# When Choice Overload Leads to a Choice and When It Does Not: Investigating Choice Overload between Tourists' Different Consideration Sets 

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## 1. Literature Review and Hypotheses

### 1.1. Destination Choice Set

There have long been calls for research to improve our understanding of the stages consumers go through in their consumption behavior and product choice. Economic and psychological researchers proposed theoretical approaches in order to have a better understanding of buying behavior processes. Primary approaches rely on the fact that such buying behaviors are rational, which means they are held by customers with rational behaviors in an attempt to maximize the ultimate value through a logical decision making process. However, this notion was challenged by some researchers like Simon (1959), who introduced "bounded rationality" and believed that consumers choose the first alternative that satisfies their needs, rather than the best alternatives that maximize the outcome value. Thereafter, rational approaches were challenged again for systematic errors and biases that people showed in their decisions and judgments (Kahneman, Slovic, \& Tversky, 1982). Howard and Sheth (1969) introduced a model in which they considered some of the variables that could influence purchase decisions. In their model, they explained how consumers make decisions when confronted with variety of alternatives, this is known as choice sets. Choice sets are applicable in situations that consumers seek information and evaluate different alternatives for their purchase, and when the buying process involves in some degree of risk (Spiggle \& Sewell, 1987).
While tourism and destination choice studies have mostly shared their knowledge from formerly mentioned approaches, there is a general agreement that the high-involvement destination choice process for recreation purposes consist of three funneling stages: early consideration or awareness set; late consideration or evoked set; and final destination selection (Crompton \& Ankomah, 1993). A hierarchical choice process occurs in which tourists systematically decrease potential alternatives and then compare those few numbers that have been left closely prior to their final destination selection. Throughout this process, early consideration set refers to potential and possible vacation destinations that a traveler considers within a specific period of time (e.g. a year, month, week, etc.), while late consideration set refers to probable destinations within a period of time which are more likely to be chosen by the traveler. Finally, the action set or final destination selection consists of all destinations from the late consideration set that tourists do actual purchasing behavior like buying ticket or going to travel agents for them (Spiggle \& Sewell, 1987). Since vacation decision-making, particularly for longer holidays, contains some important time, social, and financial constraints, it needs early planning and is framed as a long planning process (Moutinho, 1987; Van Raaij \& Francken, 1984). During the very beginning steps of travel planning, which can be defined as early consideration set, tourists start making up their mind about the type of vacation activity they are interested in and then form a list of potential vacation destinations based on these interests. After establishing what tourists want to do in their holiday and the exact type of destination (coastal, historical, rural, etc.), the most complicated part starts, which is "decision between equivalent alternatives." While an excessive number of choices in the latter stage could lead to some negative consequences such as dissatisfaction with the travel and destination's attributes, and perhaps even demotivation for traveling, provision of choices in the former phase results most probably in positive consequences such as familiarity with travel and destination preferences.

### 1.2. Choice Overload

In today's life, individuals confront an increasing number of alternatives within various areas of consuming products, careers, cities to live, and even travel destinations to choose from. While this provision of choices could be psychologically desirable through an increase in individual's intrinsic motivation (Deci, 1980; Deci \& Ryan, 1985) and feeling of personal control (Rotter, 1966; Taylor \& Brown, 1988), or from a marketing perspective by means of a competitive advantage (Bown, Read, \& Summers, 2003; Hutchinson, 2005), there is also a possibility that having multiple alternatives result in some negative consequences such as feeling less satisfied, more frustrated with the decision-making process, experiencing regret, or simply making no choice (Iyengar \& Lepper, 2000; Scheibehenne, Greifender, \& Todd, 2009). This contradictory phenomenon is called "choice overload" (Diehl \& Poynor, 2010; Iyengar \& Lepper, 2000; Mogilner, Rudnick, \& Iyengar, 2008), which makes the decision-making process overwhelming due to availability of several equivalent alternatives. It is important to make a difference between choice overload (it is also known as the "too much choice effect"), and information overload. Information overload deals with the number of alternatives and the attributes of them at the same time, and is mostly associated with the quality of available information together with the level of difficulty in understanding an issue (Le Lec, Lumeau, \& Tarroux, 2016). Choice overload on the contrary considers the relationship between the number of choices and decision-making behaviors (Scheibehenne et al., 2009). Perhaps Park and Jang (2013) described the differences between choice vs. information overload in the best possible way by stating that "information overload places greater emphasize on the attributes of the alternatives, which choice overload focuses on the number of choices" (Park \& Jang, 2013, p. 2). However, aside from their prerequisite dissimilarities, it is very likely that an information overload can lead to a choice overload.

