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Designing A Hybrid Experience: The Effect of Experience Structure on Consumers' Evaluations

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Abstract

A hybrid experience refers to an experience that is composed of two or more separable constituent experiences that are traditionally consumed independently of one another. A good example is an educational trip where sightseeing tours and educational engagements are combined in a single market offering for consumers. In this dissertation, I consider whether the structure of a hybrid experience impacts its evaluation. Through six experiments, I demonstrate that alternately structured hybrid experiences (e.g., partaking in both sightseeing tours and educational engagements within each day of a six-day trip) are more favourably evaluated than sequentially structured ones (e.g., completing all sightseeing tours and then engaging in educational engagements afterwards). This is because the benefits consumers infer from consuming an alternately structured hybrid experience may exceed the benefits inferred from a sequential structure. In addition, the positive effect of an alternating structure is greater for hybrids composed of less similar constituent experiences. Script theory, conversational implicature, variety seeking, service bundling, and schema congruity literatures are foundational to this investigation, and these results will add to the literature on experiential consumption and hybrid products by clarifying how consumers learn and evaluate this increasingly popular market offering. From a managerial perspective, the findings will improve understandings of how to design and market hybrid experiences.

Keywords: Hybrid Experience, Experience Structure, Complementarity Inference, Constituent Experience Similarity
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Chapter 1

1 Introduction

Imagine that you are planning a spring vacation and have come across an ad featuring a six-day volunteer–tour trip. The ad suggests an exciting itinerary where you will spend half of the trip volunteering in jungle restoration in the Amazon and the other half leisurely touring popular destination sites in Peru. This is a prime example of what is called a hybrid experience, an experience that is composed of two or more separable constituent experiences that are traditionally consumed independently of one another. To maximize consumers’ desire for this experience, an important decision must be made by marketers: how should the experiences in the trip be structured? Should a marketer structure the trip such that consumers will complete the jungle restoration experience in the first three days before moving to the touring portion (i.e., sequential structure), or should a marketer structure each day to include both jungle restoration and touring activities (i.e., alternating structure)? Before this decision is even made, however, a marketer must consider what type of experiences should be offered together. Would the jungle restoration experience be more attractive paired with sightseeing in Peru (i.e., a less similar experience to jungle restoration) or with the experience of teaching English in villages within the jungle (i.e., a more similar experience to jungle restoration)? In this dissertation, I demonstrate that both decisions impact how consumers evaluate hybrid experience offerings.
I suggest that an alternating structure will be more favourably evaluated because the benefits consumers infer may go beyond those inferred from a sequential structure. When the volunteer–tour trip is structured sequentially, consumers may infer that the jungle restoration experience will be spiritually rewarding and that the touring experience will be fun. In other words, the multisensory elements, events, and benefits of each experience will be processed independently from one another in comparison to when the same trip is structured alternately. However, script theory and the conversational implicature literature suggest that consumers will perceive added benefits from an alternating structure where the jungle restoration and touring experiences are staggered throughout the trip. Not only will consumers expect that the jungle restoration will be spiritually rewarding and the touring will be fun, but they may also assume that a touring event, such as boating along the Amazon River, will be more relaxing after finishing a volunteer event, such as a half-day of tree planting. Additionally, a consumer’s appreciation for the importance of a river maintenance volunteer event may be enhanced if it follows boating on the Amazon River, a touring event. I call these additional inferred benefits with the alternately structured hybrid experience complementarity inferences, and provide the first investigation of how these inferences may increase consumer preference for alternately structured hybrid experiences.

I further suggest that the positive effect of an alternating structure on hybrid experience evaluation may be a function of constituent experience similarity. In designing a hybrid experience, marketers must determine whether the constituent experiences should be more or less similar. In other words, is it better to pair two constituent experiences that may be seen as coming from similar or dissimilar
taxonomical experience categories, or evoking similar or dissimilar emotions, or contributing to similar or dissimilar consumption goals? In the volunteer-tour trip example, an English teaching experience may be perceived as more similar to the jungle restoration experience because both involve a significant amount of preparation and contribute to the goal of intellectual development. In contrast, visits to popular beach destinations may be perceived as less similar to the jungle restoration experience because they differ in their potential to contribute to a goal of relaxation. My findings suggest that preference for an alternating structure is greater for hybrids composed of less (vs. more) similar constituent experiences. While hybrids that are composed of less similar constituents may make it more difficult for consumers to infer obvious value, an alternating structure motivates and facilitates the generation of more complementarity inferences. These inferences help integrate disparate constituent experiences and enhance experience evaluations. For example, an alternating structure will enhance evaluation of a hybrid experience composed of jungle restoration activities and beach visits in comparison to a hybrid experience involving jungle restoration and English teaching events.

I examined the impact of experience structure (alternating or sequential) and constituent experience similarity (more or less) on the overall evaluation of a hybrid experience through six experiments (see Figure 1 for an overview). Experiments 1 and 2 show that alternately structured hybrid experiences are evaluated more favourably. Experiment 3 replicates the main effect of experience structure and provides evidence that individuals are more likely to generate complementarity inferences when evaluating alternating hybrid experiences. Experiments 4 and 5, directly and indirectly, show the
mediating role of complementarity inferences in enhancing the overall evaluation of alternately structured hybrid experiences. Experiment 5 also accounts for satiation avoidance as an alternative explanation. Finally, Experiment 6 demonstrates that preference for an alternating structure is greater for hybrid experiences composed of less similar constituent experiences.

Figure 1: An overview of the full conceptual model and the experiments.

The contributions of this work are as follows. I extend current literature on experiential consumption and hybrid product learning by demonstrating how consumers learn and evaluate hybrid experiences, an increasingly popular experience offering in the market. Specifically, I am the first to demonstrate that hybrid experience structure and the similarity of constituent experiences jointly affect experience evaluations. Moreover, I conceptualize, develop, and provide the first empirical test for the role of complementarity inferences in driving preference for an alternately structured hybrid
Findings of this work provide insight to practitioners on how to better design and market hybrid experiences.

This dissertation is organized as follows. In Chapter 2, I begin with a review of research related to experiential consumption, focusing on the factors that impact experience evaluation. Next, I introduce the concept of a hybrid experience and suggest that such experiences can be structured either alternately or sequentially. Then, I introduce and define a construct central to my dissertation, complementarity inference.

In Chapter 3, I focus on theory development and introduce the first set of hypotheses to be tested in this dissertation. I argue that consumers evaluate an alternating (vs. sequential) hybrid experience more favourably. This is because the benefits consumers infer from consuming an alternately structured hybrid experience exceed the benefits inferred from a sequential structure.

The effect of experience structure and the underlying mechanism are tested in five studies in Chapters 4 and 5. In Chapter 4, I show, by using different experimental designs and employing multiple hybrid experiences as well as diverse measurements of experience evaluation, that an alternating structure is more preferred to a sequential one. In Chapter 5, I demonstrate how the number of complementarity inferences drives preference for an alternating structure, while also ruling out several alternative explanations to the effects.

In Chapter 6, I introduce the concept of constituent experience similarity. I propose and then show that how similarly the constituent experiences of a hybrid
experience are perceived moderates the effects of experience structure on experience evaluation. The preference for an alternating structure is only prevalent when the constituent experiences are perceived as less similar. I discuss the contributions and implications of my research in Chapter 7.
Chapter 2

2 Literature Review

The main purpose of my dissertation is to explore two factors that may influence the evaluation of a hybrid experience. To situate my dissertation research, I first review the experiential consumption literature with a focus on factors that are known to influence the pleasure associated with an experience. Then, I review literature on experience categorization to highlight an important assumption for my theorizing. Finally, I define the concept of a hybrid experience as well as introduce hybrid experience structure and complementarity inferences, two constructs that are central to my dissertation.

