Multichannel shopping: The effect of decision making style on shopper journey configuration and satisfaction

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Abstract

Prior research demonstrates links between the maximizing tendency in decision making and online shopping behaviour, with maximizers spending considerable time on their online shopping yet being somewhat dissatisfied with their shopping decisions. Our research extends prior knowledge to the multichannel shopping context. Multichannel shopper journeys are an important form of shopping, whereby the activities comprising a shopping event occur in more than one channel. Our quantitative study examines relationships between two dimensions of maximizing, maximization as a strategy and maximization as a goal, multichannel shopper journey configuration and subsequent affect. Maximization as a strategy directly and positively relates to the numbers of channel switches and of pauses in a shopper journey and to the use of product and retailer reviews. It is indirectly associated with increased counterfactual thinking and regret, and with decreased satisfaction. Maximization as a goal has no effect on multichannel shopper journey configuration or on affect. Our findings have managerial relevance for multichannel retailers. We demonstrate that product and retailer reviews are of particular importance to those employing maximization as a shopping strategy, as they mitigate against their increased tendency to engage in counterfactual thinking. As counterfactual thinking leads maximizers to increased regret and decreased satisfaction, multichannel retailers can improve shopper satisfaction by actively directing their customers to reviews. Shoppers using maximization as a strategy could be helped to configure their shopper journeys with fewer channel switches and fewer pauses, as these provide maximizers with opportunities to doubt their decisions.

Keywords

Multichannel shopping; decision making style; maximizing; shopper journey
1. Introduction

In the current multichannel shopping environment, shoppers have multiple options in terms of how they go about their shopping activities. The term multichannel shopper journey has emerged to define the specific sequence of shopping activities and the channel(s) used for each individual shopping activity. Although Hu and Tracogna (2020) note that the division between multichannel and omnichannel shopping behaviour may be ‘blurred’ (p. 3), we specifically use the term multichannel shopper, as opposed to omnichannel shopper, in our paper. From the consumer perspective, a multichannel shopper is defined as someone who shops in more than one channel (Kushawa and Shankar, 2013) while an omnichannel shopper is one who uses all possible channels interchangeably in a single shopping event (Lazaris, Vrechopoulos, Katerina and Doukidis, 2014). Omnichannel shopping is, therefore, a subset of multichannel shopping. As our research encompasses the whole range of shopper journey types, from the use of a single channel across the entire shopper journey to the use of all possible channels, it is appropriate to refer throughout to multichannel shopping.

Research shows that many consumers patronise more than one shopping channel (Cortiñas, Chocarro and Villanueva, 2010). Channel patronage decisions are influenced by perceptions of the benefits and capabilities of the channel (Frambach, Roest and Krishnan, 2007); by the shoppers’ demographic and psychographic profiles (Inman, Shankar and Ferraro, 2004; Konuš, Verhoef and Neslin, 2008); by their past experience with the channel (Melis, Campo, Breugelmans and Lamey, 2015); by culture (Lu, Pattnaik, Xiao and Voola, 2017); and by situational factors (Chocarro, Cortiñas and Villanueva, 2013; Hand, Dall’Olmo Riley, Harris, Singh and Rettie, 2009). Channel choice decisions are made in the context of the specific shopping task being undertaken (search, evaluation, purchase) and as such aggregate to create the overall journey which best meets the shopper’s requirements (Hu and Tracogna, 2020).

While extant research has provided insight into retailers’ channel strategies and customers’ channel patronage, our understanding of the drivers of individual multichannel shopper journeys is more limited. Specifically, research attention has not yet been directed to examining the way in which
individual multichannel shopper journeys are configured within and across channels, and how this affects journey satisfaction. Developing such understanding is important for both researchers, in attaining a more nuanced understanding of contemporary shopping activity, and for retailers who seek to influence consumers’ decisions as they progress through their shopper journeys and to manage the overall customer experience.

The flexibility of the multichannel shopping environment means that a shopper journey can be configured in a wide range of ways, as the various shopping activities, such as searching for ideas or evaluating options, can be carried out in store, online using a computer, on the mobile channel using a smartphone or tablet, by telephone or using a catalogue. Additional information can also be sought from online and offline product and retailer reviews as part of the shopper journey. Thus, the permutations of channel choice/shopping activity combination are numerous, offering control to the shopper over the precise way in which they carry out their shopping. Such increased choice and control may be of particular benefit to individuals exhibiting the decision making style known as the maximizing tendency (Schwartz, Ward, Monterosso, Lyubomirsky, White and Lehman, 2002) and who strive for the optimum outcome to their decision tasks in contrast to satisficers, who are content with a good-enough decision outcome. Maximizers might be expected to make even fuller use of the range of shopping channel options available to them in their quest for the best decision outcome. The shopper’s decision making style, as reflected in the maximizing tendency, is therefore likely to impact on multichannel shopper journey configuration in terms of journey length and channel/activity combinations.

