

Great Expectations?! Assortment Size, Expectations and Satisfaction*

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ABSTRACT

Recently, researchers have challenged the idea that greater choice is always desirable, by showing that larger assortments can increase choice deferral and decrease post-choice satisfaction. That research suggests overload as the driving mechanism for these negative effects of large assortments. Our research also investigates post-choice satisfaction effects, but suggests a different underlying process. Our findings demonstrate that larger assortments can raise consumers' expectations of the degree of preference match they can achieve. Disconfirmation of these expectations can subsequently reduce choice satisfaction. Results from three studies find support for this expectation-based process and establish this mechanism in addition to an overload-based explanation.

Imagine starting your first job and being able to afford the (used) car of your dreams. One of the authors of this paper found herself in such a situation a number of years ago and started looking at dealerships around her college town. Not having much success finding her desired car locally, she began searching the Internet for suitable options. Certainly, she thought, the nearly infinite reach of the Internet would allow her to find not only the model, but also the right color, interior, engine, etc., i.e., the perfect match for her. However, after searching every dealership of her preferred manufacturer in the U.S. as well as other vendors such as Carmax, she only found two cars that even matched her two most important criteria. She bought one of them. While she would have never been able to find anything similar to this car where she lived, she could not help feeling a little dissatisfied that, given the large assortment available online, she did not find an even closer match for her preferences.

Recently, researchers (e.g. Chernev 2003a, Gourville and Soman 2005, Iyengar and Lepper 2000, Schwartz 2004) have demonstrated that there are downsides to larger assortments, that is, that consumers can experience too much choice. Their research shows that larger selections decrease purchase likelihood as well as satisfaction (Iyengar and Lepper 2000) and decision confidence (Chernev 2003). They propose choice overload and heightened decision complexity as the underlying drivers of these effects. As our anecdote illustrates, we contribute to this area of research by proposing a novel mechanism that can explain negative effects of larger assortments on satisfaction.

Common beliefs would suggest that consumers should be more satisfied with their choice after choosing from larger assortments due to a greater ability to preference match. Contrary to these common beliefs, however, we show that consumers may be less satisfied with their choice if that option was chosen from a larger as opposed to a smaller assortment. Indeed, we

demonstrate that consumers' expectations regarding their ability to match their preferences can actually leave them less satisfied. Our findings reveal that, as in the above anecdote, larger assortments raise consumers' expectations of the degree of preference match they can achieve. As a result, expectation-disconfirmation may reduce satisfaction. While prior research has focused solely on overload, our findings indicate that our proposed expectation-disconfirmation mechanism acts independently of and in addition to any effects of overload that may be present.

THEORETICAL BACKGROUND AND PROPOSED MECHANISM

While Henry Ford was happy to sell consumers whatever car they wanted as long as it was black, having many choices is deemed one of the paramount achievements of developed market economies. Manufacturers enlarge product lines in order to prevent competitors from gaining market share (Schmalensee 1978). But what exactly are the expected effects of larger assortments for consumers?

Benefits and costs of choosing from larger assortments

There can be many reasons why consumers prefer choosing from larger, more varied assortments such as uncertainty with regard to their own future preferences (Simonson 1992) and anticipated habituation (Ratner, Kahn, and Kahneman 1999). First and foremost though, consumers value selection because they expect to choose more advantageously from larger as opposed to smaller sets. Rational theory supports these beliefs, as having access to a greater number of options should increase the degree of preference match possible (Hotelling 1929).

However, some of these preference matching benefits may not materialize at all or not to the degree that consumers expect them to (Lehmann 1998). First, consumers may in fact not choose *objectively* better matching options from larger assortments because they do not find these options unless they have access to screening tools supporting their search (Diehl, Kornish and Lynch 2003). Second, consumers may not even *subjectively* perceive any benefits from choosing. Benartzi and Thaler (2002) show in an investment context that consumers do not necessarily perceive the options they chose as a better preference match than what the median consumer would have chosen. Third, benefits of choice seem to be limited to situations where people choose from attractive options (Botti and Iyengar 2004). As a whole, then, we have reason to doubt that consumers consistently reap the expected benefits of large assortments.

Worse yet, not only may consumers not benefit from larger assortments, choosing from larger assortments may actually have direct negative effects for consumers and retailers. Large numbers of options may overwhelm decision makers and can increase decision difficulty (e.g. Huffman and Kahn 1998, Gourville and Soman 2005). As such, encountering larger selections can actually reduce purchases within a given product category (Iyengar and Lepper 2000). Not purchasing reduces marketers' profits, but it may also be costly to consumers, for example, when a larger number of available investment options reduces participation in 401K plans (Iyengar, Huberman and Jiang 2004). Even if consumers do make a choice from larger selections, feeling overwhelmed may affect consumers' confidence in having made a good decision (Chernev 2003a) and may in fact reduce decision quality because decision makers adopt more alternative-based, non-compensatory decision processes (Chernev 2003b). As a whole, this stream of research places the blame for the disadvantages of larger assortments nearly completely on the experience of overload.

Our paper contributes to the research interested in this “too much choice” phenomenon in a number of different ways. First, we demonstrate that choosing from large assortments can have negative effects on satisfaction with the chosen option, thereby contributing to our understanding of post-choice consequences of larger assortments. Second, by examining the effect of assortment size on expectations we identify an unexplored mechanism, expectation-disconfirmation, that can explain how larger assortments can decrease satisfaction. Third, in addition to providing process evidence for our proposed mechanism, we also assess the proposed expectation-disconfirmation process vis-à-vis previously suggested overload effects. In this research, we directly measure both overload and expectation-disconfirmation, in order to depict the role of each in driving consumers’ satisfaction.

Conceptual Framework

Satisfaction. Prior research demonstrating downsides of larger assortments has focused primarily on choice deferral (Iyengar and Lepper 2000, Iyengar and Jiang 2004) and switching (Chernev 2003 b). However, a few studies (Bernartzi and Thaler 2002, Iyengar and Lepper 2000, study 3, Chernev 2003 a) also investigated downsides of larger assortments that may materialize even after consumers actually make a final choice. We contribute to research on post-choice effects by showing that larger assortments can decrease satisfaction. While initial product choice is important, post-choice evaluations drive repeated choice and thus affect a company’s long-term profitability (Newman and Werbel 1973) as well as customer retention (Bolton 1998). Also, we cannot assume that factors impacting choice or choice deferral will necessarily be identical to those affecting satisfaction (e.g. Oliver 1996, Thompson, Hamilton, and Rust 2005). Therefore,

demonstrating negative effects of larger assortments on satisfaction increases our understanding of the psychological processes and the managerial implications of larger assortments.