2.1 Experiential Products and the Consumption of Experiences

The experiential consumption literature has researched both experiential goods (e.g., wines and music CDs) and life experiences (e.g., balloon trips and white water rafting), both of which are consumed primarily for enjoyment purposes (Cooper-Martin, 1992; Hirschman & Holbrook, 1982; Holbrook & Hirschman, 1982). While experiential goods are usually material and tangible, life experiences are not; they refer to intangible events or episodes within a person’s life (Van Boven & Gilovich, 2003). In this dissertation, I focus on life experiences (Goode, Hart, & Thomson, 2016; Keinan & Kivetz, 2011; Zauberman, Ratner, & Kim, 2009).
Prior investigations have primarily examined why and how people consume extraordinary life experiences, such as white water rafting, skydiving, or climbing Kilimanjaro or Machu Picchu (Abrahams, 1986; Arnould & Price, 1993; Belk & Costa, 1998; Celsi, Rose, & Leigh, 1993; Kozinets, 2002; Tumbat & Belk, 2011). These experiences are often characterized in the consumer research literature as novel, unusual, infrequently consumed, and emotionally rich events (Arnould & Price, 1993; Bhattacharjee & Mogilner, 2014; Goode, Hart, & Thomson, 2016). Consumption of these experiences can be independently or jointly driven by emotional, social, and cognitive factors, among which emotional factors are usually considered as central to motivating consumption (Hirschman & Holbrook, 1982). For instance, purchasing a white water rafting experience is primarily motivated by joy-seeking (Arnould & Price, 1993). Skydiving is driven by thrill-seeking but also by desire for group membership and inclusion (Celsi et al., 1993). Recently, researchers identified that a productivity mindset can influence consumption of extraordinary experiences. Keinan and Kivetz (2011) examined why extraordinary experiences, especially less pleasant ones such as staying at freezing ice hotels or tasting peculiar foods in restaurants, are desired by consumers. Their findings suggest that the consumption of these experiences is motivated by an individual’s desire to build up an experiential résumé; making them feel more productive. Clarkson, Janiszewski, and Cinelli (2013) also suggest that the consumption of extraordinary experiences may be influenced by a desire for knowledge development. Novice consumers pursue experiences that help grow the breadth of their consumption knowledge, and expert consumers look for experiences that contribute to the depth of their consumption knowledge.
In addition to extraordinary experiences, the consumption of ordinary experiences (i.e., frequently consumed experiences, such as dining in a restaurant) has also garnered attention. By comparing the consumption of extraordinary and ordinary experiences across age groups, Bhattacharjee and Mogilner (2014) found that younger people expect to gain more happiness from extraordinary experiences. In contrast, ordinary experiences are increasingly associated with happiness as people age or anticipate a limited lifespan. Regardless of the type of experience, a consistent finding is that consuming life experiences provides people with pleasure and happiness (Cooper-Martin, 1992). An important question that follows is: What factors determine the amount of pleasure consumers may derive from an experience? The answers are important and may suggest factors that influence evaluations of a hybrid experience.

### 2.2 Sources of Pleasure

Some experiences are inherently more pleasurable than others. For most people, attending a concert is more enjoyable than attending a lecture on mathematics. However, even with the concert, the amount of pleasure consumers derive may vary (see Alba & Williams, 2013 for a review). In short, the variation in pleasure may come from (1) comparisons made between an individual’s experiential and material consumption, (2) the involvement of others in consuming and/or communicating the experience, and/or (3) the inherent properties of the experience.
2.2.1 Pleasure from Comparisons to Material Purchases

Consumers may derive more pleasure from an experience (e.g., taking a hot air balloon ride) if it is compared to consuming a similarly priced material product (e.g., purchasing a piece of antique furniture).

Experiential purchases are typically made for the purpose of acquiring a life experience, and material purchases are made for obtaining a tangible possession (Van Boven, 2005). A direct comparison of these two types of purchases suggests that experiential purchases have more positive outcomes than material purchases. Experiential purchases not only promote anticipatory pleasure before consumption (Kumar, Killingsworth, & Gilovich, 2014; Lowenstein et al., 2001), but they also make people happier when the purchase is reflected upon after completion (Van Boven & Gilovich, 2003). The happiness generated from an experiential purchase is more enduring (Nicolao, Irwin, & Goodman, 2009); purchasing is more psychologically satisfying (Howell & Hill, 2009); and the downstream effects are more positive, such as fostering social connectedness and prosocial behaviour (e.g., making donations; Kumar, Mann, & Gilovich, 2014). Further, when the experience is given as a gift, the gift can make a recipient feel closer to the giver (Chan & Mogilner, 2013). Indeed, the consumption of experiences seems to have many positive outcomes in comparison to material purchases.

One explanation for this difference is attributed to hedonic adaptation, the tendency of humans to quickly return to a relatively stable level of happiness despite positive or negative stimuli (Frederick & Loewenstein, 1999). Hedonic adaptation happens more quickly for material purchases than for experiential purchases. This is
because the intangible nature of an experience makes the pre-living and reliving of it more malleable. For example, individuals may focus on different sensory or emotional aspects of an experience every time they pre-live or relive it in their minds. The malleability thus slows down the rate of adaptation (Nicolao et al., 2009). Another theory is that the intangible nature of experiences makes them less subject to direct comparisons, a process that can be carried out more easily for material purchases and which usually results in reduced enjoyment (Carter & Gilovich, 2010).

2.2.2 Pleasure from the Involvement of Others

In addition to comparisons made between an individual’s experiential and material consumption, involving others in the consumption or communication of an experience usually increases pleasure. In contrast, learning about experiences from others can have mixed results on one’s desire for an experience.

Consuming Experiences with Others: Experiences can be consumed alone, such as listening to music on an iPod, or with others, like attending a concert (Caprariello & Reis, 2013; Raghunathan & Corfman, 2006; Ramanathan & McGill, 2007). The presence of others, or co-consumption, has been found to impact how individuals enjoy life experiences. When consuming an experience, people report enjoying it more in the presence of another person, presumably due to a feeling of companionship and sharing (Caprariello & Reis, 2013). They rate an experience more special or unusual if it is consumed with others, and to protect such specialness, they avoid consuming the same experience again when planning for future consumption (Zauberman Ratner, & Kim, 2009). This enhanced enjoyment, be it moment-to-moment (i.e., measured several times
throughout the experience) or retrospective (i.e., measured after consuming the experience), becomes greater if the person who shared the same experience offers positive and consistent opinions towards that experience (Raghunathan & Corfman, 2006; Ramanathan & McGill, 2007).

Communicating about Experiences with Others: Consumers like to share personal life experiences with others, through photos (Barasch, Diehl, & Zauberman, 2015), journals (Lambert et al., 2013, Study 1), and social media, such as Twitter and Facebook. Interestingly, communicating through these various forms can have mixed effects on one’s enjoyment of the experience. Taking photos during a positive experience can enhance pleasure, due to enhanced engagement in the experience, but doing so actually makes a negative experience worse (Barasch, Diehl, & Zauberman, 2015). Relative to a goal of taking photos for oneself (e.g., to preserve one’s memories), taking pictures with the intention to share with others (e.g., to post on Facebook) reduces pleasure derived from the experience (Barasch, Zauberman, & Diehl, 2016). Sharing positive experiences through journals also affects experience evaluation. In Lambert et al. (2012), people were asked to jot down either positive or neutral experiences for four weeks. Post-enjoyment was measured, and sharing positive experiences with a partner twice a week through journals was found to increase retrospective enjoyment of the experience.

Learning about Experiences from Others: People sometimes receive information about an experience from friends via word-of-mouth (Goode et al., 2016; Yaniv, Choshen-Hillel, & Milyavsky, 2011). There is no doubt that opinions from others affect decision making. For example, consumers rely on friends’ recommendations and online
reviews to decide where to go for dinner and which movie to watch. However, the source of information (e.g., friends or strangers) affects the decision making process, resulting in differences in one’s desire for an experience. For example, individuals who are more confident in their experiential tastes are more likely to follow opinions coming from demographically (e.g., ages) and/or behaviorally (e.g., frequency of listening to rock music) similar others for experience purchases. Individuals who are less confident in their experience tastes, on the other hand, are more likely to follow opinions coming from the popular majority (Yaniv et al., 2011). The amount of pleasure that consumers anticipate from new experiences is also affected by the closeness of the person who provides word-of-mouth information. Goode and colleagues (2016) found that an extraordinary experience was perceived as less desirable when the memory of it experience was shared by a close friend. This may be because memories shared by close others are more likely to transport recipients into the experience; enabling the recipient to see and feel the experience as if actually living it. Unfortunately, pre-living details of an extraordinary experience before consumption can dampen desire for the experience.

2.2.3 Pleasure from the Inherent Properties of an Experience

Finally, the pleasure consumers derive from an experience can also be influenced by the experience’s inherent properties. In general, an experience (e.g., a piece music) can be characterized by its sequence and intensity (Ariely, 1998; Ariely & Carmon, 2000; Ariely & Zauberman, 2000; 2003). Correspondingly, research has identified three effects that profoundly affect enjoyment of an experience: the trend, peak, and end effects.
**Trend Effects:** Hedonic trend refers to how experiences change in positive/negative intensity over time, such as when an experience becomes increasingly more pleasant or unpleasant. In general, people prefer experiences that increase in positive intensity over time (also called *improving-trend experiences*; Loewenstein & Prelec, 1993). Postponing the consumption of a more positive experience extends anticipatory pleasure, that is, the pleasure that people experience just by thinking about a future experience (Loewenstein et al., 2001). For example, Loewenstein and Prelec (1993) asked individuals to choose between two experience options: visiting an abrasive aunt the coming weekend and friends the next weekend (an improving-trend experience) or visiting friends the coming weekend and the abrasive aunt the next weekend (a deteriorating-trend experience). Ninety-percent of participants selected the first option. Additionally, experiences that increase in negative intensity over time are rated more unpleasant (also called *deteriorating-trend experiences*; Ariely, 1998). To illustrate, Ariely (1998) found that experiences that increased in negative intensity (e.g. pain) over time were evaluated as more painful than were constant experiences, which in turn were evaluated as more painful than experiences that decreased in negative intensity over time. Both improving-trend and deteriorating-trend effects, however, are contingent on the perceived cohesiveness of an experience. That is, whether the experience is continuous or can be partitioned into multiple discontinuous parts (Ariely & Zauberman, 2000; 2003). For example, a continuous experience may involve a concert by a single musician. This experience would be evaluated primarily based on the overall trend. In contrast, a discontinuous experience involving multiple musical acts at a festival would be evaluated by the individual intensity of each musical act (Ariely & Zauberman, 2003).
Peak and End Effects: The peak and end affect refers to the maximum and final intensities associated with an experience (e.g., Fredrickson & Kahneman, 1993). Research has shown that the pleasantness of an experience can be well predicted by peak and end affect (Fredrickson and Kahneman 1993; Redelmeier and Kahneman 1996; Ross & Simonson, 1991). For example, the most enjoyable moment consumers feel at a concert, as well as their feelings at the ending moment, contribute more to their overall evaluations of the concert in retrospect. Similar findings have been found with advertising, where liking for a TV advertisement was predicted by the peak and the end affect, regardless of the length of the ad itself, unless extra length was used to create another peak moment (Baumgartner, Sujan, and Padgett, 1997). In addition to the peak and end effects, Anderson (1981) also reported evidence for the primacy effects, which suggests that affective reactions at the early stage of an experience can also be influential.