Prior research (Chowdhury, Ratneshwar and Mohanty, 2009; Karimi, Papamichail and Holland, 2015; Karimi, Holland and Papamichail, 2018) has examined the relationship between the maximizing tendency and online-only shopping behaviour. Maximization is associated with increased time spent on online shopping, more decision cycles, and increased propensity for change of mind after having come to a decision outcome, suggesting that maximizers lack confidence in both their decision process and outcome. While this body of research contributes to the understanding of online shopping behaviour, most shoppers use multiple shopping channels and exclusive use of the online channel is
not the norm (Flavián, Gurrea and Orús, 2020). It is important, therefore, to examine the drivers of multichannel, as opposed to online, shopper journey configuration.

In addition to developing knowledge of multichannel shopper journey configuration, our research contributes to the understanding of the effect of the maximizing tendency on shopping behaviour. Past examinations of the relationship between the maximizing tendency and shopping behaviour have conceptualised maximisation as a unidimensional construct, despite doubts regarding the validity of that approach (Rim, Turner, Betz and Nygren, 2011). In our research we follow the recommendation of Cheek and Schwartz (2016) in conceptualising the maximizing tendency in decision making as two separate constructs – maximisation as a strategy, and maximization as a goal. The former is activity-focused and so is likely to have a direct impact on how shopping is carried out, while the latter is an overall objective which can potentially be achieved by shopping in a range of ways, and so is likely to have a lesser effect on journey configuration.

Our research also examines relationships between decision making style, multichannel shopper journey configuration, and subsequent affect. The relationship between maximizing and various forms of affect has been studied extensively in the psychology domain, but shopping behaviour research has so far neglected the effect of maximisation tendency on shopping related measures of affect such as satisfaction.

In sum, our study examines the relationship between decision making style, as manifested in the maximizing tendency, multichannel shopper journey configuration in terms of the precise combination of shopping activities and channels, and subsequent affect in relation to how the shopping was carried out. We make three contributions to knowledge. First, we demonstrate that the shopper’s decision making style has a significant effect on the way they configure their multichannel shopper journey and on their satisfaction with the way in which they shop. Second, we demonstrate that maximization as a strategy is directly associated with increased length and complexity of multichannel shopper journeys and with subsequent negative affect. Third, we find that maximization as a goal has no effect on shopper journey configuration or on subsequent affect.
As a result, our research demonstrates that despite taking advantage of the full range of shopping channels in their quest for the optimum decision outcome, maximizers are less likely to be satisfied with their shopping behaviour. The multichannel shopping environment provides maximizers with considerable flexibility, control and choice in how they carry out their shopping, but as a result their shopper journeys can be over-complicated and, hence, sub-optimal. Our study also demonstrates that the two dimensions of maximization, maximization as a strategy and maximization as a goal, behave in very different ways with respect to shopping behaviour, and should not be aggregated into a single construct. We suggest that maximization as a strategy is the most appropriate conceptualisation of the construct for use in the field of consumer decision making.

The remainder of this paper is structured as follows. Section 2 provides a review of literature and explains the research model. Section 3 presents the methodology used in the research. Section 4 sets out the research results, which are then discussed in section 5. Sections 6 summarises the main conclusions, discusses the limitations of the research, and suggests directions for future research.

2. Decision making style and shopper journey configuration

The maximizing tendency is a style of decision making which was conceptualised by Schwartz et al. (2002), building on Simon’s (1955, 1956) work on bounded rationality. Schwartz et al. revisited the concept of maximization and proposed the maximizing tendency as a trait; in seeking the best decision outcome, some people exhibit an innate tendency to maximise in decision making. Maximization has been widely studied in the fields of psychology and decision making and while it is associated with seeking the optimal decision outcome, it has been found to be associated with negative affect. Maximization is associated with reduced happiness and optimism, and is positively associated with regret (Schwartz et al., 2002). Indeed, the maximizing tendency has been found to be adversely associated with a wide range of measures of subjective and psychological well-being (Chang, Lin, Herringshaw, Sanna, Fabian, Perera and Marchenko, 2011; Iyengar, Wells and Schwartz, 2006; Purvis, Howell and Iyer, 2011; Turner, Rim, Betz and Nygren, 2012).
The over-arching theoretical framework employed in our study is that of Schwartz et al. (2002) which posits that maximizers: have a greater need for information; experience more regret; and experience less satisfaction in relation to their decision making. We augment this framework by incorporating: i). time taken to reach a decision, as maximization is associated with increased time spent on decision making (Nenkov, Morrin, Ward, Schwartz and Hulland, 2008; Rim et al., 2011); and ii) counterfactual thinking, defined as thinking about possible alternatives (what might have been) to a decision outcome (Roese, 2000). The maximizing tendency is specifically associated with counterfactual thinking, as a result of the maximizer’s lack of confidence in their decision process and outcome. Furthermore, counterfactual thinking about a decision outcome leads to regret (Tsiros and Mittal, 2000).

