek choice and abundance, the so-called too-much-choice effect suggests that having many alternatives to choose from eventually leads to negative consequences, such as decreased post-choice satisfaction. The present research extends this research by highlighting the role of choice complexity. It is argued that too-much-choice effects are associated with choice complexity, which is influenced not only by the number of alternatives, but also by other features of the choice set, such as the number of attributes that alternatives are differentiated upon. These other influences of choice complexity may propel or hinder the emergence of too-much-choice effects. Two experiments tested this hypothesis by orthogonally manipulating the number of alternatives and the number of attributes. Results revealed a too-much-choice effect when alternatives were differentiated on many attributes, but not when alternatives were differentiated on few attributes. Implications for theory and practice are discussed.

© 2009 Elsevier B.V. All rights reserved.

### 1. Introduction

The retail business across the United States and in most European countries trusts in choice and abundance. Supermarkets with thousands of products and ever-growing assortments have gained market share, while smaller retailers have disappeared. Where growth is not cost effective, abundance is often feigned by using mirrors or displays with false bottoms so that consumers at least believe they have plenty of options (Schwartz, 2004). One conclusion that may be drawn from this development is that consumers prefer variety and abundance. Moreover, given the fact that retail businesses are driven by economic goals, one may conclude that individuals consume more when more options are offered to them. In line with the first conclusion of heightened preference, Iyengar and Lepper (2000) reported that individuals prefer large over small assortments (see also Wänke & Greifeneder, 2007). Strongly contradicting the second conclusion of increased consumption, however, Iyengar and Lepper reported that having more choice was

associated with less purchasing. Perhaps even more surprisingly, participants in their experiments who had more choice alternatives were less satisfied with the chosen alternative (see also Iyengar, Wells, & Schwartz, 2006). These and related negative consequences of extensive choice sets have been referred to as choice overload (Iyengar & Lepper, 2000), the paradox of choice (Schwartz, 2004), or hyperchoice (Mick, Broniarczyk, & Haidt, 2004), and continue to attract public and scientific interest.

The possibility of too much choice has important practical and theoretical implications. On a theoretical level, it challenges most choice models in psychology and economics, according to which expanding a choice set cannot make decision makers worse off (e.g., Rieskamp, Bussemeyer, & Mellers, 2006). From an applied perspective, it strongly questions marketers' robust belief in abundance and ever-increasing assortments, because retailers could possibly boost their success by offering less. Given the potential significance of these implications, it is important to further investigate the possibility of too much choice, especially as the effect has not always replicated (e.g., Scheibehenne, 2007).

Researchers have suggested several mechanisms that contribute to too-much-choice effects (e.g., Scheibehenne, 2007). First, the more alternatives are offered, the more alternatives are foregone when choosing one. Extensive as compared to limited choice

\* Corresponding author. Address: Behavioral Science Institute, Radboud University Nijmegen, Postbus 9104, 6500 HE Nijmegen, The Netherlands. Tel.: +31 (0)24 36 12695; fax: +31 (0)24 36 12677.

E-mail address: [r.greifeneder@psych.ru.nl](mailto:r.greifeneder@psych.ru.nl) (R. Greifeneder).

sets may thus entail higher opportunity costs and lower the satisfaction with the option that is eventually chosen. Second, with more alternatives, individuals incur higher search costs (e.g., time or money, see also Fasolo, Carmeci, & Misuraca, 2009). To the extent that satisfaction with the chosen alternative is a function of the choice process, higher search costs may also contribute to lower satisfaction. Third, the more alternatives individuals know of, the more uncertain they may feel about whether they have made a good choice, again lowering satisfaction with the chosen option. Different mechanisms are thus assumed to contribute to lower satisfaction when choosing from plentiful options and the anticipation of this reduced satisfaction may decrease consumption.

Despite good reasons for the emergence of too-much-choice effects, extensive choice sets do not always result in less satisfaction, and a recent meta-analysis found that the effect size across studies is virtually zero (Scheibehenne, Greifeneder, & Todd, 2009a). However, this meta-analysis also revealed some heterogeneity in effect sizes, which may possibly stem from selective emergence of too-much-choice effects in some conditions but not others. In support of such an interpretation, a series of experiments by Scheibehenne, Greifeneder, and Todd (2009b) allows for the conclusion that too-much-choice effects can be observed when individuals need to justify their choice. Relatedly, suggesting a necessary precondition for the emergence of too much choice, Chernev (2003a, 2003b) observed that less is more when participants do not have prior preferences. Participants with clear prior preferences were more satisfied after choosing from larger assortments, presumably because the probability of matching one's preferences increases with the number of alternatives (preference matching). Together, these findings suggest that the too-much-choice effect does not occur ubiquitously. In the spirit of understanding the "when" of too much choice, the present set of experiments focuses on the complexity of the choice set beyond the number of options.