In sum, experiences are consumed primarily for enjoyment and pleasure (Cooper-Martin, 1992). In this section, I discussed three sources from which consumers may derive pleasure in an experience: comparisons to material purchases, the involvement of others, and/or the inherent properties of the experience. While the first two sources may be less controllable from a managerial perspective, the last one, on the other hand, can be manipulated through the design of an experience. For example, it is likely quite difficult to constrain with whom people consume an experience. Certainly, it could be possible, through advertisements or post-purchase communications, to encourage consumers to compare an experience with a material good to increase pre-purchase desire or enhance post-purchase satisfaction. It is very feasible to design an experience to optimize pleasure, whether this be done by adopting an improving trend or by including more peak
moments and a good ending. With respect to hybrid experiences, I explore how changing the inherent properties of the experience, by varying the experience structure of a hybrid, may influence consumer evaluations.

2.3 Categorization of Experiences

An important assumption in my dissertation is that consumers think about experiences as belonging to distinct categories. Otherwise, the concept of hybrid experiences would not pose a worthwhile investigation. For example, if consumers do not perceive educational engagements and sightseeing tours as experiences from separate categories, then the combination of the two would not be perceived as a hybrid offering but instead as a collection of various events. Furthermore, only if consumers think about experience categories would they engage in inferential processes to make sense of category-inconsistent events that are incorporated into an experience. This inferential process in turn leads to the identification of additional value for hybrid experiences. Research reviewed in this section indicates that consumers think about experiences as belonging to distinct categories, which provides important evidence for a major assumption in my dissertation.

2.3.1 Experiences and Category Cues

Categories are cognitive representations of the world’s structure in people’s mind (Rosch, 1978). They not only help individuals to mentally organize knowledge about known objects (e.g., animals, desks, computers) but also facilitate the retrieval of such knowledge when individuals try to understand a new encounter. For example, learning about a newly released smartphone, such as the LG G5, relies on consumers retrieving
previously learned information about the category of smartphones. Based on the retrieved information, consumers are then able to infer that the new product could help make phone calls, surf online, access social media, etc. A tangible product, like the LG G5, can be categorized by its physical appearance (i.e., whether the new product resembles the look of smartphones; Gregon-Paxton et al., 2005); the product label (i.e., whether it is labeled as a smartphone in the advert; Moreau, Markham, & Lehmann, 2001); the dominant attribute (i.e., whether the product can be used to make phone calls, a dominant feature of smartphones; Noseworthy & Goode, 2011); or even the context into which the product is placed (i.e., the LG headphone-smartphone hybrid is categorized as a smartphone when placed near other smartphones but a headphone when placed with other headphones; Noseworthy, Wang, & Islam, 2012). When multiple category cues exist, the first encountered or the most obvious cue determines a product’s categorization (Gregon-Paxton et al., 2005). Similar to tangible products, experiences can also be categorized by various cues, such as activity type, a combination of activity type and other experience differences, as well as abstract conceptual cues, like goals.

In cognitive psychology, the categorization of experiences has been studied from a top-down perspective, where activity type serves as the superordinate category cue used to mentally organize and access all other knowledge related to a specific experience (Schank, 1982; Schank & Kolodner, 1979). For instance, all experiences that involve a focal activity of eating may be stored under the activity type of “eating.” Other activity types that can be used to classify experiences include entertainment, school, sports, hygiene, shopping, crime, transportation, and housework (Rifkin, 1985). Moreover, within each activity type, an experience can be further organized by other differences,
such as locations, time, and participants. For instance, eating might be further organized into eating at restaurants or at home, eating for breakfast, lunch, or dinner, and eating with family, with friends, or alone.

In addition to top-down activity-based categorization, a network view of how consumers categorize experiences is also present in the cognitive psychology literature. According to the network view, experiences are classified simultaneously using a variety of cues, such as activity type, location, participants, and time (Barsalou, 1988; Lancaster & Barsalou, 1997). Instead of assuming that activity type supersedes all other knowledge related to a specific experience (e.g., location, participants, time), the network view suggests that all relevant cues work simultaneously to determine an experience’s category.

The third approach to investigating experience categorization examines the categorization of experiences via abstract conceptual cues, such as goals (e.g., experiences for leisure or for work; Barsalou, 1983; Conway, 1990), emotional valence (e.g., positive or negative experiences; Conway, 1990), and temporal structure (e.g., experiences when I was in college or in high school; Conway & Bekerian, 1987). This approach, compared to the first two, has been adopted more extensively in consumer behaviour research.

**2.3.2 Downstream Effects of Experience Categorization**

How experiences are categorized has a profound impact on experience perception, planning and consumption. For example, Bhattacharjee and Molliger (2014) investigated how age affects the purchase of extraordinary (e.g., skydiving) or ordinary (e.g., dining at a restaurant) experiences and resulting happiness with one’s life. The distinction between
these two experience categories, extraordinary versus ordinary, resides in the frequency of consumption, the goals they meet, and the emotions they elicit. Younger people expect to gain more happiness from extraordinary experiences, as they consider memories of this type of experience are important in defining who they are (Zauberman et al., 2009). On the other hand, ordinary experiences are increasingly associated with happiness as people age or when individuals expect to have limited time remaining in their lives.

Categorizing experiences by valence (i.e., positive or negative) can influence how individuals plan and consume experiences. The hedonic editing hypothesis (Thaler, 1999; Thaler & Johnson, 1990) suggests that when facing multiple experiences, consumers prefer to segregate positive events to maximize enjoyment and integrate negative events to minimize displeasure.¹ For example, researchers would prefer to receive two manuscript acceptances on different days rather than on the same day but receive two manuscript rejections on the same day rather than on different days (Linville & Fischer, 1991). Similarly, consumers prefer to delay a positive experience in order to extend pre-consumption savouring, but prefer to expedite a negative experience to minimize anxiety associated with anticipation (Hardisty, Frederick, & Weber, 2011). Consumers also rely on the valence of an experience to plan how to consume event categories involved in an experience (Shah & Alter, 2014). Consumers prefer to consume in a way that eliminates event categories within an experience if it is framed negatively, but are reluctant to do so if the experience is framed positively. To illustrate, consider that an individual plans to

¹ Prospect theory (Kahneman & Tversky, 1979) focused on monetary gains and losses, but Thaler and colleagues (1990; 1999) as well as Linville & Fischer (1991) looked at positive and negative events. Linville and Fischer (1991) also found evidence of segregating negative experiences. In prospect theory, the editing phase of the decision is about stimulus encoding and simplification processes.
visit six cities in Canada. These cities can be further classified into two location categories: West and East. If a person has already visited two western cities and one eastern city, and is deciding which city to visit next, findings from the Shah and Alter (2014) study would predict that the last city from the West category would be chosen (thus eliminating the category of western cities). However, this prediction would only hold if the whole trip is framed as an unpleasant journey. The person would be expected to choose to visit another city from the East category if the trip is framed as a pleasant journey. This is because eliminating categories leads to a greater subjective feeling of making progress. This is more important in the consumption of negative experiences than positive experiences.

Research on experience categorization has important implications for my dissertation research. It provides evidence that consumers think about experiences as belonging to distinct categories and also shows that experience categorization can be determined by various cues. These findings are fundamental to my conceptualization of hybrid experiences and theorizing related to the role of complementarity inferences. Next, I introduce and define the concept of hybrid experiences and discuss two other constructs central to my thesis.

2.4 Conceptualization of Hybrid Experiences

2.4.1 Hybrids in the Innovation Literature

Much as consumer goods can have hybrid functionality (e.g., Apple’s iWatch or LG’s smartphone–headphone hybrid), experiences from different categories can be combined to create hybrid experiences. Such experiences are not uncommon. Educational
engagements and sightseeing activities are often combined to create educational trips for students. Voluntourism combines volunteer work and tourism to attract consumers who would like to consume leisure activities while contributing to society. “Cook-the-book” experiences combine learning to cook with a book club. Recently, some tourism websites, such as expedia.com and viator.com, have started to help consumers to design their own hybrid experiences. For example, on one site consumers are provided with a list of more than fifty-five tours from various experience categories, such as sports events, local museum tours, food-tasting trips, and visits to famous attractions. They are then allowed to pick three to ten tours from the list to customize a trip to New York (https://www.expedia.ca/things-to-do/explorer-pass-choose-3-4-5-7-or-10-museums-tours-attractions.a182983.activity-details).