Since Schwartz et al. published their 13-item scale in 2002, there has been considerable debate as to the most appropriate conceptualisation of the maximizing tendency. Misuraca, Faraci, Gangemi, Carmeci and Miceli (2015) note that the literature ‘appears confused and fragmented’ (p. 112). Maximization is generally considered to be a multidimensional construct though, as noted earlier, shopping behaviour research has tended to conceptualise maximization unidimensionally. Competing conceptualisations have been proposed. For example Dalal, Diab, Zhu and Hwang (2015) and Mikkelson and Pauley (2013) proposed unidimensional conceptualisations, while Nenkov, Morrin, Ward, Schwartz and Hulland (2008) suggested a three dimensional conceptualisation comprising ‘Alternative Search’, ‘Decision Difficulty’ and ‘High Standards’. Richardson, Ye, Ege, Suh and Rice (2014) developed a Refined Maximization Scale also comprising three factors - ‘Wanting the Best’, ‘Experiencing Regret in Decision Making’ and ‘Decision Difficulty’. When conceptualised unidimensionally maximization has generally been found to be associated with maladaptive outcomes such as regret. When conceptualised multidimensionally, the factors reflecting style of decision making such as ‘Alternative Search’ or ‘Decision Difficulty’ were associated with maladaptive outcomes, but the ‘High Standards’ or ‘Choosing the Best’ factor, reflecting maximization as a goal, has been found to be associated with positive outcomes (Diab, Gillespie and Highhouse, 2008;
Nenkov et al., 2008; Purvis et al., 2011). This indicates that the underlying dimensions of maximization do not behave in the same way in terms of decision making and subsequent affect.

Cheek and Schwartz (2016) and Cheek and Goebel (2020) reviewed, respectively, 13 and 14 maximization conceptualisations and scales. They found that the extant conceptualisations were weakened by insufficient theoretical grounding; by a tendency to theorise after, rather than before, scale development; by the inclusion of the ‘Decision Difficulty’ factor, which they considered to reflect indecisiveness and not maximization; and by the inclusion of constructs such as regret which are better considered as outcomes of decision making. As a result, both Cheek and Schwartz (2016) and Cheek and Goebel (2020) concluded that a two dimensional conceptualisation of maximization was most appropriate, comprising maximization as a goal, and maximization as a strategy. They consider this to strike a balance between simplicity and ability to discriminate between the key components of decision making style; we adopt this conceptualisation.

Maximization as a goal is defined as choosing the best, or having as a goal the best choice. In the context of shopping behaviour, maximization as a goal can be thought of as believing that the perfect decision outcome can be found when shopping, and so having high standards or being scrupulous in relation to the type of product chosen. Maximization as a strategy is defined by Cheek and Schwartz (2016) as the combination of ‘the process of seeking out alternatives, including the act of seeking out information about alternatives, with the process of comparing alternatives.’ (p136), and in relation to shopping behaviour can be thought of as perseverance. Engaging in maximization as a strategy when shopping is likely to involve considerable effort being expended in examining and comparing alternatives across a range of shopping channels and retailers. Thus, maximization as a goal and maximization as a strategy, although related, drive behaviour in differing ways.

Maximization leads to longer time spent on and greater effort being invested in the decision making process (Polman, 2010; Schwartz et al., 2002). In studies of online-only purchasing behaviour, the maximizing tendency has been found to be associated with longer decision-making processes, more decision cycles and a longer time spent on pre-purchase browsing (Chowdhury et al., 2009; Karimi et
al., 2016). In a multichannel environment, maximizers are likely to employ all channel options, and take the opportunity to switch back and forth between channels, in their search for the optimum solution. We expect this to be reflected in both dimensions of maximisation. Thus we hypothesise:

**H1a:** Maximization as a strategy is positively associated with the number of channel switches in a shopper journey.

**H1b:** Maximization as a goal is positively associated with the number of channel switches in a shopper journey.

However, we anticipate maximisation as a strategy to have a greater effect than maximisation as a goal on the number of channel switches. Maximisation as a strategy is activity-focused and so is likely to be associated with more channel switches as each channel provides more information to base the decision on and more opportunities to optimise the decision. On the other hand, maximisation as a goal is an overall objective that potentially can be achieved, regardless of the way in which the shopping is carried out, and so is likely to have a weaker effect on journey configuration.

As the maximizing tendency is associated with increased time spent on decision making (Chowdhury et al., 2009; Nenkov et al., 2008; Rim et al., 2011) and the desire to find the optimum solution, rather than a good-enough solution, it is likely that maximizers will incorporate pauses into their shopper journeys, during which they take stock and consider their options. Again, we expect this to be influenced by both dimensions of maximisation, but also anticipate that the activity oriented maximisation as a strategy may have a stronger effect on the number of pauses in a shopper journey than maximisation as a goal. We hypothesise, therefore:

**H2a:** Maximization as a strategy is positively associated with the number of pauses in a shopper journey.

**H2b:** Maximization as a goal is positively associated with the number of pauses in a shopper journey.
Maximizers engage in more social comparisons than their satisficing counterparts (Schwartz et al., 2002; Weaver, Daniloski, Schwarz and Cottone, 2015), suggesting a lack of confidence in their decision processes and outcomes.