Consumer Expectations. According to the expectation-disconfirmation model (Oliver, 1980), satisfaction is intimately linked to expectations. Expectations are predictions about the future, the focus of which can range from general beliefs about the product as a whole to anticipating specific product characteristics (Oliver 1980). The expectations we are interested in are consumers' predictions about how closely they will be able to match their preferences when choosing from a given set of options. Economic models suggest that consumers should achieve a better preference match when a larger number of options is available (Hotelling 1929, Kuksov and Villas-Boas 2006). Rationally, having access to a greater number of options should also make consumers more demanding and less willing to compromise (Bakos 1997). We believe consumers will hold beliefs consistent with these rational models. That is, consumers' expectations of their ability to match their preferences will be an increasing function of assortment size.

Expectation-Disconfirmation. The expectation-disconfirmation model has been central to the study of satisfaction. At its core, this model asserts that satisfaction is a function of comparing *perceived* preference match to *expected* preference match. When perceived and expected preference match do not align, consumers experience disconfirmation (e.g., Boulding, Kalra, Staelin and Zeithaml 1993). Based on this framework our central prediction is that choosing from larger assortments can lead to greater expectation disconfirmation and that subsequently this effect of assortment size on expectations-disconfirmation can lower satisfaction.

Two components affect disconfirmation: a priori expectations of the attainable preference

match and a posteriori perceptions of the realized preference match. Importantly, in our research we are primarily interested in isolating the effect of assortment size on *expectations* and satisfaction. Our research will control for either objective or subjective realized preference match either statistically or through experimental design. Doing so will allow us to isolate the effect of assortment size on satisfaction via a priori expectations.

Overload. Prior research has suggested that “overload” may be to blame for consumers’ lower likelihood of purchasing from larger assortments (e.g. Iyengar and Lepper 2000 study 1). In addition, overload has been shown to also affect post-decision outcomes such as satisfaction with the chosen option (Iyengar and Lepper 2000, study 3) or choice confidence (Chernev 2003a). As such when examining the effect of larger assortments on satisfaction, we will also pay attention to overload as another factor that may decrease satisfaction.

While caused by similar environmental conditions (e.g. greater number of options) it has been suggested (e.g. Botti and Iyengar 2006) that there exist two different types of overload: information overload and choice overload. While information overload is fundamentally more cognitive in nature, choice overload has been suggested as being more affective (e.g. Botti and Iyengar 2006; Iyengar and Lepper 2000). While it would be theoretically important to in fact empirically distinguish these two types of overload, in our paper, we merely want to establish that our proposed mechanism, expectation-disconfirmation, affects satisfaction, regardless of whether or not overload exists and whether or not such overload is predominantly affective or cognitive in nature. As such, we create situations where overload either does not play a role or where we control for overload using both affective and cognitive measures.

In summary, we predict that choosing from larger as opposed to smaller assortments can leave consumers less satisfied due to their a priori expectations. We argue that larger assortments

raise consumers' expectations of the preference match they are able to achieve when choosing from larger sets and that consumers overestimate the extent to which they will be able to choose more advantageously (i.e. are able to find a better preference match). Finally, we predict that larger as opposed to smaller assortments can decrease customer satisfaction due to expectation-disconfirmation and that this effect of expectation-disconfirmation is operating independently of overload.

We test these predictions in three experiments. Study 1, a scenario study, establishes that people are less satisfied with the same, well-fitting option when the option ostensibly came from a larger as opposed to a smaller assortment. In addition, Study 1 shows that this effect is due to expectation-disconfirmation, under conditions when no influence of overload is possible. Study 2 replicates this finding in a real choice setting, where participants were exposed to a large number of options and asked to choose one option for their own use. In Study 3, we further test the robustness of the expectation-disconfirmation mechanism. In a situation where overload is clearly at work, we still show the mediating effect of expectation disconfirmation on satisfaction.

STUDY 1

The two studies described below establish that expectations rise as a function of assortment size (Study 1A) and that satisfaction with an identical option is reduced due to expectation-disconfirmation when that option is believed to have come from a larger as opposed to a smaller assortment (Study 1B). 108 undergraduate students participated in study 1A and 172 undergraduate students participated in study 1B as part of a data collection session that included a series of unrelated studies.

Design and Procedure

The studies followed a two group between-subject design, with size of the assortment from which the target option was ostensibly chosen manipulated at two levels (25, 250).

Participants faced an ecologically valid principal-agent task that has been used in prior research (Diehl 2005). Participants imagined they had to select a birthday card to give to a male coworker. Participants read the following description of the coworker's preferences:

Imagine you need to get a birthday card for a male coworker to wish him happy birthday. You do not know him very well and thus are afraid of offending him by being too sarcastic or suggestive. Therefore you decide to send him a more generic card. You are looking for a card that is nice but not too personal and that would be considered tasteful by most people.

Turning to the next page they were told “You go to a small [large] card shop to find a card for your coworker. You browse their birthday section, which has about 25 [250] cards to choose from.” In Study 1A participants stated their expectations on how likely they felt it would be that they find the ideal card for their coworker. Though using the same scenario, Study 1B differed in that participants did not state their expectations since this question would have heightened the salience of such expectations and could have altered the subsequent decision process (Ofir and Simonson 2007, 2001). Instead, participants in Study 1B moved to the next page where all participants saw a single card, identical for all participants (see figure 1), and were asked to imagine that they had selected that card for their coworker. They then responded to the satisfaction and expectation-disconfirmation questions as described below.

 Figure 1 about here

The card presented in the scenario was selected from a set of 250 available cards previously scored in terms of their fit with the coworker's preferences. Scores indicating preference fit ranged from 1 to 6.43 ($M = 2.83$, $SD = 1.32$) in the overall set, with higher values indicating better fit. The card used in this study was one of the 2 best cards and received a mean rating of 6.43 by the judges (for further details of the scoring procedure see Diehl, Kornish and Lynch 2003).

Dependent Measures

Study 1A. Participants' expectations of finding a card that matched the coworker's preferences was assessed by asking "How likely do you think is it that you'll find the ideal card for your coworker?" on a 9-point scale ranging from not at all (1) to extremely likely (9).

Study 1B. Participants indicated their satisfaction with the chosen card by answering the question "How satisfied would you be with this card?" on a scale from 1 (not at all satisfied) to 9 (extremely satisfied). We also measured perceived fit with the coworker's preferences, by asking respondents the question "Overall, how well does this card fit your coworker?" on a scale from 1 (does not fit at all) to 9 (fits extremely well). Note that the latter question assesses perceived preference fit. The former question reflects the outcome of *integrating* a priori expectations and posteriori perceptions. Finally, our measure of expectation-disconfirmation was modeled after a measure suggested by Swan and Trawick (1981). We asked respondents to rate the target card on a 9-point scale anchored at 1 (much worse than I expected) to 9 (much better than I expected), with lower numbers indicating greater negative disconfirmation.

Note that in study 1A we directly measure expectations *before* the choice, testing for the effect of assortment size on expectations. However, prior research has shown that stating expectations fundamentally changes the subsequent decision process (Ofir and Simonson 2007, 2001). Since we are interested in the underlying process in the absence of stating expectations explicitly, in study 1B and subsequent studies we use this a posteriori measure of expectation-disconfirmation to test our proposed mechanism.