Despite market popularity, knowledge of how consumers understand and evaluate hybrid experiences is limited. What is known about how consumers learn about and form preferences for more utilitarian and functional hybrid products is not directly transferable to hybrid experiences. For example, hybrid functional products are better designed integratively (i.e., the hybridization gives rise to new features that do not belong to any of the composing products) than additively (i.e., the hybridization simply combines features of the two composing products; Gibbert et al., 2012). This is because a more integrative design offers additional product benefits that make the hybrid seem more cohesive. To illustrate, adding a flashlight to a pair of slippers creates an additive hybrid. An integrative hybrid would introduce new features, such as a battery that recharges as you walk or a pressure sensor built into the slippers that turns on the flashlight when the slippers are worn (Gibbert et al., 2012). This design knowledge, however, is not
immediately transferable to hybrid experiences. Hybrid products are tangible, and new features that arise from integrative hybridization can often be visually detected and understood with ease. In contrast, experiences are intangible, and there is no physical design to prompt appreciation of new benefits. Consequently, the advantages of an integrative design may not be as readily realized for hybrid experiences.

2.4.2 Hybrids in the Service Literature

To define hybrid experiences, it may help to look at hybrid offerings in the service marketing literature. A hybrid offering is defined as a combination of one or more goods or one or more services that create more customer benefits than if the good or service were available separately (Shankar, Berry, & Dotzel, 2007, p. 2). Adopting this conceptualization, I define a hybrid experience as being composed of two or more separable constituent experiences that are traditionally consumed independently of one another. In Figure 2, I offer the example of a two-day voluntour trip as a hybrid experience, because it consists of volunteering events (e.g., tree planting and river cleanup) as well as sightseeing events (e.g., boating and jungle walk). More commonly, one would expect volunteering and sightseeing events to be consumed as two independent experiences.
A hybrid experience is conceptually different from a complex experience. The latter concept refers to a single experience that has more than one experiential dimension, such as social, cognitive, or sensory dimensions (Gentile et al., 2007; Schmitt, 2010; Tsiotsou & Goldsmith, 2012). My conceptualization of a hybrid experience refers to a combination of two or more separate experiences, each of which may or may not be a complex experience. A good example of a complex experience is wine tasting (Tsiotsou & Goldsmith, 2012). For novice wine tasters, it is a novel sensory experience, intensively involving many of the senses (sight, touch, smell, and taste). It is also a social experience as wines tasters interact with hosts from whom they learn about different wines and with other guests with whom they communicate their feelings about wine. It is also a cognitive experience, as wine tasters improve their knowledge about wines. This complex experience can be combined with other experiences, such as wine making, to make a hybrid experience for consumers, but wine tasting alone is not a hybrid.

A hybrid experience is also different from a service constellation. The latter is a combination of multiple interdependent experiences or services that are often produced by multiple providers (van Riel et al., 2013). A service constellation may consist of a
hybrid experience, but it also includes other services that are inter-related. For example, a two-day voluntour trip is a hybrid experience, as it consists of volunteering and sightseeing activities. To create a service constellation, this hybrid experience can be combined with a transportation service that enables optimal time management during the trip or a review service that facilitates prioritization of the activities in the trip. In other words, a service constellation involves not only the core experience(s) to be consumed but also services that enhance consumption of the core experience(s) and of which are usually offered by different providers. For my dissertation, I focus only on hybrid experiences and not service constellations.

2.5 Hybrid Experience Structure

Although the categorization of experiences has been studied from at least three different perspectives (i.e., top-down, network, and conceptual), there is agreement that information about experiences is stored in memory as abstract knowledge, which could take the form of scripts or memory organization packets (MOPs). MOPs are also scripts but a more generalized form (Schank & Abelson, 1977; Schank, 1982). By definition, a script is a hypothesized cognitive structure that organizes the way in which event-based experiences are understood (Abelson, 1981). It consists of not only information on experience categories (e.g., activity types), but also procedural information on inter-correlated events that one performs in an experience (Tversky, Zacks, & Hard, 2008; Tversky, Zacks, Morrison, & Hard, 2011; Zacks & Tversky, 2001). In the strongest format of a script, order and the occurrence of events for an experience are ritualized and strictly followed, such as in a Japanese tea ceremony. In a weaker format, a script contains information on the occurrence as well as the sequence of events. For instance,
the script of “going to a movie” provides events and procedures usually involved in executing the experience, such as “driving to the movie theatre,” “purchasing tickets,” “entering the theatre,” and “watching the movie.” In a weak format, a script supplies a bundle of the potential events without any predetermined sequence (Abelson, 1981). A weak script format for a voluntary service experience might involve events like “tree planting,” “river cleanup,” and “animal protection.” They are all potential events that belong to the overall experience, but their sequential order is unnecessary for the experience to occur (i.e., consumers can go through the three events in different orders).

The script-based knowledge of experiences enables structural flexibility. A hybrid experience can therefore be structured integratively, sequentially, or alternately with its constituent experiences. Differences among these structures arise from the extent to which the consumption of the independent events of each constituent experience in a hybrid temporally overlaps (see Figure 3). At one extreme, two constituent experiences can be integrated and simultaneously consumed. An example of this type could be a dinner theatre event where attendants dine while watching a show. At another extreme, two constituent experiences could be combined sequentially without any temporal overlap, as in a two-day voluntour trip where the itinerary involves a full day of sightseeing followed by a full day of voluntary service. Between these two extremes is a hybrid model where the constituent experiences and their corresponding events are consumed in an alternating pattern, such as having both voluntary services and sightseeing tours integrated in each of the two days of the voluntour trip. To illustrate, assume that a hybrid experience is composed of constituent experiences A and B, each with multiple independent events, such as A₁, A₂, B₁, and B₂. The sequential structure
would be shown as $A_1A_2B_1B_2$, while the alternating structure would be illustrated as $A_1B_1A_2B_2$.

**Figure 3: Temporal variation in hybrid experience structure.**

In the next section, I review the literature relating to service bundling and complementarity, and then define the concept of complementarity inference that is foundational to my thesis.

### 2.6 Complementarity Inference

I define a *complementarity inference* as a judgment that a consumer makes about the *added* value generated from pairing two experiences, based on the conceptualization of complementarity from Popkowski Leszczyc, and Häubl (2010). When a hybrid experience is structured alternately (vs. sequentially), there is the possibility of a greater number of complementarity inferences to be generated; this may lead to an enhanced experience evaluation. For example, consider that volunteering and sightseeing activities are structured alternately in a voluntour trip, such as scheduling a boating tour after tree planting. Consumers may infer that boating may feel *more* rewarding after working hard at tree planting, which makes the whole trip seem more favourable. Moreover, these
inferences could relate to functional, economic, and emotional/sensory evaluations, each of which will be illustrated using examples below.

In the field of microeconomics, complementarity is often measured through cross-price elasticities. In essence, goods are considered complements if a change in the price of one good leads to a change in the quantity demanded of the other. For instance, if the price of gasoline increases and consumption falls, the consumption of motor oil will fall (Pindyck & Rubinfeld, 2001). The marketing literature regards complementary goods as those consumed jointly to fulfill different aspects of a consumer’s need, such as coffee and donuts (Lattin & McAlister, 1985). The notion of complementarity has also been extended beyond product-level descriptions to describe the marginal utility one feature can add in the presence of another (e.g., adding tartar protection to a toothpaste that already has the cavity prevention feature; Chernev, 2005, p. 749).

Implicit in the marketing literature is the idea that consumers can easily generate complementarity inferences with complementary products, services, or product features (Telser, 1979; Harlam et al., 1995; Popkowski Leszczyc & Häubl, 2010). Inferencing refers to the construction of meaning that goes beyond the information explicitly given (Harris, 1981). Because most stimuli used in this research involve well-established complementary pairs, such as VCRs and videocassette tapes (Gaeth et al., 1990), shampoos and conditioners (Harlam et al., 1995), or a centralized security system and an alarm system bundled in a package (Hermann, Huber, & Coulter, 1987), the inferencing process has been assumed to be automatic and, thereby, not of focal interest to consumer researchers. One exception is from a study by Popkowski Leszczyc and colleagues
(2007). They found that consumers *deliberately* infer the value (i.e., quality) of one item in a bundle based on that of another bundled item. Interestingly, this inferencing takes place even if the two bundled items are neither substitutes nor complements. This finding suggests that consumers may also engage in an effortful inferencing process to evaluate experience bundles, of which may be relevant to the hybrid experiences I investigate.