Additionally, maximization is associated with increased use of information during decision making (Iyengar et al., 2006) as the maximizer considers and compares more options. In the context of a multichannel shopper journey, we consider the use of product and retailer reviews as the means by which maximizers can meet their need for reassurance and for information. Therefore, we hypothesise:

\[ H3a: \text{Maximization as a strategy is positively associated with the use of product/retailer reviews during a shopper journey.} \]

\[ H3b: \text{Maximization as a goal is positively associated with the use of product/retailer reviews during a shopper journey.} \]

It is logical to expect maximisation as a strategy to be more strongly associated with use of reviews than maximisation as a goal. As mentioned, maximisation as a strategy leads to each step of the journey being seen as potentially important, including obtaining additional information and reassurance. In contrast, the focus of maximisation as a goal is the final outcome and it may be less important to seek information and reassurance along the way.

Maximizers tend to question their decisions by engaging in counterfactual thinking (Leach and Patall, 2013). Counterfactual thinking ‘refers to imaginings of alternatives to past outcomes’ (Roese, 2000 p. 277). Such imagined states can be better (upward counterfactuals) or worse (downward counterfactuals) than reality. Maximization is specifically associated with upward counterfactual thinking as the maximizer’s lack of confidence in their decision making manifests itself in imaginings of better outcomes that might have been achieved (Leach and Patall, 2013; Schwartz et al., 2002). In the context of a multichannel shopper journey, the number of channel switches engaged in by maximizers and the number of pauses during the journey present opportunities for (upward) counterfactual thinking. Thus we hypothesise:
**H4:** The number of channel switches during a shopper journey is positively associated with upward counterfactual thinking about the configuration of the shopper journey.

**H5:** The number of pauses during a shopper journey is positively associated with upward counterfactual thinking about the configuration of the shopper journey.

In the context of a multichannel shopper journey, product/retailer reviews will act as a source of reassurance; the information provided on the characteristics of alternatives from the wide range of third party reviews available to the shopper will have a reassuring effect and reduce counterfactual thinking. As a result, we hypothesise:

**H6:** Using product/retailer reviews during a shopper journey is negatively associated with upward counterfactual thinking about the configuration of the shopper journey.

Upward counterfactual thinking about a decision outcome is considered to be directly associated with regret over the decision outcome (Mannetti, Pierro and Kruglanksi, 2007; Seta, Seta, Petrocelli and McCormick, 2015). As noted earlier, the maximizing tendency has been linked to a number of maladaptive outcomes such as regret (Besharat, Ladik and Carillat, 2014; Schwartz et al., 2002; Nenkov et al., 2008; Turner et al., 2012). The mechanism by which this regret occurs is by means of intervening upward counterfactual thinking. Specifically, the decision outcomes arrived at by maximizers engender upward counterfactual thinking, which in turn leads to regret. In relation to multichannel shopping behaviour, maximizers will engage in upward counterfactual thinking about the way they carried out their shopping. In turn, this will result in feelings of regret, about the configuration of a shopper journey, leading us to hypothesise:

**H7:** Upward counterfactual thinking is positively associated with the level of regret in the context of the configuration of a shopper journey.

Finally, regret is an antecedent of (dis)satisfaction (Tsiros and Mittal, 2000; Zeelenberg and Pieters, 1999) and therefore shoppers who regret the way in which they conducted their shopping are unlikely to be satisfied with their shopper journey. Accordingly, we hypothesise:
H8: Regret is negatively associated with satisfaction in the context of a shopper journey.

Our research framework is shown in Figure 1.

Insert Figure 1 here.

3. Method

3.1 Capturing the shopper journey

To test our hypotheses, we first needed to develop a survey instrument for capturing the shopper journey in terms of each individual shopping activity undertaken, the channel used at each point in the journey, and the ancillary activities which affected the shopper’s decision making. To this end, we conducted 12 depth interviews with multichannel shoppers, in which the concept of the shopper journey, the length and the characteristics of shoppers’ journeys were examined. These depth interviews informed the design of the survey instrument, by identifying the range of shopping channels and touchpoints used by multichannel shoppers, the types of shopping activities undertaken in a shopper journey and the number of journey phases which would need to be accommodated. The shopping activities which emerged were: searching for ideas; evaluating options; taking time to wait and think about a possible purchase; the act of purchasing. The shopping channels and ancillary touchpoints used in participants’ multichannel shopper journeys were: physical stores; online stores; catalogues; magazines; product and retailer reviews; advertisements. The depth interviews also demonstrated that while most shopper journeys are short and linear, the survey instrument would also need to be able to capture lengthy journeys comprising iterations around activities.

The survey instrument used during the quantitative stage of the research captured the characteristics of each phase of the shopper journey via a series of questions relating to a recalled shopper journey. Respondents were asked to think about a non-routine shopper journey which they had undertaken relatively recently which ended with a purchase, and to state the purpose of the journey (purchase for self, purchase for household, purchase (not gift) for someone else, gift), the item(s) purchased and amount spent. The starting point of the journey was classified by respondents as one of: no idea what
to purchase; a rough idea what to purchase; or knew what to purchase. Respondents were then asked to indicate the type of activity (searching for ideas, evaluating options, waiting/thinking, purchasing) and the channel/touchpoint used (stores, online, advertisements, magazines/catalogues, product/retailer reviews) at each phase via a series of ‘what next?’ questions. Respondents were allowed to iterate around the ‘what next?’ questions until they indicated that their journey had concluded with a purchase. Figure 2 illustrates the operationalisation of shopper journey phase capture by means of a flow diagram.