Results

Study 1A. As predicted, we find that assortment size affects participants' expectations of finding a better preference match ($F(1,106) = 18.83, p < .0001$), such that participants feel there is a greater likelihood of finding the ideal option from a larger ($M = 6.87$) as opposed to a smaller ($M = 5.22$) set.

Study 1B - Perceived Preference Fit. Regardless of the condition participants were assigned to, they perceived the card presented to them as being an equally good fit for the target consumer ($M_{Large} = 5.64, M_{Small} = 5.78, F(1, 170) = .05, p > .8$). As such, any differences we may find with regard to satisfaction are not driven by differential perceptions of fit in the two experimental conditions.

Satisfaction. As would be expected, perceived fit had a significant positive effect on satisfaction ($b = .45, F(1, 169) = 233.66, p < .0001$). In addition, however, size of the underlying assortment also had a significant, yet negative effect on satisfaction with participants reporting lower levels of satisfaction in the larger as opposed to the smaller assortment condition ($M_{Large} = 5.28, M_{Small} = 5.61, F(1, 169) = 4.7, p < .05$).

Expectation Disconfirmation. As in the previous analysis, we control for perceived fit on expectation-disconfirmation ($b = .67$, $F(1, 169) = 145.07$, $p < .0001$). Assortment size had an effect over and above perceived fit with the larger assortment leading to greater negative disconfirmation ($M_{Large} = 4.6$, $M_{Small} = 4.9$, $F(1, 169) = 3.78$, $p = .05$).

Mediation. We have shown that assortment size has a negative effect on satisfaction as well as expectation disconfirmation. Expectation-disconfirmation also has a significant effect on satisfaction ($b = .42$, $F(1, 169) = 53.34$, $p < .0001$). We estimated a model with satisfaction as the dependent variable and assortment size as well as expectation-disconfirmation as independent variables while controlling for perceived fit ($b = .45$, $F(1, 168) = 63.02$, $p < .0001$). In this model expectation-disconfirmation still has a significant effect ($F(1, 168) = 46.52$, $p < .0001$), while assortment size no longer remains a significant predictor ($F(1, 169) = 1.94$, $p > .15$). The Sobel test ($z = 1.86$, $p = .06$) as well as estimating the confidence interval around the indirect effect of size on satisfaction as mediated by expectation-disconfirmation (-0.34 ; $-.003$, Preacher and Hayes 2004, 2006) further support the conclusion that the effect of assortment size on satisfaction is mediated by expectation-disconfirmation.

Discussion Studies 1A and 1B

These two studies provide initial support for our predictions. In Study 1A we first confirm that larger assortments indeed cause consumers to have higher expectations about the preference match they will be able to achieve. That is, this study demonstrates that consumers believe that larger assortments will increase the degree to which they can match their

preferences. Though rational theories would also have predicted this relationship, it was important to find evidence supporting this contention using a direct measure of expectations.

Study 1B then demonstrates that larger assortments can decrease satisfaction because consumers experience more negative disconfirmation when the option is believed to have come from a larger as opposed to a smaller assortment. It is important to note that, irregardless of the assortment, participants perceived the card in and of itself to be an equally good preference match. This finding clearly demonstrates that it is not differential perceptions of preference fit between assortments that drive the observed negative effect on satisfaction. Rather, what drives satisfaction is the gap between the perceived outcome (i.e. preference fit), which is unaffected by assortment size, and what consumers expected to be possible, which is very much affected by assortment size.

Prior research suggested that choice overload is what causes negative consumer reactions to larger assortments even when they make a decision. The design of this study clearly shows that overload cannot be the only reason why larger assortments may lead to worse outcomes: In both experimental conditions participants evaluated only a single option. This task should be relatively easy to engage in and any difficulty arising from processing this option should be identical across the two conditions. Results from this study thus support our proposition that larger assortments can decrease satisfaction because larger assortments are more likely to cause expectation-disconfirmation independent of overload.

By design, participants did not decide on the focal option themselves. Since consumers have a preference for choosing themselves (Botti and Iyengar 2004), we wanted to replicate our findings in a situation where participants search through assortments of different sizes and select their own option. Also, in study 1, the preference fit of the target option was constant across both

conditions. While larger assortments may in fact not result in better preference matches (Diehl, Kornish and Lynch 2003), whether they do or not is an empirical question. Study 2 will present participants with more options in the larger than in the smaller assortment, thus providing participants with the opportunity of a greater preference match.

STUDY 2

In study 2, we sought to replicate our previous findings that consumers are less satisfied with options chosen from larger assortments and that this negative effect of assortment size is driven by expectation-disconfirmation. We demonstrate this relationship in a situation where participants had many options to search through and choose from. In addition, Study 2 allowed participant to select the option they liked best based on their own preferences, rather than those of another person.

Design and Procedure

This study followed a two group between-subjects design with assortment size (300, 60) manipulated at two levels. Participants were asked to search through a set of computer wallpapers (background images for the computer screen) and select one that they later on could receive via email for their own use. 65 undergraduate students who stated that they owned a computer participated in this study in return for extra credit. Students with computers were selected to increase relevance of the task in general and also for their choice to have real consequences, since participants could actually receive their chosen wallpaper.

Participants were told that they would be searching for a wallpaper for their computer. Out of six provided categories (Abstract Designs, Animals, Nature, Travel, Sports & Entertainment, Vehicles) we first asked participants to indicate which category the wallpaper they were looking for would fall into. Participants also had the option of selecting an ‘other’ category and subsequently defining their own category. The reason for having participants think about these categories was to set realistic limits about the types of available wallpapers since in a pre-test many participants indicated they were looking for types of wallpapers (e.g. swimsuit models) that were not part of our assortment. In order to further increase task involvement, we then asked participants to briefly draw and describe the wallpaper they were looking for on a piece of paper.

Next, participants were presented with the assortment of wallpapers downloaded from various Internet sites. Wallpapers had been selected to cover a varied range of interests and to be of similar picture quality (i.e. similar resolution). Participants in the large assortment had access to 300 wallpapers equally distributed across the six categories mentioned above. For each participant in the small assortment condition, a unique assortment of 60 wallpapers was created by drawing 10 wallpapers from each of the six categories at random. While 60 wallpapers may not seem to be a small assortment, a pre-test had indicated that students perceived this to be a small number given the product category. Though empirically that was not the case, we had thought participants might restrict their search and choice only to their initially identified category. Therefore, we wanted to ensure that participants also faced a sufficiently large number of options when choosing just within a single category.

Figure 2 about here

Participants searched through and chose an option at their own pace. Options were listed by their category indicator and a number (e.g. Travel1, see figure 2 A). In order to view an option, participants had to click on this name and a thumbnail picture of that option appeared on the screen (see figure 2B). Participants could then either go back to the assortment list or choose the option they currently were looking at. After making a selection, participants saw their chosen wallpaper in full screen display. This was done to allow participants to experience their chosen option the same way they would after installing it on their home computer. After viewing the picture, participants responded to the dependent measures and manipulation check and provided their email address in order to receive their chosen wallpaper. We also collected SAT scores as part of the overall session to be used as a covariate, since prior research suggests that academic achievement may be related to outcome satisfaction (Iyengar, Wells and Schwartz 2006).

