

Choice overload among children: How set size affects children's perceived choice quality

עומס הבחירה בקרב ילדים:

איך גודל הסט משפיע על תפיסת איכות ההחלטה של ילדים

Student: Hilla Schupak

Supervisor: Prof. Eyal Pe'er

Abstract

Parents and caregivers often offer children various choice opportunities. For example, children may be asked to choose their breakfast cereals from the few options in their home kitchen or from a wide assortment at the supermarket. The size of a choice set may influence the child's choice quality and how satisfied they will feel from their choice in two opposing ways. On one hand, choosing from many options may enhance the child's chances to find their optimal alternative. On the other hand, larger sets can also reduce post-choice satisfaction if they lead to *choice overload*. Such choice overload has, until now, mainly been studied among adults and its occurrence was primarily attributed to either a) increased cognitive demands of larger sets, or b) increased feelings of regret from the (more) unchosen options. These drivers of the choice overload effect – cognitive ability and feelings of regret – have been found to evolve during childhood years, suggesting that children's reactions to various set sizes may also oscillate as they grow older and experience cognitive and emotional development. Although children face many decision tasks from a very young age, the question of how cognitive ability and regret interact with the size of choice set to affect their perceived choice-quality has remained unrequited.

Providing choice opportunities is a prevalent expression of parental autonomy-supportive behavior that has been strongly recommended by many educational experts. According to the Self-determination theory, the child's sense of autonomy and competency are two of the crucial components of healthy psychological development. However, if a child feels overwhelmed by a choice set, or frustrated with the difficulty of the choosing experience, the excessive choice provision might hinder their sense of autonomy and competency. Hence, providing choice might not necessarily lead to enhancing the child's sense of autonomy and

competence. The child's subjective experience from the choice situation could prove to determine whether the choice provision would be beneficial to them or not.

Studying the effects of choice set size on children's choice experience and choice quality may broaden and deepen our understanding of children's decision-making processes, and could also promote a more educated use of choice provision. The way set size affects children's choice quality may vary due to relevant age-related developments. The more capable children are, the fewer negative influences are expected, and hence the offered choice opportunities may actually be empowering for them. However, children are not always free to choose according to their abilities, rather they face choice opportunities that are often designed by their caregivers. Caregivers' lay beliefs concerning the child's ability to cope with a large choice set, along with situational stress-enhancing factors, were found to influence caregivers' autonomy-supportive behaviors and choice provision amongst them. These factors may affect caregivers' preferences regarding the choice set they would offer and thus, may have considerable influence on the child's final choice quality. A good match between the offered choice and the child's relevant abilities would enhance the chances that the choosing experience would be empowering for the child. The current research aimed to explore both the ability of children to cope with varied set sizes and caregivers' considerations and beliefs to the provision of large choice sets, also under time pressure conditions.

To examine the effect of set size on children's post-choice satisfaction, a valid measure for children's subjective choice quality first had to be developed and validated. While valid tools for children's inner states are common in medicine (e.g., for pain assessment) and psychiatry (e.g., for anxiety intensity assessment), the research on children's decision-making and education mostly relied on observations or caregivers' reports. The current study's first goal was to design and evaluate a post-choice satisfaction measure that could be used in the subsequent research. In Chapter 1, I report on a study in which I developed and evaluated both a behavioral (willingness to exchange) and a self-report (visual analogue scale) measure for young children's perceived choice-quality, and examined the measures' validity among the different age groups.

These measures enabled me to examine the main goal of my research, which was to study children's ability to choose satisfactorily from varied set sizes. In Chapter 2, I report on a large-scale study in which children from three age groups were asked to choose a prize from assortments of various sizes. Preschoolers showed a choice overload effect – manifested as lower satisfaction when choosing from larger sets – but only if their cognitive ability was average or lower relative to their peers. First graders' reactions to set sizes were similar to those

of preschoolers, but the negative effects of the larger set sizes were not significant. Fourth graders, in contrast, showed an opposite effect, reporting higher satisfaction as set size increased. Because the ability to feel regret is known to evolve only after preschool age, these results challenge the regret-based explanation for the choice overload phenomenon. These results also support a cognitive-based explanation for choice overload. The negative influence of larger set size among preschoolers did not occur if the child's cognitive inhibition ability was high, and fourth graders (who are typically more cognitively mature than preschoolers) were even positively affected by increases in set size. This suggests that increases in cognitive demands play a key role in the mechanism underlying the choice overload phenomenon.

The final goal of my research was to evaluate caregivers' beliefs in children's ability to satisfactorily choose from large choice sets and their effects on caregivers' choice-provision preferences. In Chapter 3, I report on two studies showing that most caregivers hold a belief that larger set sizes would, on average, lead to longer deliberation time across all age groups, but do not expect set size to affect children's post-choice satisfaction. Caregivers generally recommended giving children the opportunity to choose, but also rigidly limited their recommendations to relatively small set size options. Exploring the origin of their rather narrow choice set recommendation I unraveled a major influence of time pressure on caregivers' recommendations - caregivers tended to prefer the larger choice set for older children - but only when there were no time constraints. Under time pressure, however, caregivers tended to offer the same set size, regardless of the child's age.

The overall findings of this research contribute to the understanding of children's decision-making abilities and show how set size affects children's choice quality. The evidence for varied effects of set size on children's choice quality across age groups further emphasizes the importance of well-adapted choosing situations. This research also contributes to the accumulative evidence that young children may validly report their own inner states and provides a valid measurement for children's perceived choice quality. Using this measure may promote the more general goal of exploring children's sensitivity to many other choice features, and further specify the recommendations for well-adapted choice opportunities. However, the central role of time pressure on parental choice opportunities provision suggests that a better understanding of children's abilities might not necessarily promote actual well-adapted choice provision. I thus advocate and recommend further efforts into understanding the circumstances under which caregivers could genuinely offer their children well-adapted choice opportunities that would promote children's sense of autonomy and competence.

Being integrated with other considerations regards choice provision, my research findings may promote some practical issues such as assisting parents and educators that wish to better fit choice situations to their children. From a policy perspective, this research suggests that children's vulnerability to choice set size should also take into account when designing consumer protection policies. The current research offers insights for both parental behavior and children's performance in the common daily situation of choosing from varied choice sets. Exploring children's choosing situations from these two perspectives, parental behavior and children's relevant abilities, could thus help promote children's current behavior and well-being, as well as their healthy development towards becoming autonomous adults.