It is interesting to note that assortment size—the central variable in too-much-choice research—may be only one among several variables triggering the three outlined mechanisms. For instance, the similarity between alternatives or the amount of information provided may also cause increases in opportunity costs, search costs, and uncertainty. Indeed, with very similar alternatives, opportunity costs are likely to be higher than for very dissimilar alternatives, independent of the number of options, and the same is true for search costs and uncertainty (see also Fasolo, Hertwig, Huber, & Ludwig, 2009). From a conceptual perspective, this proposed multi-causation of mechanisms triggering too much choice—by number of alternatives, similarity of alternatives, amount of information, etc.—is intriguing, as it may point to a common underlying variable. We suggest that choice complexity is a plausible candidate, because more alternatives, higher similarity of alternatives, and more attribute information all affect the complexity of choosing. From this perspective, what drives too-much-choice effects is not the increase in the number of alternatives as such, but associated increases in choice complexity. Interestingly, this perspective also suggests that too-much-choice effects may be facilitated or hindered by other variables that influence choice complexity. The present contribution explores this possibility.

To investigate the hypothesis that other variables influencing choice complexity may facilitate or hinder too-much-choice effects, the present contribution focuses on the number of attributes that alternatives are differentiated upon. It is hypothesized that increases in the number of attributes are associated with increases in choice complexity, because the difficulty of making a selection increases with the number of non-redundant pieces of information that need to be evaluated. If choice complexity is high due to alternatives being differentiated on many attributes, we expect a too-much-choice effect. In contrast, if choice complexity is low due to alternatives being differentiated on few attributes, choice satis-

faction may not decrease with more alternatives to choose from; in fact, given that having more choice is also associated with advantages (e.g., higher chances of finding an ideal option), satisfaction may even increase the more alternatives are presented. Note that this moderation hypothesis is conceptually different from prior findings, as it does not focus on the evaluator (Chernev, 2003a, 2003b) or her or his motivation (Scheibehenne et al., 2009b), but on features of the choice set itself.

In sum, the present contribution extends prior research by suggesting that too-much-choice effects are driven by choice complexity. This extended perspective on too much choice allows for the prediction that other variables that likewise influence choice complexity, such as similarity of alternatives or amount of information, may propel or hinder the emergence of too-much-choice effects. The following two experiments investigate this moderation hypothesis by focusing on features of the choice set itself, namely the number of attributes that alternatives are differentiated on.

## 2. Experiment 1

Experiment 1 was designed to investigate whether a too-much-choice effect occurs when alternatives are differentiated on many attributes, but not when alternatives are differentiated only on few attributes. To this end, the standard too-much-choice design (Iyengar & Lepper, 2000), in which participants are offered a choice out of either few or many alternatives, was orthogonally crossed with a manipulation of the number of attributes that alternatives are differentiated upon.

### 2.1. Method

#### 2.1.1. Participants

A sample of 121 University of Mannheim students participated in return for a payment of 1.50€ (2 US dollars at the time). Forty-three percent of participants were female and the average age was 22.3 years ( $SD = 2.8$ ).

#### 2.1.2. Design and manipulations

Participants were randomly assigned to a 3 (number of alternatives, 6 vs. 15 vs. 30)  $\times$  2 (number of attributes, 1 vs. 6) between-participants factorial design. The conditions of 6 and 30 alternatives were chosen to closely replicate the experiments reported by Iyengar and Lepper (2000). The conditions of 1 vs. 6 attributes were chosen based on independent pre-testing, which revealed a considerable difference in perceived choice complexity.

#### 2.1.3. Procedure and materials

After entering the laboratory, participants were greeted by the experimenter and thanked for their participation. Participants received a questionnaire and a paper chart on which several colored pens were displayed (the display). Pens were used as choice alternatives because both the number of alternatives and the number of choice attributes can easily be varied. Furthermore, we hypothesized that the likelihood of preference matching would be low for colored pens (for details on this reasoning, see Iyengar & Lepper, 2000). Participants only saw the displays and not real products.

**2.1.3.1. Choice task.** Participants' first task was to choose the one colored pen they liked best from a given display. They were asked to choose the pen as if they were shopping for it. Before seeing the display, participants were informed about the attributes on which the pens were differentiated, including a one-sentence description about what each attribute meant and what the different attribute levels were.

Download English Version:

<https://daneshyari.com/en/article/920204>

Download Persian Version:

<https://daneshyari.com/article/920204>

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