Dependent measures and manipulation check

Participants responded to the question “How satisfied are you with your chosen wallpaper?” by adjusting an unnumbered slider anchored at “not at all satisfied” and “extremely satisfied”. Slider position was later translated into a number between 0 and 100, with higher numbers indicating greater satisfaction. We also measured decision difficulty by asking participants to answer the question “How difficult was it to decide which option to choose?”. Participants adjusted an unnumbered slider anchored at “not very difficult” and “very difficult”. Again, slider position was translated into a number between 0 and 100 with higher numbers indicating greater decision difficulty. Note that feelings of difficulty assessed by this measure could be driven by either cognitive or affective overload. In fact, very similar measures of

difficulty have been used previously to assess the more cognitive effect of larger choice sets (Bettman, Johnson and Payne 1990) but also the more affective consequences of having a greater number of options to choose from (Iyengar and Lepper 2000)¹. As such, our measure should be able to detect overload regardless of its nature.

The expectation-disconfirmation measure used in Study 1B was collected here as well. In addition, the computer recorded whether the chosen wallpaper came from the category participants had indicated initially as the one they were looking for. This allows us to test whether larger assortments provide a better preference match and if so, whether this effect of preference match fully determines satisfaction with the chosen option. In order to verify that participants perceived the two assortments to be differentially large, we administered a manipulation check taken from Iyengar and Lepper (2000). Participants responded to the statement “The selection had many options to choose from” using a 7-point scale labeled “too few wallpapers to choose from” (1), “the right number of wallpapers to choose from” (4), and “too many wallpapers to choose from” (7). Further, the computer recorded the time participants spent searching and also the unique as well as the total number of options they inspected.

Results

We estimated a model with assortment size as the independent variable, controlling for other variables as explained below. For means see table 1.

¹ Bettman, Johnson and Payne (1990) asked participants “to rate how difficult the choice was to make on a scale ranging from 0 (not difficult at all) to 10 (extremely difficult)”. Iyengar and Lepper (study 3, 2000) assessed difficulty by asking “Did you find it difficult to make your decision of which chocolate to pick?” using a scale of 1 (not at all) to 7 (extremely).

Manipulation Check. The manipulation check verified that participants perceived the larger set as significantly bigger than the smaller set ($M_{\text{Large}} = 4.80$, $M_{\text{Small}} = 3.55$, $F(1,63) = 10.72$, $p < .01$).

Search. Assortment size did not have a significant effect on total search time ($F(1, 63) = 1.65$, $p > .2$) or total number of options seen ($F(1, 63) = 2.58$, $p > .11$) and only had a slight effect on the number of unique options seen ($F(1, 63) = 3.63$, $p < .07$, see table 1). Further, time spent searching ($b = 2.41$, $F(1, 63) = 1.55$, $p > .2$), total number of options seen ($b = .13$, $F(1, 63) = 1.74$, $p > .19$), and unique options seen ($b = .08$, $F(1, 63) = .58$, $p > .4$) did not have a significant effect on decision difficulty. While it may seem surprising that at this level of search, we did not see stronger effects on decision difficulty, this lack of a relationship could be due to the nature of the stimuli. The target stimuli were pictures which can be processed quickly and holistically, explaining why greater search was not very taxing to participants even though they processed a fair number of options.

Decision Difficulty. In line with our findings on search, we did not find a significant effect of assortment size on decision difficulty ($F(1,63) = 0.68$, $p > .4$, $M_{\text{Large}} = 50.50$, $M_{\text{Small}} = 44.27$). Still, we control for decision difficulty in the analysis to establish that expectation-disconfirmation has an effect on satisfaction over and above the effect of any difficulty experienced by participants.

Category Match. Participants were somewhat more likely to choose from the category they had indicated initially when choosing from the large (53 %) as opposed to the small assortment (34%), though this difference is not significant ($\chi^2 = 2.15$, $p > .14$). This finding provides some indication that having access to more options may indeed have allowed participants to find something closer to what they were looking for.

Satisfaction. Assortment size had a significant effect on satisfaction ($F(1,62) = 4.72, p < .05$). Participants who chose from the larger assortment were less satisfied with their chosen option ($M_{\text{Large}} = 71.25$) than those choosing from the smaller assortment ($M_{\text{Small}} = 84.97$), even though all options available in the small assortment were also present in the larger assortment. Decision difficulty did not have an effect on satisfaction with the chosen option ($F(1, 63) = 0.13$). Also, participants that chose an option from the initially indicated category ($M_{\text{Match}} = 82.21$) were slightly but not significantly more satisfied than those choosing from a different category ($M_{\text{No Match}} = 73.47, F(1,63) = 1.84, p > .17$). Importantly, controlling for difficulty and the effect of category match, assortment size still had a significant on satisfaction ($F(1,60) = 5.73, p < .02$).

Expectation disconfirmation. In line with Iyengar, Wells and Schwartz (2006) we find that those with higher SAT scores experienced slightly more negative expectation-disconfirmation than those with lower scores ($b = -.003, F(1,61) = 2.81, p < .1$). Category match had a significant effect on expectation-disconfirmation, such that greater negative disconfirmation occurred when participants did not end up selecting an option from the category they had initially in mind ($M_{\text{No Match}} = 5.05, M_{\text{Match}} = 6.17, F(1,61) = 5.02, p < .05$). On top of these effects though, a larger as opposed to a smaller assortment size also created more negative disconfirmation ($M_{\text{Large}} = 5.28, M_{\text{Small}} = 5.89, F(1,61) = 4.35, p < .05$)².

Mediation. We already established that assortment size affects satisfaction as well as the potential mediator, expectation disconfirmation. Expectation-disconfirmation on its own also has a significant effect on satisfaction ($b = 8.80, F(1,63) = 53.55, p < .0001$). Finally when both assortment size and expectation-disconfirmation are used as predictors of satisfaction, size no

² The interaction of size and category match was not significant ($F(1, 60) = .66, p > .4$) and thus was not included in this analysis.

longer is a significant predictor ($F(1,59) = 1.62, p > .2$), but expectation-disconfirmation still has significant influence ($F(1,59) = 46.4, p < .001$). The Sobel test ($z = -2.02, p < .05$) as well as estimating the confidence interval around the indirect effect of assortment size on satisfaction (-19.11; -1.73 Preacher and Hayes 2004, 2006) further support the conclusion that the effect of assortment size on satisfaction is mediated by expectation-disconfirmation.

Discussion Study 2

Study 2 replicates the pattern of results found in Study 1B using a preferential choice task where participants searched for and selected an option for their own use. In this richer environment, we find additional support for our prediction that larger assortments can decrease satisfaction with the chosen option and that this effect is mediated by expectation-disconfirmation.