*Insert Figure 2 here.*

The survey instrument was tested with a small number of multichannel shopper participants using a think aloud procedure; the instrument coped well with the variety of types of shopper journey imagined by the participants, and no modifications were required. This instrument design provided a flexible system of shopper journey capture, accommodating single, multichannel and omnichannel journeys of varying lengths and levels of complexity. Respondents were instructed to answer all questions in the context of the recalled shopper journey, and not in the context of what was purchased at the end of the journey.

### 3.2 Measures and measurement

The survey instrument illustrated in Figure 2 enabled us to capture shopper journey configuration via three measures: i) the number of channel switches; ii) the number of pauses in the journey (operationalised to respondents as phases of the journey where they needed/wanted to wait and think); and iii) the shopper’s engagement in information search via social comparison (operationalised by measuring the use of product/retailer reviews). Table 1 presents descriptive statistics for the three shopper journey measures.

*Insert Table 1 here.*

Following Cheek and Schwartz’s (2016) recommendation we used Dalal et al.‘s (2015) MTS-7 scale to measure maximization as a goal, and the 12-item Alternative Search Scale from Turner et al.‘s (2012) maximization inventory to measure maximization as a strategy. Counterfactual thinking was
measured using two items (Roese, Summerville and Fessel, 2007; Wang, Liang and Peracchio, 2007) and regret was measured using three items (Besharat et al., 2014; Tsiros and Mittal, 2000). Satisfaction with the shopper journey (as opposed to satisfaction with the purchase) was measured via a single item. Although Churchill (1979) counsels against the use of single-item measures, Bergkvist and Rossiter (2007) found no difference in the predictive validity of single versus multi-item measures of the same construct, and the findings of Wanous, Reichers and Hudy (1997) support the validity of a single-item measure of satisfaction. Table 2 lists the scales and items, all of which were measured on 7-point Likert scales.

Insert Table 2 here.

3.2 Data collection and analysis

Data were collected by means of an online survey which ran during July and August 2018. The sample was provided by Qualtrics, who also administered the survey, and comprised UK adults who met two criteria: i). They carried out non-routine shopping (i.e. not shopping for groceries and everyday things, but for clothing, gifts, appliances and so on) for themselves or for someone else; ii). They had ever used at least two shopping channels from the list of stores, online, mobile apps, and catalogues (as derived from the qualitative stage of the research). It was considered appropriate to focus on non-routine shopping as this is likely to involve greater cognitive effort and as such is more likely to be affected by the shopper’s decision making style. Respondents were asked to answer all the shopper journey configuration questions in the context of a recent, non-routine shopping event. A pilot test was carried out with 100 respondents and no modifications to the instrument were required.

From a total of 525 responses a usable sample of 486 was obtained after removal of those who failed to respond appropriately to the attention check questions or who failed to answer all parts of the survey. The sample profile is shown in Table 3. Data were analysed using SPSS 24 and the research model was tested by means of Partial Least Squares SEM using Smart-PLS 3.

Insert Table 3 here.
4. Results

First, we tested for common method bias. Harman’s 1-Factor Test confirmed the proportion of shared variance as 24.72%, well below the accepted threshold of 50% and therefore providing no evidence of common method bias. Subsequently, the measurement model was assessed. Five items were dropped from the maximization as a strategy scale due to low loadings (see Table 2). The measurement model exhibited internal consistency reliability (all scale composite reliabilities were >0.8, see Table 4) and convergent validity (all AVE values >0.5, see Table 5). Additionally, all HTMT ratios are below the conservative threshold of 0.85 (Hair, Sarstedt, Ringle and Gudergan, 2018) and therefore the model’s discriminant validity is considered acceptable.

Insert Table 4 here

Insert Table 5 here

Table 6 provides the results of the structural model.

Insert Table 6 here.

As predicted, maximization as a strategy is positively and significantly linked to the number of channel switches, to the number of pause phases in a shopper journey and to the use of product/retailer reviews (supporting H1a, H2a and H3a).

The number of channel switches and the number of pause phases in a shopper journey were found to be significantly and positively related to the level of counterfactual thinking (supporting H4 and H5). The use of product/retailer reviews was found to be significantly and negatively associated with the level of counterfactual thinking. (supporting H6). The level of counterfactual thinking was found to be significantly and positively associated with the level of regret (supporting H7). Regret was found to be significantly and negatively associated with the level of satisfaction with the shopper journey (supporting H8).

A surprising result is that all of the path coefficients between maximization as a goal and shopper journey configuration measures were negative in direct contrast to the coefficients relating to
maximization as a strategy. However, none of the hypotheses involving maximization as a goal were supported (H1b, H2b, H3b).