Negative consequences of choice overload such as demotivation have been discussed extensively in different contexts such as social psychology and consumer behaviour (Inbar, Botti, \& Hanko, 2011; Iyengar \& Lepper, 2000; Polman, 2012). Some studies have reported an opposite direction when the number of alternatives becomes more and the differences between them become less. Research has shown that by increasing the attractiveness of alternatives, consumers tend to defer their choices or in some cases decide not to choose. By having an excessive number of choices, the complexity of decision making process will be increased due to the integration of information, which this in turn makes individuals to rely on some decision heuristics (Haynes, 2009). On the other end of the spectrum, however, there is an assumption that provision of choices might positively affect intrinsic motivation which in turn results in an enhanced performance level on variety of activities (Katz \& Assor, 2007). Similar relationships have been also found between provision of choices and perceived control and life satisfaction (SethiIyengar, Huberman, \& Jiang, 2004).

In tourism, it is very likely that an increase in the number of alternatives for tourists (e.g., destinations, tour packages, hotels, restaurants, etc.) will not only lessen their intentions to travel or choosing tour packages, but also result in negative consequences like travel dissatisfaction, disloyalty, negative e-WOM, or purchase demotivation in their actual buying behavior (Jiajing \& Meng, 2014; Josiam \& Hobson, 1995; Matzler \& Waiguny, 2005). However, this relationship depends highly on the stage tourists are at in their decision-making and destination choice process. No tourism choice overload studies have considered different stages of tourists' destination choice process while studying this phenomenon, so this research can be the first one which differentiates between different phases of tourists' consideration set. In the very beginning steps tourists start making up their mind about holiday type, when and where to go, how much to
spend, etc. After establishing what tourists want to do in their holiday and the exact type of destination (coastal, historical, rural, etc.), the most complicated part starts; a decision between equivalent alternatives, whether among potential destinations or several available tour packages to a specific destination. It has been suggested in this study that an excessive number of choices in the early phase results most probably in a final decision, as it helps potential travelers to develop their preferences and ideas in their destination choice process, while a choice overload in the latter stage would lead to demotivation for traveling and simply making no choice.
There are some substantial differences between tourism products (as a well-known and clear example of service products) and other regular products, other than those four famous characteristics of service products which are: intangibility, inseparability, heterogeneity, and perishability (Parasuraman, Zeithaml, \& Berry, 1985). First, tourism consumers spend purchased services in a different place, like going to vacations, and receiving no tangible return on their investment. Moreover, tourism products are purchased infrequently and are more expensive compared to other service or regular products. These features along with four formerly mentioned characteristics all together encourage tourists to engage in decision-making process at a higher level than many other service products (Sirakaya, McLellan, \& Uysal, 1996; Sirakaya \& Woodside, 2005). There are some prerequisites for choice overload such as familiarity or prior preference, non-predominance of specific product, and time pressure that can be easily found in tourism context. Tourists' novelty seeking is one of the factors that reduce the role of familiarity and prior preference in the tourism context (Jang \& Feng, 2007). Furthermore, it is hard for travelers to figure out which product is dominant, especially when using the Internet as products are very similar. Finally, tourists also need to purchase quickly and have a feeling of time pressure while purchasing tourism products in peak season. In this way, it is not nonsensical that tourists can hardly have a well-defined preference prior to their destination choice, especially when they are in their early consideration set (i.e., potential travelers in this stage have not yet had any idea about whether to travel or not, where to go if they want to travel and which attributes to consider in their destination choice, when to go and how much to spend on their trip). Therefore, it is very likely that having a plethora of alternatives available in the early consideration stage can result in positive consequences such as helping potential travelers to recognize their preferences and ideas in their destination choice process. Thus, this study hypothesizes:

H1: The likelihood of making 'no choice' decreases as more choices are presented in tourists' early consideration set
On the other hand, once a decision has been made about going on a vacation, what types of destinations to choose from, which attributes to consider based on the chosen type, and when to travel, the second stage is started and is called late consideration set. In this stage travelers try to reduce the number of destinations from the initial set to a smaller and more probable list of destinations by considering relative utility of initial destinations based on their well-defined preferences and attributes obtained from the early consideration set. After those early alternatives from the first stage has been screened into a much shorter list of destinations that are more likely to be chosen, tourists engage in a much more active search among late alternatives, which is called the action set. Final destination choice is selected in the action set (Crompton, 1992). As stated earlier, potential travelers in the last two stages of late consideration and action set have their specific preferred attributes prior to destination choice ready, and confronting them with multiple similar alternatives (choice overload) would most probably have demotivating
consequences such as a tendency to make no choice at all. Therefore, this study considers these last two stages as a single phase and hypothesizes:
H2: The likelihood of making 'no choice' increases as more choices are presented in tourists' late consideration and action set