Unlike study 1, this design afforded participants choosing from the larger assortment with a higher likelihood of matching their preferences. Indeed, participants choosing from the large assortment were more likely to choose within the category they had a priori identified as their favorite category and choosing from that target category increased satisfaction. Interestingly though, we still find larger assortments to decrease satisfaction, despite the fact that participants in the larger assortment condition seem to have achieved a closer preference match.

Study 2 demonstrates the effect of size on satisfaction controlling for decision difficulty. However, in this study, difficulty did not differ significantly between conditions and also was only marginally affected by search. Participants may not have experienced any difficulty or overload because the visual target stimuli could be processed quickly and easily. The fact that

overload is not as severe as expected may be the case for a wider range of categories that are evaluated primarily visually and that the consumer may also be highly involved with (e.g. wall paint, nail polish, artwork, jewelry, etc.). Information overload has often been demonstrated in product choices where the product is multidimensional (e.g. Keller and Staelin 1987). In line with this prior work, in study 3, we therefore change the stimuli to multi-attribute products (camcorders) in order to increase decision complexity.

Alternately, perceived difficulty may not have differed between assortments because participants were able to stop searching at any point and may just have ended their search when they started to feel overloaded. In addition, allowing participants to search freely may not only have erased overload differences but may also have created uncertainty about the unsearched options and thus may have affected satisfaction. Addressing both concerns and in line with prior research (e.g. Iyengar and Lepper 2000, Chernev 2003a), study 3 will expose participants to the entire set of options available to them before they make a decision thus eliminating uncertainty about unseen options.

STUDY 3

We believe that larger assortments can have a negative effect on satisfaction through two parallel processes: Expectation-disconfirmation and overload. While overload has been suggested by many researchers as a very likely explanation of choice deferral and dissatisfaction, only a handful of studies have explicitly measured the construct. As mentioned previously, choice difficulty has been used as a measure of affective as well as cognitive processes (Bettman, Johnson, and Payne 1990; Iyengar and Lepper study 3). Other affective responses assessed were

the feelings of being overwhelmed or frustrated (Iyengar and Lepper study 3), while confusion was a cognitive response frequently measured (e.g., Huffman and Kahn 1998; Jacoby, Speller, and Kohn 1974; Malhotra 1982). In study 3 we will assess overload using a multi-item measure that spans these different dimensions. This measure will help us establish our expectation-disconfirmation mechanism in the presence of overload, whether overload is more cognitive or affective in nature.

Also, in our studies thus far, we have always measured satisfaction with the chosen option first before assessing overload. This procedure did not allow participants to voice any feelings of overload prior to reporting choice satisfaction. As such, if the task created any feelings of overload, this negative meta-cognitive experience may have bled into the satisfaction judgment (e.g. Schwarz and Clore 1983). Though overload did not play an important role in either of the previous studies, in study 3, using multi-attribute stimuli we expect overload to differ as a function of assortment size. Therefore, in addition to assortment size, we also manipulate the order in which satisfaction and overload are measured, further establishing the robustness of our findings.

Design and Procedure

Study 3 followed a 2 (assortment size) by 2 (question order) between-subjects design. Assortment size was manipulated to be either small or larger. We also manipulated whether we first assessed the degree of overload participants experienced before asking them to indicate their satisfaction with the chosen option or vice versa. 170 undergraduate students participated in this

study in return for extra credit. Due to missing responses we will analyze data from only 165 respondents.

Figure 3 about here

In study 3 participants were given the task of selecting a camcorder on behalf of a coworker who had predefined preferences (principal agent task). Participants first read an explanation of four attributes (weight, resolution, memory, zoom) relevant to this purchase. They then learned about the target's importance weights along these dimensions (Weight: 10, Resolution: 20, Memory: 40, Zoom: 30). Camcorders in the catalog were described along the same dimensions. Each dimension was represented by a bar, with longer bars indicating higher values on a given characteristic (i.e. higher weight, higher resolution, etc., see figure 3)³. We calculated how well each option fit the coworker's preferences by applying a multi-attribute model to the preference weights and product characteristics and normalizing the preference fit scores so that 100 would indicate a perfect fit. The 32 camcorders created for this study scored between 19.6 and 85.5 with a mean of 50. We used these scores to match catalog versions as closely as possible in terms of average fit and range of fit as described below. We also use these scores to assess whether there are any differences in how closely the chosen option objectively fit the coworker's preferences.

Participants first saw an example of how camcorders would be described in the catalog (see figure 3) and then read the statement "You go to a store which has 8 [32] camcorders to choose from. We ask you to review the descriptions of these camcorders carefully and at your own pace." Participants either saw a small catalog of 8 options or a large catalog of 32 options

³ Note that for all attributes except for weight, higher values were preferred.

from a fictitious store (“Videocentral”). We used four different versions of the small catalog, rotating through all 32 camcorders. These were matched closely in terms of minimum, maximum and average product fit (see appendix A). The four small versions were combined in two counterbalanced orders to create two different versions of the large catalog. Each catalog had four products to a page and participants looked through the entire catalog at their own pace. When they had made a decision, participants wrote down the model number of the chosen option and then responded to the dependent measures. Participants answered the dependent measures in one of two orders. One group answered the satisfaction questions first before proceeding to the questions assessing felt overload. This order was the same order we used in study 1B and study 2. The other group first indicated how overloaded they felt and then indicated their satisfaction with the chosen option. Each set of questions, assessing overload or satisfaction, was presented on a separate sheet, with the instructions clearly indicating that participants should answer these questions only with regard to their chosen option or their decision making experience respectively without taking other assessments into account (see Pham et al. 2001 for related instructions, for our wording see Appendix B). This was done to assure that participants separated their judgment of satisfaction as much as possible from their assessment of overload. Following these sets of questions, participants responded to the expectation-disconfirmation measure and the manipulation check.

Manipulation Check and Dependent Measures

Manipulation check. In order to establish the differential size of the two assortments, participants responded to the question “When initially given the task to pick a camcorder from

Videocentral's assortment, do you think the store should have included more kinds of camcorders?" using a 9-point scale anchored at "I felt that I had too few camcorders to choose from" (1) and "I felt that I had too many camcorders to choose from" (9, Iyengar and Lepper 2000).

Satisfaction. Participants rated their satisfaction with their chosen camcorder on a 9-point scale with higher values indicating greater satisfaction. We also asked them to rate how confident they were that their coworker would be happy with their camcorder choice on a scale from 1 ("not at all confident") to 9 ("very confident"). This was done to ensure there was no confusion in the task that would have led to differences between their own choice satisfaction and how satisfied they expected the target person (i.e. coworker) to be. Both measures were highly correlated ($r = 0.84$), suggesting that respondents understood the task and indeed adopted the coworkers' preferences when making their choice. We averaged across both measures to create an index of overall satisfaction.