5. Discussion

5.1 Maximisation as a strategy

Maximization as a strategy has a significant effect on multichannel shopper journey length and configuration, being positively associated with the number of channel switches, the number of pause phases in a shopper journey and with the use of product/retailer reviews. Higher levels of maximization as a strategy result in longer and more complex shopper journeys during which shoppers make greater use of information and social comparisons in the form of product/retailer reviews. The use of such reviews significantly reduces the level of counterfactual thinking, and can therefore be seen as having a positive and reassuring effect on the shopper. The increased channel switching and increased number of pauses associated with higher levels of maximization as a strategy lead to increased counterfactual thinking, increased regret, and reduced satisfaction with the shopper journey. Despite striving for the best outcome, those engaging in maximization as a strategy do not appear to see the benefits of their efforts and are more likely to experience maladaptive affect and outcomes than their satisficing counterparts.

5.2 Maximization as a goal

Maximization as a goal is not significantly associated with any of the shopper journey configuration measures. This indicates that the two dimensions of the maximization construct have markedly different effects on shopping behaviour and that simply having maximization as a goal has no direct bearing on how shopping is carried out.

6. Conclusions, limitations and future research

Prior research has found the maximizing tendency to have an effect on online-only shopping behaviour, with maximizers taking longer to shop, considering more options, and being less satisfied with their shopping decisions (Chowdhury et al., 2009; Karimi et al., 2015). Our findings build on this knowledge and demonstrate that maximization as a strategy is associated with how multichannel shopper journeys are configured. Our research also supports the view that the maximizing tendency, as manifested in the use of a maximization strategy, is associated with maladaptive decision outcomes, specifically counterfactual thinking, regret and reduced satisfaction. Despite and, possibly,
even because of the focus on obtaining the optimal decision outcome, higher levels of maximization result in lower satisfaction with the multichannel shopper journeys.

We find that maximizers do, however, benefit from the use of product/retailer reviews, and these appear to mitigate against their maladaptive decision outcomes.

We contribute to the understanding of the maximizing tendency by revealing that maximization as a strategy and maximization as a goal behave in markedly different ways in the context of multichannel shopper behaviour. Maximization as a strategy has a direct effect on how a multichannel shopper journey is configured, and an indirect effect on resultant counterfactual thinking, regret and satisfaction. Maximization as a goal has no effect on multichannel shopper journey configuration or on post-decisional outcomes resulting from the shopper journey. Our findings cast doubt on the practice of conceptualising maximization as a unidimensional construct and we suggest that future research efforts could usefully be directed to further examination of the different effects of maximization as a strategy versus maximization as a goal. Future research could also be directed to an examination of the possible effect of moderating variables on the relationship between maximization and shopper journey configuration. For example, the shopper’s need for prestige, innovativeness and involvement with product category could moderate the effect of decision making style on the resultant shopper journey.

Our research used a survey design and as a result is subject to limitations. We rely on respondents’ ability to recall a specific, non-routine multichannel shopper journey and report its characteristics accurately. While respondents were briefed to answer questions on the process of their shopper journey rather than on what they purchased as a result of that journey, it is possible that their responses were influenced by their feelings about the purchase itself. Future research could employ an experimental design to control the parameters of the shopper journey and to minimise any interaction effect between the journey and resultant purchase.

Our findings also have managerial relevance for multichannel retailers. We demonstrate that product and retailer reviews are of particular importance to those employing maximization as a shopping strategy, as they mitigate against their increased tendency to engage in counterfactual thinking. As counterfactual thinking leads maximizers to increased regret and decreased satisfaction, multichannel retailers can improve shopper satisfaction by actively directing their customers to reviews. Shoppers using maximization as a strategy could be helped to configure their shopper journeys with fewer channel switches and fewer pauses, as both provide maximizers with opportunities to doubt their decisions.
References