## 2. Methodology, Research Design, and Data Collection

As stated earlier in the paper, the current study seeks to understand the kind of relationship between tourists' consideration stages (e.g. early, late, and action consideration sets) in their destination choice process and choice overload phenomenon (i.e. being presented with many options makes tourists have a difficult time making a decision). It tries to understand whether faced with multiple alternatives varies between tourists in their different stages of destination choice, and whether these multiple choices might lead them to make no-choice at all. In order to control the role of familiarity with the destination, a pretest will be conducted to decide which destination to include in the scenarios. For this goal, a list of the 10 most famous destinations will be provided to 50 conveniently selected University of Alberta students in Canada. They will be asked to rate the level of their familiarities with each destination based on a seven-point Likert scale, and further to choose the most desirable and undesirable destinations for their reading week break visitations (Reading week happens in the third week of February among Canadian universities). Subsequently, the most familiar and desirable destination will be chosen (destination X ) for further steps. It is also worth mentioning that the initial list of potential destinations can be constructed through reviewing relevant websites such as (https:// tripadvisor.com) or (https://geography.about.com). Thereafter, five different choice sets (2, 5, 10, 20 , and 30 choices) will be formed, and in order to reduce dissimilarities among choice set alternatives, the researcher will try to apply the same conditions between alternatives such as airline, reservation deadline, hotel rating, etc. The only changeable factor will be the total price of different tour packages, which the price will have minor variations.

The target population of this study will be students planning to travel during the reading week break. Although using a student sample has often been criticized in studies, many other choice overload studies have utilized undergraduate students as their sample (e.g., Chernev, 2003; Fasolo et al., 2009; Haynes, 2009; Lin \& Wu, 2006; Mogilner et al., 2008; Shah \& Wolford, 2007; Park \& Jang, 2013). College students have traveled at least once in their life, and moreover, it is very likely for them to travel during reading week break (Bywater, 1993; Field, 1999; Bai, Hu, Elsworth, \& Countryman, 2004). In this order, a sample of University of Alberta students will be randomly reached via e-mail 3 months (early consideration set) and 1 month (late consideration set) before reading week break, and then 2 weeks after the reading week (post-trip), and will be asked to participate in one of 10 different scenarios ( 2 consideration sets $\times 5$ choice sets). Random assignment controls bias and unobserved variables (Shadish, Cook, \& Campbell, 2002). This method also helps to clarify causal inferences (Wilkinson, 1999). In the questionnaire, first part will be a question about familiarity of students about the destination, to know whether they know 'destination X' or not (7-point Likert-scale from $1=$ 'not familiar at all' to $7=$ 'very much familiar'). Then participants will be asked to read the scenario that they have been randomly assigned to (Early and late consideration set scenarios), and then choose between preferred alternatives or 'none' that is included as making no choice at all. Answers will be binary coded so that ' 0 ' for choice and ' 1 ' for no choice. Finally, demographic variables (i.e., gender, age, income, etc.) will be included in the last part.

## 3. Data Analysis and Expected Results

Descriptive and inferential statistics will be used to analyze the data. First, completed questionnaires will be coded and data will be entered into IBM SPSS 21. In order to assure the quality of data, responses will be entered in SPSS two times and the two data sets will be compared. To ensure the cleanliness of the data, case and variable screening will be conducted to identify missing data, unengaged responses, and outliers. Also, normality, linearity, and homoscedasticity of the data will be examined. Experts' check will be used to confirm face validity of the items. A logistic regression will be employed to analyze data, as logistic regression models estimate probabilities of incidents as functions of independent variables. Logistic regression is a logit form of multiway frequency analysis when dependent variable is discrete, and multiple regression analysis when the dependent variable is dichotomous (Tabachnik, Fidell, \& Osterlind, 2001). The main reasons for favoring Logistic regression over Ordinary Least Squares (OLS) are that it is very likely that binary dependent variables violate normal distribution and homogeneous error variance assumption of OLS. It is expected that tourists who are in their early consideration set, and faced with the diverse choices will result in a final decision to travel, as having multiple alternatives at hand helps travelers to develop their preferences and ideas in their destination choice process, and no negative effects of choice overload would be observed. However, those potential travelers who are in their late consideration and action sets will be upset by facing multiple similar alternatives, and will tend to make no choice at all. This study will contribute to the current literature from number of perspectives. Foremost, this study will be one of the first investigations of positive and negative consequences of choice overload in a tourism context, by considering different stages of tourists' consideration sets. Second, it will contribute to the existing literature by extending the domain of choice overload in tourism context.

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