Overload. We used three different questions to assess overload. All responses were taken on 9-point scales anchored at "not at all" (1) and "very much" (9). Participants indicated to what extent they felt 1) overwhelmed and 2) confused in the decision process and 3) how difficult it was for them to decide which camcorder to choose. In fact, all three measures were highly correlated ($\alpha = .85$) and a principal component analysis suggested just one underlying factor that explained 79% of the variance. Thus we averaged across these three different measures to form an overall index of overload.

Expectation-Disconfirmation. The same measure as used in prior studies was taken to assess expectation disconfirmation.

Results

We estimated an ANOVA with size, order of question and the interaction of size by order of question as independent variables. We control for the kind of catalog each participant saw, which was estimated as version (1, 2, 3, 4, 5, 6) nested within size (small, large).

Manipulation Check. Participants perceived the assortment to be significantly bigger when choosing from the larger as opposed to the smaller catalog ($M_{\text{Large}} = 6.24$, $M_{\text{Small}} = 5.01$, $F(1,157) = 23.85$, $p < .0001$).

Preference Fit. We attempted to closely match the range and average fit of the options available from different catalogs, but, just as in real life, the larger catalog always provided the best option and also provided a larger number of very good options (see appendix A). Still, in this situation, size did not have a significant effect on the objective preference fit of the chosen option ($F(1, 157) = 0.01$, $p > .9$). There was, however, a significant, yet theoretically uninteresting main effect of catalog version ($F(1,157) = 3.61$, $p < .01$)⁴.

We also calculated the extent to which the chosen option deviated from the best fitting option available by subtracting the fit score of the chosen option from the maximum score of the respective catalog. This measure provides an objective measure of decision quality to assess information overload (e.g. Jacoby, Speller, and Kohn 1974; Malhotra 1982). Note, that this measure partials out the idiosyncratic differences among the small catalog versions. In addition, the measure also removes some of the advantages of larger assortments. Recall that the best option was always present in the large assortments, but only available in one small catalog. By

⁴Participants choose significantly better from one of the small catalog versions (catalog 2) than from any other small version ($F(1,157) = 10.62$, $p < .01$) and significantly worse from small catalog version 1 than from any other small version ($F(1,158) = 8.05$, $p < .01$). These effects were entirely a function of the best fit available in each catalog (see Appendix A).

taking this difference measure this particular advantage of large catalogs is removed. As such, this measure allows us to see the effect of assortment size on objective choice quality, conditional on the actual preference match attainable in the catalog.

This analysis reveals a significant negative effect of assortment size, indicating that those having access to more and more good options actually deviated further from the best available option ($M_{\text{Large}} = 6.53$, $M_{\text{Small}} = 1.97$, $F(1,157) = 19.00$, $p < .0001$). This finding replicates prior research in consumer behavior (e.g. Jacoby, Speller, and Kohn 1974) suggesting that access to more options creates information overload as evidenced by less optimal decisions. Thus, we can conclude that unlike Studies 1 and 2, Study 3 did effectively create overload.

Overload The subjective measure of overload also mirrors these findings. Given these more complex stimuli, the larger assortment indeed triggered greater feelings of overload compared to the smaller assortment ($M_{\text{Large}} = 4.90$, $M_{\text{Small}} = 3.40$, $F(1,157) = 29.27$, $p < .0001$). There was no interaction of size and order of questions asked ($F(1,157) = 0.58$, $p > .4$), however, question order did have a significant main effect on felt overload ($F(1,156) = 4.18$, $p < .05$). Participants felt more overloaded when responding to overload measures *after* indicating their satisfaction ($M_{\text{Satisfaction-Overload}} = 4.48$), compared to when answering overload measures first ($M_{\text{Overload-Satisfaction}} = 3.88$). While we expected that assessing overload first might change satisfaction, unexpectedly we instead find that asking participants to assess their *satisfaction* first heightens perceptions of overload.

Expectation disconfirmation. As before, we find a significant effect of assortment size on expectation-disconfirmation with more negative disconfirmation occurring in large compared to small assortments ($M_{\text{Large}} = 6.45$, $M_{\text{Small}} = 7.15$, $F(1,157) = 10.30$, $p < .01$). Question order

($F(1,157) = 0.01, p > .9$) and the interaction of question order and size were not significant ($F(1,156) = 0.05, p > .8$).

Satisfaction. Replicating findings from our previous studies, participants were less satisfied with their chosen item when choosing from the larger ($M_{\text{Large}} = 7.40$) as opposed to the smaller assortments ($M_{\text{Small}} = 7.81, F(1,157) = 4.18, p < .05$). Question order ($F(1,157) = 0.98, p > .3$) did not have a significant main effect on satisfaction. Importantly, question order also did not interact with assortment size ($F(1,157) = 1.57, p > .2$), suggesting that asking about feelings of overload before or after assessing satisfaction did not alter the effect of assortment size on satisfaction. Preference fit had a marginal and positive effect on satisfaction ($b = 0.03, F(1,156) = 2.91, p < .1$). Controlling for preference fit, we obtain the same main effect of assortment size ($F(1,156) = 4.18, p < .05$), no effect of question order ($F(1,156) = 0.69, p > .4$), and no interaction of question order and size ($F(1,156) = 1.37, p > .2$).

Mediation. We showed above that assortment size had a significant effect on satisfaction, as well as on subjective overload and expectation disconfirmation. Both expectation disconfirmation ($b = 0.48, F(1,163) = 61.86, p < .0001$) and overload ($b = -0.32, F(1,163) = 46.58, p < .0001$) by themselves also affect satisfaction. We added expectation disconfirmation and overload as potential mediators. Both expectation disconfirmation ($b = .41, F(1,156) = 45.76, p < .0001$) as well as overload ($b = -.27, F(1,156) = 30.93, p < .0001$) are significant predictors in that model, while assortment size no longer is a significant predictor ($F(1,156) = 2.10, p > .15$). Since we are interested in the effects of both potential mediators, we used the bootstrapping estimation suggested by Preacher and Hayes (2006) to estimate the effect of assortment size on satisfaction through overload and expectation disconfirmation simultaneously. Estimates of the confidence intervals around the *indirect* effects of assortment size on

satisfaction as mediated by overload (- 0.71; - 0.21) and expectation disconfirmation (- 0.55; - 0.10) suggest that both variables jointly mediate the effect of assortment size on satisfaction.

Discussion Study 3

Study 3 replicates and extends our findings in a setting where participants were exposed to all options before making a decision and thus were not uncertain about the preference fit of the available options. Further, we demonstrate the effect of assortment size on satisfaction in a situation where exposure to a greater number of options is indeed perceived as more difficult, overwhelming and confusing. Further, measuring the extent to which participants felt overloaded first before assessing satisfaction with the chosen option did not alter our previous findings. Finally, we demonstrate that the negative effect of assortment size on satisfaction via expectation-disconfirmation can occur independently of the effect of size on satisfaction via preference fit. We again show that assortment size affected expectation-disconfirmation and expectation-disconfirmation mediates the negative effect of assortment size on satisfaction. Extending findings from our previous studies, we establish that the expectation-disconfirmation mechanism we propose operates in parallel to effects of overload.