Table 1 Descriptive Statistics for Shopper Journey Configuration Measures

<table>
<thead>
<tr>
<th>% Shopper Journeys Comprising Any Use of:</th>
<th>Of Those Shopper Journeys Comprising M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Channel Switches (CS)</td>
<td>87</td>
<td>1.86</td>
</tr>
<tr>
<td>Pauses (P)</td>
<td>22</td>
<td>1.82</td>
</tr>
<tr>
<td>Use of Reviews (Rev)</td>
<td>10</td>
<td>1.14</td>
</tr>
<tr>
<td>Construct</td>
<td>Item</td>
<td>Outer Loading in Measurement Model</td>
</tr>
<tr>
<td>-----------</td>
<td>----------------------------------------------------------------------</td>
<td>------------------------------------</td>
</tr>
<tr>
<td>Maximization as Strategy (Turner et al., 2012)</td>
<td>I can’t come to a decision unless I have carefully considered all my options</td>
<td>0.578</td>
</tr>
<tr>
<td></td>
<td>I take time to read the whole menu when eating out</td>
<td>0.469</td>
</tr>
<tr>
<td></td>
<td>I will continue shopping for an item until it reaches all of my criteria</td>
<td>0.587</td>
</tr>
<tr>
<td></td>
<td>I usually continue to search for an item until it reaches my expectations</td>
<td>0.567</td>
</tr>
<tr>
<td></td>
<td>When shopping, I plan on spending a lot of time looking for something</td>
<td>0.860</td>
</tr>
<tr>
<td></td>
<td>When shopping, if I can’t find exactly what I’m looking for, I will continue to search for it</td>
<td>0.704</td>
</tr>
<tr>
<td></td>
<td>I find myself going to many different stores before finding the thing I want</td>
<td>0.793</td>
</tr>
<tr>
<td></td>
<td>When shopping for something, I don’t mind spending several hours looking for it</td>
<td>0.814</td>
</tr>
<tr>
<td></td>
<td>I take the time to consider all the alternatives before making a decision</td>
<td>0.691</td>
</tr>
<tr>
<td></td>
<td>When I see something that I want, I always try to find the best deal before purchasing it</td>
<td>0.520</td>
</tr>
<tr>
<td></td>
<td>If a store doesn’t have exactly what I’m shopping for, then I will go somewhere else</td>
<td>0.465</td>
</tr>
<tr>
<td></td>
<td>I just won’t make a decision until I am comfortable with the process</td>
<td>0.646</td>
</tr>
<tr>
<td>Maximization as a Goal (Dalal et al., 2015)</td>
<td>No matter what I do, I have the highest standards for myself</td>
<td>0.711</td>
</tr>
<tr>
<td></td>
<td>I never settle for second best</td>
<td>0.723</td>
</tr>
<tr>
<td></td>
<td>No matter what it takes, I always try to choose the best thing</td>
<td>0.655</td>
</tr>
<tr>
<td></td>
<td>I don’t like having to settle for ‘good enough’</td>
<td>0.702</td>
</tr>
<tr>
<td></td>
<td>I am a maximizer</td>
<td>0.798</td>
</tr>
<tr>
<td></td>
<td>I will wait for the best option, no matter how long it takes</td>
<td>0.828</td>
</tr>
<tr>
<td></td>
<td>I never settle</td>
<td>0.786</td>
</tr>
<tr>
<td>Counterfactual Thinking (adapted from Roese et al., 2007; Wang et al., 2007)</td>
<td>If I could choose again, I might have made more comparisons and could have purchased a much better product</td>
<td>0.732</td>
</tr>
<tr>
<td></td>
<td>I wish that my shopping journey had been different so that I could have obtained a better outcome</td>
<td>0.850</td>
</tr>
<tr>
<td>Regret (adapted from Besharat et al., 2014; Tsiros and Mittal, 2000)</td>
<td>I feel sorry that I carried out my shopping journey in this particular way</td>
<td>0.909</td>
</tr>
<tr>
<td></td>
<td>I regret carrying out my shopping journey in this way</td>
<td>0.905</td>
</tr>
<tr>
<td></td>
<td>I should have carried out my shopping in a different way</td>
<td>0.927</td>
</tr>
<tr>
<td>Satisfaction (Westbrook, 1980)</td>
<td>How satisfied were you with your shopping journey?</td>
<td>NA</td>
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Table 3 Sample Profile

<table>
<thead>
<tr>
<th>Age</th>
<th>N</th>
<th>%</th>
<th>Employment Status</th>
<th>N</th>
<th>%</th>
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<tbody>
<tr>
<td>18-24</td>
<td>84</td>
<td>17.3</td>
<td>Employed full time</td>
<td>243</td>
<td>50.0</td>
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<tr>
<td>25-34</td>
<td>129</td>
<td>26.5</td>
<td>Employed part time</td>
<td>76</td>
<td>15.6</td>
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<tr>
<td>35-44</td>
<td>102</td>
<td>21.0</td>
<td>Not currently in employment</td>
<td>89</td>
<td>18.3</td>
</tr>
<tr>
<td>45-54</td>
<td>66</td>
<td>13.6</td>
<td>Retired</td>
<td>47</td>
<td>9.7</td>
</tr>
<tr>
<td>55-64</td>
<td>66</td>
<td>13.6</td>
<td>In full time or part time education</td>
<td>31</td>
<td>6.4</td>
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<tr>
<td>65 and above</td>
<td>39</td>
<td>8.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>486</td>
<td>100.0</td>
<td></td>
<td>486</td>
<td>100.0</td>
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Table 4 Scale Reliability

<table>
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<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>α</th>
<th>CR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximization as a Strategy (MS)</td>
<td>4.93</td>
<td>1.09</td>
<td>.87</td>
<td>.89</td>
<td>.535</td>
</tr>
<tr>
<td>Maximization as a Goal (MG)</td>
<td>4.85</td>
<td>1.08</td>
<td>.89</td>
<td>.91</td>
<td>.602</td>
</tr>
<tr>
<td>Counterfactual Thinking (CFT)</td>
<td>2.74</td>
<td>1.48</td>
<td>.82</td>
<td>.92</td>
<td>.849</td>
</tr>
<tr>
<td>Regret (R)</td>
<td>1.97</td>
<td>1.29</td>
<td>.94</td>
<td>.96</td>
<td>.896</td>
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Table 5 Correlation Coefficients