So far, consumer research has tended to focus on only one of the dimensions of complementarity inference—the functional value of the combinations (Gaeth et al., 1990; Harlam et al., 1995; Hermann et al., 1987). This emphasis on functional complementarity is partially due to the nature of products examined. For example, complementarities inferred from combinations such as VCRs and videocassette tapes are often thought of as being functional, such as enhanced product usefulness and quality (Gaeth et al., 1990). Other research has looked at economic considerations, suggesting that purchasing a complementary combination is anticipated to effectively save time, effort, and money (Guiltinan, 1987; Simonin & Ruth, 1995). For instance, the observation that the consumers’ preferences for a combined offering of oil and filter changes at the same gas station suggests that consumers see additional value in saving time and effort by making a combined purchase (Guiltinan, 1987). While both functional and economic dimensions are relevant in the consumption of experiences, I propose that complementarity inferences may also involve sensory and emotional aspects. For example, sensory or emotional complementarity inferences may arise when scheduling a boating event between tree planting and river cleanup events in a voluntour trip. Consumers may infer that boating in the river will be rewarding and relaxing after planting trees, but the beautiful view consumers see while boating along the river will also help them appreciate
the significance of helping with river cleanup the following day. In other words, a greater number of sensory and emotional inferences may be generated by having three independent events sequenced in such a way.

In the following chapter, I use the concepts of hybrid experiences, experience structure, and complementarity inferences to develop my theory and generate hypotheses. Specifically, I demonstrate how and why preferences for hybrid experiences may vary as a function of experience structure.
Chapter 3

3 Theoretical Development

I propose and show that a greater number of complementarity inferences will be generated when a hybrid experience is structured alternately, and this will in turn enhance experience evaluations (see Figure 4). My theorizing is motivated by three converging streams of research. Script theory indirectly suggests that the processing of a hybrid experience may be contingent on its structure (Abelson, 1981). That is, when structured sequentially, the constituent experiences of the hybrid will be processed largely independently from each other. When the hybrid is structured alternately, however, the conversational implicature literature (Grice, 1975; Schwarz, 1996) suggests that individuals will generate complementarity inferences to meaningfully integrate events from different constituent experiences. Similar to Goode et al. (2010), it is expected that the more inferences that are generated, the more benefits individuals will associate with the hybrid experience, and the more favourably the experience will be evaluated.

![Figure 4: Conceptual model for the role of complementarity inferences.](image)
3.1 The Role of Script Theory and Conversational Implicature

To determine the completion of an experience is to judge whether or not all anticipated events in the experience have been finished. Once the experience is complete, adding another event does not exert any effect on the finished experience; instead, the added event is viewed as a separate experience in itself or as the beginning of a new experience. With a voluntour trip, once all of the volunteering events are finished, consumers would perceive this constituent experience to be complete. Adding a sightseeing event, such as boating, to the end of the trip, would not likely alter the number of inferences generated for the volunteering or boating events. While there is general agreement regarding what constitutes a completed experience (Tversky et al., 2008), it remains unclear as to how consumer learning and evaluations would be affected if an unrelated event (e.g., boating) were scheduled between volunteering events. To address this, it is necessary to understand how individuals generate inferences when learning about experiences, especially those with script-inconsistent (i.e., unrelated) events as with the boating and volunteering example.

Although an experience script also involves the executive order of anticipated events (i.e., the sequence in which events are executed), both its content and structure are quite malleable (Abelson, 1981). This is because individuals actively engage in gap-filling procedures to understand encountered experiences (an inferencing process noted by Abelson [1981]). Inferences about a new experience can be made based on existing scripts of comparable experiences stored in memory, and/or generated ad hoc based on the context (Kardes, Posavac, & Cronley, 2004). These inferences, in turn, facilitate
comprehension of new but familiar experiences even if the event sequence of the
countered experience is atypically arranged (Lichtenstein & Brewer, 1980) or if
important events are omitted from the experience (Bower, Black, & Turner, 1979). To
illustrate, think about the experience of going to a movie. The script includes “driving to
the movie theatre,” “purchasing tickets,” “entering the theatre,” and “watching the movie.”
Now imagine an occasion where the event “purchasing tickets” is arranged to come after
“watching the movie.” Would this atypical sequence arrangement impede people’s
understanding of the experience? Script theory would suggest no. Because individuals are
familiar with the film watching script, they are able to rely on the memorized script to
infer that all the described events, albeit atypically ordered, are still present. At the same
time and to make sense of the atypical sequence, consumers may also infer that the
cinema is running a sales promotion for films where customers pay whatever they want
after watching the movie. Similarly, omitting the event of “purchasing tickets” from the
description is not expected to hinder experience comprehension either, as individuals may
understand event omission by inferring that the person may have a coupon or a free pass.

Do consumers generate ad hoc inferences to understand experiences that consist
of script-inconsistent events? With the hybrid experiences investigated in my dissertation,
script-inconsistency is most predominant with alternately structured experiences (e.g.,
A1B1A2B2). With this level of script-inconsistency, it is unclear as to how the generation
of inferences by consumers would be affected. To date, it has only been shown that
script-inconsistent events are marked with distinct tags and stored in memory separately
from experience consistent events; thus, resulting in greater accuracy when recalled later
(Graesser, Gordon, & Sawyer, 1979; Graesser, Woll, Kowalski, & Smith, 1980). This
memory perspective of script-inconsistency offers little insight into how the inference generation process might be affected by script-inconsistency.

Anecdotally, it would seem that people also generate ad hoc inferences to understand the details and benefits of an experience with script-inconsistent events. Consider watching a romantic comedy at the theatre. Imagine being offered a nice cup of latte between the events of “entering the theatre” and “watching the movie.” Clearly, this new event is not typical in a script that involves film watching. However, it will not likely be difficult for consumers to draw their own conclusions as to why such an atypical event was involved. In other words, I expect this novel event may spur the generation of additional inferences. People may infer that the theatre wants them to feel more comfortable and romantic by pairing a latte with a heart design in the foam with the romantic comedy they are going to watch. Further, by generating ad hoc inferences to resolve script inconsistency, consumers may find the experience more appealing as new benefits are inferred. I next turn to conversational implicature research for indirect theoretical support.

The conversational implicature literature assumes that all information provided by individuals during a conversation is relevant. This assumption allows people to engage in a sense-making process to understand information that might otherwise be seen as uninformative or ambiguous. This inferencing process has been used by participants to make sense of research experiments (Schwarz, 1996) and by recipients to understand various marketing communications (Miller & Kahn, 2005). That is, any and all information is considered relevant to the context at hand. Applying this to a situation
where a consumer is learning about a new experience, the conversational implicature literature suggests that individuals may view all events involved in a particular experience to be relevant. Consequently, individuals will try to understand the experience by generating ad hoc inferences intended to bridge all the events together. In the example of going to a movie, consumers may have assumed that the event of “being offered a cup of latte” should be relevant to the experience. Motivated by this assumption, they engage in a process to make sense of this new event, which may lead to inferences that the theatre pairs free latte with romantic comedies to enhance consumers’ film-watching experience.

Taken together, script theory suggests that when a script-inconsistent event is added to the end of an existing experience, it will be processed separately from the focal experience. For example, if the event of “being offered a cup of latte” is added after the event of “watching the movie”, it will be processed, in large part, independently from the film watching experience. Movie-goers will not actively attempt to link the latte to watching the movie. Watching the movie will be perceived as enjoyable, and drinking a free latte will also be perceived as enjoyable. On the other hand, if a script-inconsistent event is included among the events of the focal experience, the conversational implicature literature suggests that individuals will generate ad hoc inferences to meaningfully integrate the inconsistent event. If “being offered a latte” is scheduled between “entering the theatre” and “watching the movie”, consumers may infer that the free latte is offered as a token of customer appreciation. As stated before, consumers may also infer that drinking a latte with a heart design in the foam while watching a love movie makes the film watching experience more romantic. These inferences go beyond
the value of the script-inconsistent event itself (e.g., having a cup of latte is enjoyable) to demonstrate that complementarities could arise when a script-inconsistent event is incorporated into an otherwise unrelated experience.

This theoretical reasoning is critical to understanding what drives preferences for sequentially or alternately structured hybrid experiences. When two constituent experiences of a hybrid are structured sequentially (e.g., \( A_1A_2B_1B_2 \)), each constituent experience will be processed independently. When events from the constituent experiences are structured in an alternating manner (e.g., \( A_1B_1A_2B_2 \)), overall comprehension of the hybrid experience will involve inference generation that is likely to be motivated by a process attempting to reconcile script inconsistency. For example, if volunteering and sightseeing activities are structured sequentially in a voluntour trip, they will be mainly processed independently from each other with few inferences generated to integrate the constituent experiences. As a result, consumers may feel that the voluntary service is meaningful, and the sightseeing tour is fun. On the other hand, if volunteering and sightseeing activities are structured alternately, such as scheduling the boating tour between tree planting and the river cleanup, more integrative inferences may be generated. After working hard at tree planting, boating may feel rewarding and more relaxing. In addition, the beautiful views of the river seen while boating may help people further appreciate the significance of the river cleanup scheduled the following day. Finally, scheduling a jungle walk after the river cleanup may increase one’s connection with nature, as both activities take place in the same day. These inferences go beyond the value of each constituent experience (voluntary services and sightseeing tours). In Figure 5, I illustrate visually the complementarity inferences that may be generated for the
sequentially and alternately structured voluntour trip. Each circle in the figure represents the places in the trip where complementarity inferences are expected to be generated.