GENERAL DISCUSSION

Many retailers, particularly online, position themselves in terms of their assortment size, priding themselves as offering the largest selection in a particular category (e.g. Alba et al 1997).

A recent commercial for Autotrader.com exactly reflects this strategy. Showing a consumer getting in and out of one car after another, the narrator states:

“It’s the only place you can see almost three million cars. The largest selection of cars anywhere. And when you search from a selection this wide, no matter what you are looking for, on Autotrader.com, you find exactly the car you want. Just like that. So why go anywhere else?”

Our research suggests that highlighting the assumed relationship between a large assortment and consumers’ inherent expectations about preference match may have substantial downsides. While prior work has suggested that larger assortments can decrease satisfaction due to consumers’ feelings of overload, we show that larger assortments may have negative consequences that are not due to such overload. Findings from three studies show that consumers may be less satisfied when choosing an option from a larger compared to a smaller assortment. Even though consumers may be afforded a better preference match from larger assortments, they may overestimate the extent to which they are able to choose more advantageously from larger assortments. Subsequently, larger assortments are more likely to trigger disconfirmation of these heightened expectations and thus may reduce satisfaction. While larger assortments can certainly also create overload, we show that the proposed expectations-based mechanism operates over and above any detrimental effect of overload on satisfaction.

By demonstrating this effect of larger assortments and by explicating the underlying mechanism driving this effect, our research contributes to both behavioral theory and managerial practice in multiple ways. We add to the growing research identifying potential negative effects of larger assortment by demonstrating that, contrary to established beliefs, consumers may not be more satisfied with options chosen from larger assortments. Instead, larger assortments can decrease satisfaction with the chosen object. We establish the psychological mechanism that

underlies these findings, identifying expectation-disconfirmation as an important driver. We further provide process evidence not only of our proposed expectation-disconfirmation mechanism but also of overload as parallel causes of decreases in satisfaction.

Further, our framework makes unique recommendations for marketing practice. While limiting the information provided (Iyengar, Huberman and Jiang 2004) or focusing consumers on dimensions that are more easily comparable (Gourville and Soman 2005) may reduce overload, our findings suggest that such measures would not eliminate all damaging consequences of larger assortments. Instead, in line with recent research (Ofir and Simonson 2007, 2001) we argue that marketers need to carefully consider consumers' expectations and protect against expectation-disconfirmation. Our findings suggest that marketers need to be careful in whether and how they evoke such expectations. It may be risky to highlight to consumers that they "can see almost three million cars", as Autotrader.com does, since such an approach can raise expectations even further than they might be raised by merely experiencing the assortment, thus exacerbating expectation-disconfirmation. Instead of highlighting the absolute size of the assortment, marketers positioned in terms of large assortments may want to rather highlight the market coverage afforded by the assortment. As such, rather than promising consumers a perfect match, retailers could assure consumers that they have access to everything the market offers. Such an approach may manage expectations and may also reduce anticipated regret of missing out on options consumers may imagine being available elsewhere (Bülbul and Meyvis 2006).

Limitations and Future Research

Although we were able to demonstrate the role and importance of expectations with regard to larger assortments, many questions still remain unanswered. One open question concerns the level of consciousness with which such expectations are held. Oliver and Winer (1987) distinguish between active and passive expectations. The former are conscious predictions of the future that guide the purchasing decision. The latter are generally held assumptions about the state of the world that may not be conscious until they are disconfirmed, at which point they become salient. In all our studies, expectations about the consumer's ability to preference match most closely resemble passive expectations. Choosing from large assortments seems to contradict these implicitly held assumptions. In the Autotrader.com example, the marketer's claim seems to establish active expectations. Future research would need to explore the impact of active expectations and whether they also lead to expectation-disconfirmation. Whether expectations are disconfirmed may in part depend on the source of these expectations. In all our studies not only were expectations passive, but they also were intrinsic to the participants. While reality may contradict such internally held expectations, expectations created by marketers may be treated as tentative hypotheses (Hoch and Ha 1986) and may not create expectation-disconfirmation when experiences or preferences are ambiguous.

Another important question to be explored is the role of preference formation in this context. Across all our studies preferences were formed reasonably well, either by establishing a target consumer whom participants were shopping for (study 1, study 3), or because participants had formed preferences before searching through the assortment (study 2). While preference formation should reduce overload (Chernev 2003a), the impact of preference formation on expectations is not as clear yet. On the one hand, when consumers have a certain product or specific attribute combination in mind they may be more likely to notice any deviation from that

ideal and thus may experience greater expectation-disconfirmation. On the other hand, holding more established preferences could also decrease rather than increase the likelihood of disconfirmation. Consumers who have more established preferences are likely to also have greater knowledge about the product category (Alba and Hutchinson 1987). Their expectations may to a larger extent be based on attribute combinations previously encountered in the market place and as such these consumers may not actually expect to find a better preference match merely as a function of the number of options available to them.

Another interesting area of future research concerns the role of lay theories in the experiences and expectations associated with large assortments. People hold different beliefs about life and the way the world works (Furnham 1998). Such lay theories play a particularly important role when interpreting meta-cognitive experiences (Schwarz 2004). In the current context, one such relevant lay belief is the notion that "bigger is better", while another lay belief may suggest that "bigger is overwhelming". The impact of larger assortments on satisfaction may depend on the extent to which consumers hold one belief versus the other. Consumers presuming that bigger is better may be at greater risk of experiencing expectation-disconfirmation, while consumers wary of too many options being overwhelming may be more affected by feelings of overload. As such, future research may investigate whether consumers hold both of these beliefs with equal strength and what conditions may increase the salience of one belief versus the other.

Conclusions

Importantly, our research demonstrates that the negative effects of large assortments are not only restricted to cases when consumers lack cognitive resources to facilitate the choice

process. In fact, though they may provide improvements relative to completely unaided experiences of large assortments, tools designed to reduce overload alone will not completely mitigate the potential negative effects of large assortments. Rather, our research suggests that as assortments continue their exponential growth, the management of expectations will need to be carefully balanced against consumers' hopes and aspirations. In exploring ways in which this balance can be achieved, future research may be able to identify ways of reclaiming the rationally-predicted and colloquially expected benefits of large assortments.

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Table 1
Study 2 - Means

	Large Assortment N = 36	Small Assortment N = 29
Perceived Size of the assortment (Manipulation Check)	4.89	3.55
Total search time (in minutes)	3.53	2.92
Total number of options seen	61.64	46.55
Unique number of options seen	52.19	37.21
Decision Difficulty	50.50	44.27
Category Match	53 %	34 %
Expectation-Disconfirmation	5.28	5.89
Satisfaction	71.25	84.96

Figure 1

Greeting card used in Study 1

OUTSIDE**INSIDE**

In other words, Happy Birthday!