<table>
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<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximization as a Strategy (MS)</td>
<td>.731&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.572</td>
<td>.242</td>
<td>.104</td>
<td>-.011</td>
<td>.106</td>
<td>.143</td>
<td>.029</td>
<td>.071</td>
</tr>
<tr>
<td>Maximization as a Goal (MG)</td>
<td>.776&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.079</td>
<td>-.028</td>
<td>-.042</td>
<td>.018</td>
<td>.036</td>
<td>.026</td>
<td>.094</td>
<td></td>
</tr>
<tr>
<td>Channel Switches (CS)</td>
<td></td>
<td>-.391</td>
<td>.479</td>
<td>.380</td>
<td>.309</td>
<td>.326</td>
<td>-.252</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pauses (P)</td>
<td></td>
<td></td>
<td>.316</td>
<td>.165</td>
<td>.242</td>
<td>.303</td>
<td>-.175</td>
<td></td>
<td></td>
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<tr>
<td>Use of Reviews (Rev)</td>
<td></td>
<td></td>
<td></td>
<td>.025</td>
<td>-.001</td>
<td>-.009</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Counterfactual Thinking (CFT)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.921&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.692</td>
<td>-.386</td>
<td></td>
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</tr>
<tr>
<td>Regret (R)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.946&lt;sup&gt;a&lt;/sup&gt;</td>
<td>-.467</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction (SAT)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

<sup>a</sup>Square root of AVE

<sup>b</sup>Single item measure – no AVE can be calculated

Table 6 Hypothesis Test Results

<table>
<thead>
<tr>
<th>Hypothesis Tests</th>
<th>Path</th>
<th>Estimate</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
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<td>t-stat</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>--------</td>
</tr>
<tr>
<td>H1a</td>
<td>+</td>
<td>Supported</td>
<td>MS→CS</td>
</tr>
<tr>
<td>H1b</td>
<td>+</td>
<td>Not supported</td>
<td>MG→CS</td>
</tr>
<tr>
<td>H2a</td>
<td>+</td>
<td>Supported</td>
<td>MS→P</td>
</tr>
<tr>
<td>H2b</td>
<td>+</td>
<td>Not supported</td>
<td>MG→P</td>
</tr>
<tr>
<td>H3a</td>
<td>+</td>
<td>Supported</td>
<td>MS→Rev</td>
</tr>
<tr>
<td>H3b</td>
<td>+</td>
<td>Not supported</td>
<td>MG→Rev</td>
</tr>
<tr>
<td>H4</td>
<td>+</td>
<td>Supported</td>
<td>CS→CFT</td>
</tr>
<tr>
<td>H5</td>
<td>+</td>
<td>Supported</td>
<td>P→CFT</td>
</tr>
<tr>
<td>H6</td>
<td>-</td>
<td>Supported</td>
<td>Rev→CFT</td>
</tr>
<tr>
<td>H7</td>
<td>+</td>
<td>Supported</td>
<td>CFT→R</td>
</tr>
<tr>
<td>H8</td>
<td>-</td>
<td>Supported</td>
<td>R→SAT</td>
</tr>
</tbody>
</table>
Figure 1 Research framework

Maximization as Strategy

Maximization as Goal

Number of Channel Switches

Use of Product/Retailer Reviews

Number of Pauses

Counterfactual Thinking

Regret

Satisfaction

H2a

H1a

H3a

H2b

H1b

H3b

H4

H5

H6

H7

H8
Figure 2: Flow diagram of survey instrument

Eligibility check questions

Purpose and duration of shopper journey

Start of shopper journey

Knew exactly what to buy

What did you do next?\(^1\)

Went ahead and purchased

This was clearly a long and complicated shopper journey. How many more shopping activities did you carry out before you went ahead and purchased?

Purchase channel, return/exchange questions

Rest of survey

What did you do next?\(^2\)

What did you do next?\(^2\)

What did you do next?\(^1\)

Eligibility check questions

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Knew exactly what to buy

What did you do next?\(^1\)

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This was clearly a long and complicated shopper journey. How many more shopping activities did you carry out before you went ahead and purchased?

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Rest of survey

What did you do next?\(^2\)

What did you do next?\(^2\)

What did you do next?\(^1\)

Eligibility check questions

Purpose and duration of shopper journey

Start of shopper journey

Knew exactly what to buy

What did you do next?\(^1\)

Went ahead and purchased

This was clearly a long and complicated shopper journey. How many more shopping activities did you carry out before you went ahead and purchased?

Purchase channel, return/exchange questions

Rest of survey

What did you do next?\(^2\)

What did you do next?\(^2\)

What did you do next?\(^1\)

---

\(^1\)What did you do next options: Needed to wait & think (pause); Visited a store to see/try; Went online to get more information; Read product/retailer reviews

\(^2\)Ideas channel/touchpoint options: physical store; online store; magazines, catalogues; product/retailer reviews; advertisements

\(^3\)Evaluation channel/touchpoint options: physical store; online store; magazines, catalogues; product/retailer reviews