**Figure 5: Visual illustration of complementarity inferences for a voluntour trip.**

Further, the greater the number of complementarity inferences generated, the more favourably a hybrid experience will be evaluated. Inferences and the extent to which inferences are generated have been found to increase evaluations of products and brand extensions probably due to increased comprehension and appreciation of benefits (Goode et al., 2010; Maoz & Tybout, 2002; Moreau et al, 2001; Mukherjee & Hoyer, 2001). I also expect that complementarity inferences will be generated when consumers learn about a sequentially structured hybrid experience. Consumers almost always generate inferences to understand a new marketplace offering. However, I propose that an alternately structured hybrid experience will lead to a greater number of complementarity inferences as a result of the consumer trying to meaningfully integrate a staggered schedule of events. With a sequentially structured hybrid experience, consumers may still infer that arranging all sightseeing tours after all volunteering events makes the trip feel
more rewarding. However, the structure would likely prevent boating, specifically, from being perceived as more relaxing. It may also prevent or minimize appreciation for the significance of the river cleanup, since boating was not scheduled between tree planting and river cleanup. In other words, it is the number of complementarity inferences that is expected to account for differences in evaluations between alternately and sequentially structured hybrid experiences.

Specifically, I hypothesize that

\[ H_1: \text{An alternately structured hybrid experience will be evaluated more positively than a sequentially structured hybrid experience.} \]

\[ H_2: \text{A greater number of complementarity inferences will be generated for an alternately (versus sequentially) structured hybrid experience, which will in turn increase overall preference for the hybrid experience.} \]

3.2 Alternative Explanations

To account for alternative explanations, I turn to the variety seeking literature. Understanding the potential role of satiation avoidance and variety-seeking motives is key to appreciating the contribution of my dissertation.

3.2.1 Satiation Avoidance as an Alternative Explanation

The consumption of experiential products (e.g., listening to music) is strongly associated with affective sensations (Hirschman & Holbrook, 1982; Hoyer & Ridgway, 1984; Kahn & Lehmann, 1991). Repetitively experiencing specific sensations, however, can result in satiation and boredom (Coombs & Avrunin, 1977; Rolls, 1986). To avoid
satiation, or to maintain the enjoyment level that an affectively charged product elicits, consumers typically prefer an alternating consumption pattern (McAlister & Pessemier, 1982; Kahn, 1995). For instance, when asked to choose snacks for future consumption, individuals composed a snack bundle with high variety (chocolates with different flavours), even opting for items that were not among their favourites (Simonson, 1990). Stimulation can also be increased by switching from one product variant to another, even if the variant to which one switches is familiar (Faison, 1977). Preference for this alternating consumption pattern has also found support through scanner data on consumption history where attribute satiation is shown to be an important driver of choice switching (McAlister, 1979; 1982). While this body of work does not investigate life experiences, findings may be relevant, as they provide insight into the benefits of alternating the consumption of experiential products.

However, there are at least two reasons that this satiation avoidance mechanism may not be applicable in addressing the evaluation of hybrid experiences. First, research on satiation avoidance uses products that are close substitutes. They come from the same product category or satisfy similar needs or goals. For instance, studies experimentally demonstrating satiation avoidance frequently use snacks (e.g., strawberry and raspberry flavoured chocolate; Simonson, 1990) and musical selections (e.g., pop music; Ratner, Kahn, & Kahneman, 1999). In contrast, a hybrid experience may be comprised of two different and non-substitutable constituent experiences. First, I expect constituent experiences to be non-substitutable because they usually satisfy different goals for consumers (e.g., a voluntour trip) or take on different forms though satisfying a similar goal (e.g., a hybrid of art tours and food tastings where both are consumed for
entertainment but involve different sensory experiences). While an empirical model by Lattin and McAlister (1985) has shown that variety seeking could happen beyond close substitutes and among brands that complement each other (e.g., toothbrush and toothpaste), there is no empirical evidence suggesting that the effect would be due to satiation avoidance. In fact, complementarity inferences may actually provide the explanation for Lattin and McAlister’s (1985) findings. Second, a hybrid’s constituent experiences usually involve a collection of goal-consistent but slightly different events. In the voluntour trip example, the sightseeing constituent experience may consist of events such as boating and jungle walking, while the volunteering constituent experience may consist of events such as tree planting, river cleanup, and animal protection. Thus, to repeat one constituent experience (e.g., the sightseeing tours) is very different from repetitively consuming one product (e.g., raspberry flavoured chocolate). With the former, satiation is less likely to emerge and be relevant simply because events involved in each constituent experience vary. Indeed, in extreme cases, consumers might even want to repeat events to build up consumption knowledge about a specific experience category (Clarkson, Janiszewski, & Cinelli, 2013) or to boost personal growth (Russell & Levy, 2012).

If evaluation takes place before consuming a hybrid experience, as it usually would when a consumer pre-plans experiences, then there is even more reason to argue that consumers may fail to anticipate satiation from the hybrid experience even if the constituents are composed of very similar events. Consumers often underestimate the satiation they might feel during an experience (Gilbert, Gill, & Wilson, 2002) because
anticipated emotions are usually less intense than those felt while immersed or thinking back on an experience (Van Boven & Ashworth, 2007).

In summary, the satiation avoidance mechanism, which accounts for variety seeking among hedonic products, may have limited traction in explaining why an alternately (versus sequentially) structured hybrid experience might be preferred. This is because the constituents of a hybrid experience may not be close substitutes but come from different experience categories, and each constituent experience of a hybrid is usually comprised of a series of varied events. Finally, when planning for a hybrid experience, consumers usually project their future preferences onto their anticipated preferences. Both anticipated emotions and preferences are usually less intense, thus making it more unlikely to arouse a feeling of satiation.

3.2.2 Perceived Variety as an Alternative Explanation

Another alternative explanation for why an alternating structure is preferred to a sequential one is that, an alternately structured hybrid experience may be perceived more varied than a sequentially structured one, and this might enhance experience evaluation. The variety seeking literature suggests that the same assortment of options (e.g., products, colours, activities) may be perceived as more or less varied depending on how these options are displayed. This is because changing the display can make it more or less difficult for consumers to recognize and appreciate the full extent of the variety in an assortment (Hoch, Bradlow, & Wansink, 1999; Kahn & Wansink, 2004; Morales et al., 2005). For example, Kahn and Wansink (2004) found that, for a set of twenty-four colors of beads, an organized assortment (e.g., arranging all the beads in sequence according to
the colors) could help children better recognize how many colors of beads were included and that increased consumption quantities. On the other hand, a disorganized assortment (e.g., displaying beads randomly) made it difficult for children to gauge the variety of colors included in the assortment, which subsequently decreased consumption quantities. Prior research also suggests that the greater the perceived variety, the more positive evaluations of the assortment (Hoch, Bradlow, & Wansink, 1999), the more value perceived from consuming the items (Kahn & Wansink, 2004), the greater possibility of sampling the product assortments (Iyengar & Lepper, 2000), and the more positive attitudes towards the retail site that offers the assortment with high variety (Broniarczyk, Hoyer, & McAlister, 1998). This may be because consumers feel more positive affect when perceiving high variety (Ratner & Kahn, 2002), and this positive affect colors consumers’ attitudes towards nearly everything in the same context (see Schwarz & Clore [2003] for a review). Or, it may be because consumers believe that the varied assortments will offer a more favourable consumption memory in retrospect than do less-varied assortments (Ratner et al., 1999).

Nevertheless, research that demonstrates the effects of perceived variety usually employs assortments with a large number of products. For example, Hoch et al. (1999) showed the effects of variety perception using an assortment of sixteen hypothetical imaginary goods, and Morales and colleagues (2004) tested the same effect with nine types of fragrance (Study 1), twenty-five types of microwave popcorons (Study 2), twenty-seven ties (Study 3), and thirty-two bags (Study 4). Although Kahn and Wansink (2004) looked at both small and large assortments of beads and jelly beans, their small assortment still consisted of six colors of the products (the large one was with twenty-
four colors). Thus, although perceived variety of an assortment can be influenced by how
the products are displayed, this effect may only apply to assortments with a certain
number of products (e.g., more than five according to prior literature), but the number of
events involved in the constituents of a hybrid experience is usually small. It is, in fact,
very rare to find voluntour trips or educational trips presenting consumers with up to
twelve events (six for each constituent). Indeed, Kahn and Wansink (2004) found that
product display has less of an impact on variety perception of assortments with small
numbers of products. For these reasons, I expect that the structure of a hybrid experience
(sequentially or alternately) may not influence variety perception of the hybrid, which
thus will have little impact on experience evaluation. I do, however, empirically account
for the role of variety perceptions in my research.
Chapter 4

4 The Effect of Experience Structure on Evaluation

In this chapter, I discuss two experiments that investigate the effect of hybrid experience structure on experience evaluations. Earlier, I hypothesized that an alternating structure would lead to higher experience evaluations. To test this, I used both within-subjects (Experiment 1) and between-subjects (Experiment 2) designs; used various hybrid experiences; and operationalized the dependent variable, experience evaluation, in multiple ways. Motivated by script theory and literature on conversational implicature, I predicted that (1) in a choice task, more participants would select a hybrid experience structured alternately, (2) in a trip design task, participants were more likely to design the trip in an alternating format, and (3) in an evaluation task, an alternating (versus sequential) hybrid experience would be evaluated more favourably.