Figure 2 Study 2 – Navigational Screens

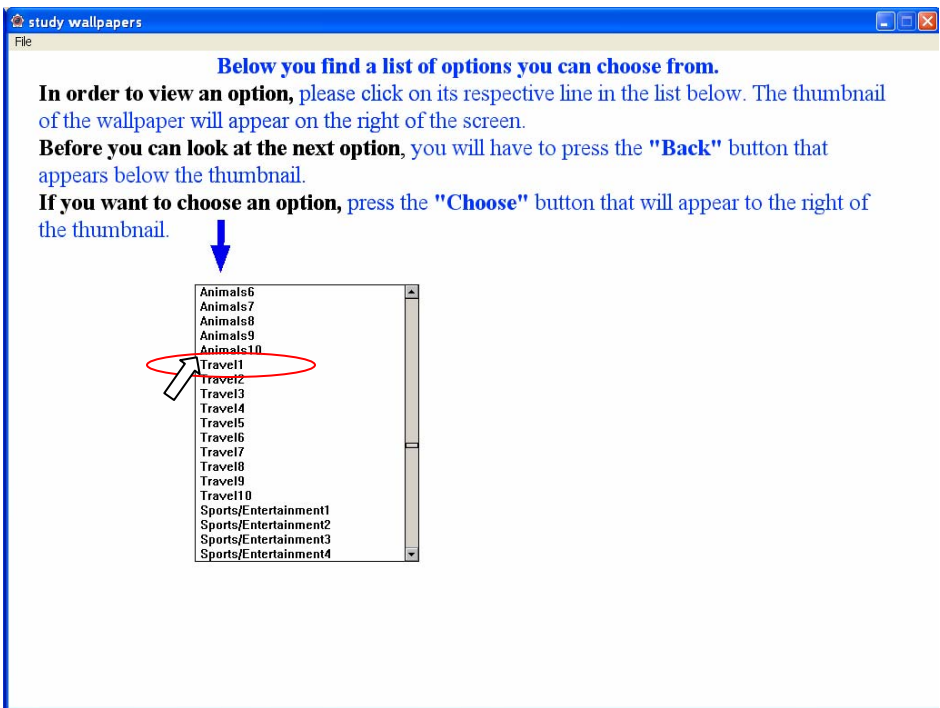


Figure 2 A – Search screen

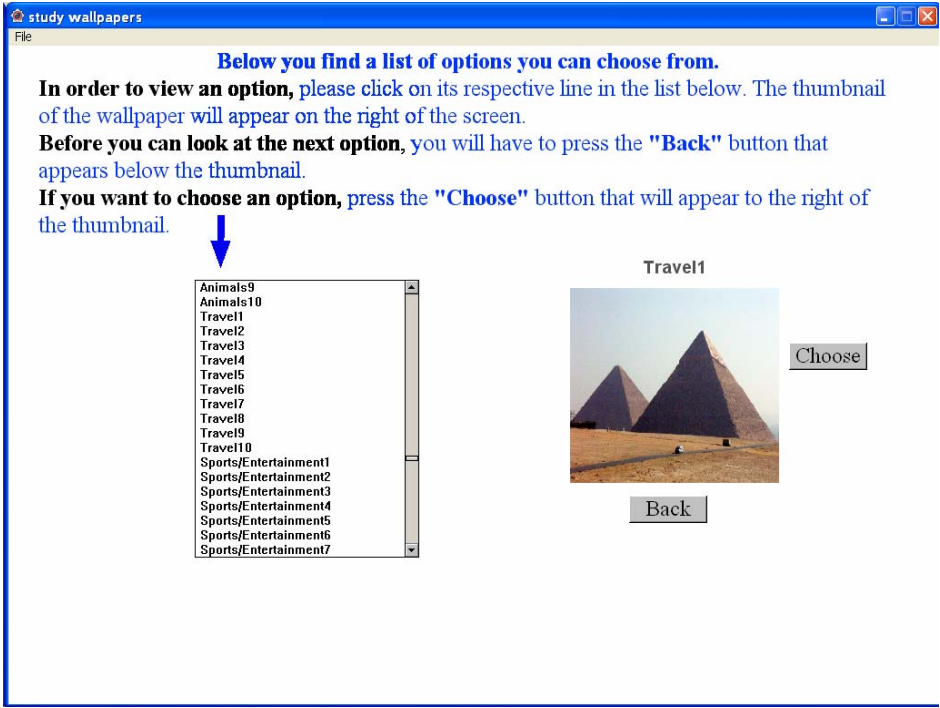


Figure 2 B – Screen with currently evaluated option (Travel1) present

Figure 3

Study 3 – Example of camcorder representation in the catalogs*

**Videocentral
Camcorder #LL2**

Weight	8 oz.		26 oz.
Resolution	6 MP		26 MP
Memory Capacity	3 MB		14 MB
Zoom	6X		28X

*Note, bars printed as continuous rectangles without any visible separations.

Appendix A
Study 3 Catalogs

	Camera ID	Camera Utility	Average Utility in Catalog	Minimum Utility in Catalog	Maximum Utility in Catalog
Catalog 1	2	19.63	49.93	19.63	79.00
	5	54.50			
	6	65.50			
	15	42.87			
	17	34.37			
	20	25.00			
	26	79.00			
	29	78.55			
Catalog 2	3	20.90	50.22	20.90	85.50
	11	56.00			
	18	39.00			
	19	75.00			
	21	85.50			
	22	60.00			
	27	23.37			
	30	42.00			
Catalog 3	1	23.51	50.08	21.50	80.00
	10	52.11			
	12	21.50			
	13	80.00			
	16	77.50			
	23	40.00			
	25	38.01			
	28	68.00			
Catalog 4	4	78.00	50.07	22.50	80.00
	7	22.68			
	8	65.00			
	9	22.50			
	14	55.62			
	24	30.29			
	31	46.45			
	32	80.00			
Large Catalogs 5&6	Order of small catalogs in large catalog		50.07	19.63	85.50
	Catalog 1, Catalog 2, Catalog 3, Catalog 4				
	Catalog 4, Catalog 2, Catalog 1, Catalog 3				

Appendix B
Study 3
Questionnaire used in the Overload-Satisfaction Condition

Shopping experience

We will first ask you some questions about your experience making this decision. Please answer these questions solely with regard to how the process of choosing made you feel.

While reviewing the camcorders, to what extent did you feel overwhelmed?

1	2	3	4	5	6	7	8	9
Not at all								Very much

How confused did you feel while making this decision?

1	2	3	4	5	6	7	8	9
Not at all confused								Very confused

How difficult was it to decide which camcorder to choose?

1	2	3	4	5	6	7	8	9
Not at all difficult								Very difficult

----- PAGE BREAK -----

Camcorder Choice

We will now ask you a few questions about your satisfaction with the actual camcorder you chose. Please answer these questions solely with regard to how you feel regarding that product choice.

How satisfied are you with your chosen camcorder?

1	2	3	4	5	6	7	8	9
Not at all satisfied								Very satisfied

How confident are you that your coworker would be happy with your choice of camcorder?

1	2	3	4	5	6	7	8	9
Not at all confident								Very confident