4.1 Experiment 1

The objective of Experiment 1 was to test Hypothesis 1. I examined if an alternating experience structure was preferred to a sequential structure through two within-subjects tasks (fitness–leisure experience choice and summer camp design). The order of the two tasks was counterbalanced. Thirty-nine undergraduate students (44% female) completed this experiment for partial course credit.

4.1.1 Fitness–Leisure Choice Task

In this task, I asked participants to imagine registering for a four-day hybrid fitness–leisure experience. The fitness constituent experience consisted of fitness related
talks, group work, and a variety of indoor and outdoor physical activities. The leisure constituent experience consisted of beach activities, pub activities, and shopping trips. Participants then indicated whether they preferred the experience to be structured in a two-day fitness followed by a two-day leisure sequential structure or in an alternating structure where both fitness and leisure activities would be staggered in each of the four days. At the end, participants wrote down the reasons for the choice they made (see Appendix A for the task instruction).

In support of Hypothesis 1, significantly more participants preferred an alternating fitness–leisure experience to a sequential one (87% versus 13%; $\chi^2(1, N = 39) = 21.56, p < .001$). In addition, participants listed a couple of reasons for choosing the alternating structure, such as “Every day you get a mixture of events, I think you would get more out of each day,” and “To get participants more used to daily exercise, so that they are more likely to maintain the habit after they leave the event.” These reasons suggest that people who preferred an alternating structure did generate complementarity inferences to justify their choices.

4.1.2 Summer Camp Design

In the second task, I asked participants to take on the role of a trip planner from a local travelling company to design a five-day educational trip to Singapore for first-year university students. Participants were informed that the trip must include two constituent experiences: the sightseeing activities and the educational engagements. For each constituent experience, six events were provided to help with the trip design. However, participants were not requested to use all of the provided events. The sightseeing
activities were visiting 1) the Marina Bay Area, 2) Junong Birdpark, 3) Universal Studios Singapore, 4) Sentosa, 5) Adventure Cove and Aquarium, and 6) India Street, Arab Street, and Chinatown. The educational engagement events were 1) visiting National University of Singapore and meeting with current students, 2) visiting Nanyang Technological University and national science lab, 3) attending talks on culture, history, and geography, 4) attending voluntary works with local students, 5) participating in student competitions in mathematics, science, and English literature, and 6) participating in consortiums dealing with topics on sustainability and multicultural society. Participants made and shared detailed event arrangements for each of the five days at the end of the task (see Appendix B for the task instruction).

I coded participants’ designed trip schedules into two dependent variables. The first dependent variable, STRUCTURE, captured how the summer camp was designed. I coded the trip as having an alternating design if the sightseeing activities and the educational engagements were scheduled in alternation throughout the five-day trip. On the other hand, the trip was coded as having a sequential design if participants preferred to finish all of the events for sightseeing and then engage in the educational engagements or vice versa. Participants were more likely to design the summer camp in an alternating structure (90%; χ²(1, N = 39) = 24.64, p < .001), thus supporting Hypothesis 1.

The second dependent variable, SWITCH, captured the number of switches between the two constituent experiences (Menon & Kahn, 1995). A SWITCH rate of 1 indicated that the summer camp was designed in a sequential manner, whereas any number greater than 1 indicated that an alternating structure was designed. I found that
participants, on average, designed the trip with 4.5 switches between the sightseeing activities and the educational engagements. Most participants planned 4 switches (/medium = 4/) between the two constituent experiences. That was at least one switch per day.

4.1.3 Experiment 1 Discussion

Results from Experiment 1 provide initial evidence that an alternating experience structure is preferred over a sequential structure. However, this experiment has some limitations. First, the within-subjects design had low external validity. Rarely in the marketplace do companies provide both experience structures for consumers to compare before making a choice. In most cases, consumers will be shown only one trip structure, be it alternating or sequential. Therefore, it is important to know which structure is more favourable to consumers when the two structures are not presented together. A between-subjects design enables a test of this type. Second, changing experience structure could also result in changes in factors that may affect experience evaluation. For instance, scheduling all the fitness activities in the first two days (a sequential structure) may result in higher physical fatigue in consumers than having such activities scattered over four days (an alternating structure). Higher physical fatigue could then dampen the evaluation of a sequentially structured fitness–leisure event. As another example, staggering the educational engagements with the sightseeing activities over five days (an alternating structure) may be less mentally exhausting than having all the educational activities packed in the first half of the trip (a sequential structure). The reduced mental exhaustion in an alternating structure is then likely to increase the evaluation of an alternately structured educational trip. In Experiment 2, I measured and controlled for physical
fatigue and mental exhaustion when testing the main effect of experience structure on evaluation.

4.2 Experiment 2

Experiment 2 was designed to provide additional evidence for the effect of experience structure, employing a between-subjects design with self-reported experience evaluations. Specifically, participants evaluated either an alternately or a sequentially structured hybrid experience. I expected that experience evaluations would be higher when the hybrid experience was structured alternately.

4.2.1 Design and Procedure

One hundred and ten undergraduate students (66% female) participated in this experiment for partial course credit. Upon arrival, participants read an online experimental instruction that asked them to acquire from the lab assistant an itinerary for an event titled “Bonjour French Festival.” The randomly assigned itinerary was structured either alternately or sequentially. Participants then read through the itinerary at their own pace and responded to a series of evaluation questions regarding the event.

The hybrid experience Bonjour French Festival was a two-day event composed of film watching activities and acrobatic performances. The film watching experience consisted of three different genres of films: (1) Paris, Je t’aime, a film about love, (2) Once Upon a Forest, a film about the natural environment, and (3) Léolo, a film about life. The acrobatic performances consisted of three different shows: (1) Amaluno, a show about a family’s island exploration trip, (2) KOOZA, a show about a life changing journey, and (3) OVO, a show about the world of insects. These films and acrobatic
performances were structured either sequentially or alternately. In the sequential structure, participants finished watching all the films on the first day and then attended the three acrobatic performances on the second day (see Appendix C for the sequential festival itinerary). For the alternating itinerary, the films and acrobatic performances were scheduled such that a film was followed by an acrobatic show, which was then followed by another film (see Appendix D for the alternating festival itinerary). In both itineraries, a two-and-half hour break was scheduled between each watching activity. By doing so, I hoped to ensure that the activity arrangement was not perceived as being overwhelming for participants.

Both itineraries were printed on a French-themed background, and participants were told that the event would be presented by FCCA (French Canadian Community Association) on November 7 and 8, 2015 at the Bell Lightbox Theatre on King Street West in Toronto. This additional information was used to increase the believability of the experimental scenario.

4.2.2 Measurements

Dependent Variables: The key dependent variable was experience evaluation. Participants were asked, “Please imagine that you have decided to attend this festival, please evaluate this event on the following items.” In response to this question, participants rated five items on a seven-point scale, anchored using the labels “undesirable/desirable,” “not enjoyable/enjoyable,” “not interesting/interesting,” “not attractive/attractive,” “not exciting/exciting” (adapted from Mitchell, Thompson, Peterson, & Cronk, 1997; Raghunathan & Corfman, 2006). An exploratory factor
analysis showed that these five items were related to a single underlying dimension (82% of the variance explained). Therefore, I averaged the item scores to create an overall measure of experience evaluation ($\alpha = .95$).

In addition to experience evaluation items, participants also indicated on two seven-point scales (anchored with “not at all/very much”) to what extent they expected to feel mentally exhausted and physically fatigued if they attended the French festival. Additionally, participants indicated how familiar (anchored with “not at all familiar/very familiar”) and unique (anchored using the labels “not at all unique/very unique”) the festival seemed to be. I examined these factors to make sure changes in experience structure did not lead to changes in other responses that could potentially affect experience evaluations.

4.2.3 Results

**Control Variables:** I conducted a one-way MANOVA with experience structure as the independent variable, and physical fatigue, mental exhaustion, experience familiarity, and experience uniqueness as dependent variables. None of these variables was significantly affected by experience structure (see Table 1; $F$’s $< .71$, $p$’s $> .10$).

**Experience Structure:** I conducted a one-way ANOVA with experience structure as the between-subjects independent variable and experience evaluation as the dependent variable. Experience structure significantly affected experience evaluation ($F(1, 109) = 6.92; p = .01; \eta^2 = .06$); thus supporting Hypothesis 1. The alternately structured French festival was evaluated more favourably than the sequentially structured festival ($M_{alternating} = 5.35$ vs. $M_{sequential} = 4.73$; see Figure 6).
Table 1: Experiment 2 summary statistics.

<table>
<thead>
<tr>
<th>DV</th>
<th>Alternating (n = 53)</th>
<th>Sequential (n = 56)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experience Evaluation</td>
<td>M=5.35, SD=1.02</td>
<td>M=4.73, SD=1.41</td>
</tr>
<tr>
<td>Physical Fatigue</td>
<td>M=2.57, SD=1.65</td>
<td>M=2.71, SD=1.42</td>
</tr>
<tr>
<td>Mental Exhaustion</td>
<td>M=2.91, SD=1.75</td>
<td>M=3.16, SD=1.68</td>
</tr>
<tr>
<td>Experience Familiarity</td>
<td>M=3.40, SD=1.86</td>
<td>M=3.18, SD=1.75</td>
</tr>
<tr>
<td>Experience Uniqueness</td>
<td>M=4.47, SD=1.61</td>
<td>M=4.52, SD=1.72</td>
</tr>
</tbody>
</table>

Other Variables

![Figure 6: The effect of experience structure on evaluation in Experiment 2.](image)

### 4.2.4 Experiment 2 Discussion

The results of Experiment 2 support Hypothesis 1. As expected, the alternately structured French festival was evaluated more favourably than the sequentially structured one. Experience structure did not affect perceptions of familiarity and uniqueness or the extent to which individuals expected to feel physical fatigue or mental exhaustion from attending the festival.

So far, I established the basic relationship between experience structure and experience evaluation through varied experimental designs (between-subjects and within-subjects), multiple measures of experience evaluation (event choice, camp design, and self-reported experience evaluations), and with different types of hybrid experiences.
(fitness–leisure event, summer camp, and the French festival). In Chapter 5, I employ three experiments to examine the underlying mechanism as to why an alternating experience structure is more favourably evaluated.
Chapter 5

5 The Role of Complementarity Inferences

An alternating structure may be more favourably evaluated than a sequential one because of the increased benefits consumers infer with the former structure. For instance, when an educational trip is structured sequentially, consumers may infer that the educational engagements will be informative and that the sightseeing activities will be fun. When the same trip is structured alternately, however, consumers may also surmise that attending the river safari will be rewarding after finishing the half-day workshop and therefore feel more relaxing. In addition, they may see greater significance in the ecosystem workshop after the river safari, as the workshop may be seen as providing a foundation that enhances greater appreciation for the nature observed on the river safari. I call these additional inferred benefits complementarity inferences, which I expect to enhance experience evaluations. In this chapter, I discuss three experiments that examine the mediating role of complementarity inferences (Hypothesis 2).

In Experiment 3, I collected participants’ thoughts related to a hybrid experience. Two research assistants then coded these written responses for complementarity inferences and variety related thoughts. I expected that participants would be more likely to generate complementarity inferences for an alternately (vs. sequentially) structured hybrid experience. However, the number of variety related thoughts would not differ between experience structures.
In Experiment 4, I examined the role of complementarity inferences by manipulating participants’ involvement in the experience evaluation task. I expected that only when participants were highly involved would they devote greater amount of cognitive resources to generate complementarity inferences. This would, in turn, increase experience evaluations.

In Experiment 5, I examined the mediating role of complementarity inferences directly and indirectly. I collected participants’ thoughts related to a hybrid experience through two thought tasks, and research assistants coded these written responses for complementarity inferences and incompatibility inferences. Then, I tested the number of complementarity inferences as the mediator in a moderated mediation analysis. Additionally, I included another experimental condition, where I provided participants who saw a sequentially structured experience with complementarity inferences. If preference for an alternating structure was due to generating a greater number of complementarity inferences then participants in this new experimental condition were expected to evaluate the sequential experience more favourably than those who evaluated the sequential structure without complementarity inferences.

5.1 Experiment 3
The objectives of Experiment 3 were threefold. First, it served as a replication of Experiment 2. I used the Bonjour French Festival stimulus again in this experiment. Second, this experiment was designed to provide initial evidence that consumers are more likely to generate complementarity inferences when evaluating an alternately structured hybrid experience than when evaluating a sequentially structured one. Third,
this experiment would demonstrate that structuring a hybrid experience alternately or sequentially does not change how much variety is perceived in the experience.

5.1.1 Design and Procedure

Fifty-eight undergraduate students (52% female) participated in this experiment for partial course credit. As in Experiment 2, participants acquired an itinerary for the Bonjour French Festival from the research assistant. The randomly assigned itinerary was structured either alternately or sequentially. Participants read through the itinerary at their own pace, wrote down their thoughts regarding the festival, and then responded to a series of evaluation questions.

5.1.2 Measurements

Thought Task: After reading the itinerary, participants were instructed to write down whatever thoughts came to mind while reading the French festival itinerary (adapted from Goode et al., 2010). They were reminded that there was no right or wrong answer, and asked to simply list whatever thoughts they had. They had space to list up to 8 thoughts and were requested to evaluate afterwards whether each listed thought was “negative,” “neutral,” or “positive.” Two research assistants, who understood the definition of complementarity inferences but were blind to the true purpose of the experiment, coded the listed thoughts independently. Inter-rater reliability was high ($r$’s > .70), and disagreements were resolved through discussion.

The research assistants counted the total number of thoughts each participant listed and then counted the number of thoughts that were related to the French festival’s content (e.g., “every movie sounds interesting and unique”) and schedule (e.g., “movies
and acrobatics sandwiched makes it interesting”). Because the thought-listing task was open-ended, participants also listed thoughts unrelated to the festival content and schedule. For example, participants often listed thoughts related to the design of the ad: “I like the colour scheme and the way the advertisement looks in general”; “the ad is an artistic demonstration”; and “good use of the French flag colours for the advertisement”. These unrelated thoughts were excluded from the analyses. Next, the assistants coded the content and schedule related thoughts for complementarity inferences. A thought was identified as a complementarity inference if it referred to a benefit that was clearly connected to the structure of the hybrid experience. For example, one participant wrote that: “the schedule will maintain people’s attention, as acrobatics in between movies will be visually stimulating.” This person inferred that the festival would be more engaging because film watching and acrobatics shows were alternated in the itinerary. Meanwhile, written responses of “many activities,” “a great number of activities,” “a lot of things to do,” or just the word “variety” were coded as variety related thoughts (Hoch, Bradlow, & Wansink, 1999). I expected that participants would be more likely to generate complementarity inferences when the French festival was structured alternately (vs. sequentially), but they would be equally likely to come up with variety related thoughts in both conditions. Finally, the research assistants counted the number of positive, negative, and neutral self-rated thoughts listed by participants.

Experience Evaluation: After responding to the thought-listing task, participants evaluated the French festival using the same items from Experiment 2 ($\alpha = .93$). They also rated to what extent they expected to feel mentally and physically exhausted if attending the festival. Finally, they indicated on three seven-point scales (anchored with
“not at all/very much”) whether they perceived the itinerary to be informative, easy to comprehend, and to have an appealing design. I measured these items to disentangle participants’ evaluation of the itinerary’s content and schedule from its design. If an alternating experience structure makes the festival ad design seem more informative, easier to comprehend, and more appealing, then experience evaluations may be influenced by these design factors and thus should be accounted for as an alternative or complementary explanation for the hypothesized effects.

5.1.3 Results

Control Variables: I conducted a one-way MANOVA with experience structure as the independent variable, and physical fatigue, mental exhaustion, itinerary informativeness, ease of comprehension, and appealing design as the dependent variables. Except for itinerary informativeness ($F(1, 56) = 3.94, p = .05; \eta^2 = .07$), none of the other variables were significantly affected by experience structure ($F$'s < 1, $p$'s >.56; see Table 2).

Experience Structure: I ran a one-way ANOVA with experience structure as the independent variable and evaluation as the dependent variable. Experience structure significantly affected evaluations ($F(1, 56) = 15.91; p < .01; \eta^2 = .22$), thus confirming Hypothesis 1. Participants evaluated the alternately structured French festival more favourably than the sequentially structured one ($M_{\text{alternating}} = 5.37, SD = 1.12$ vs. $M_{\text{sequential}} = 4.15, SD = 1.21$; see Figure 7). After controlling for itinerary informativeness, the main effect of experience structure on evaluation was still statistically significant ($F(1, 55) = 10.99; p < .01; \eta^2 = .17$).
Table 2: Experiment 3 summary statistics.

<table>
<thead>
<tr>
<th>DV</th>
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<th>Sequential (n = 30)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Experience Evaluation</td>
<td>5.37</td>
<td>1.12</td>
</tr>
<tr>
<td>Other Variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Fatigue</td>
<td>3.25</td>
<td>1.82</td>
</tr>
<tr>
<td>Mental Exhaustion</td>
<td>2.93</td>
<td>1.59</td>
</tr>
<tr>
<td>Easy to Comprehend</td>
<td>5.64</td>
<td>1.45</td>
</tr>
<tr>
<td>Design Appealing</td>
<td>4.64</td>
<td>1.25</td>
</tr>
<tr>
<td>Informativeness</td>
<td>5.82</td>
<td>1.02</td>
</tr>
<tr>
<td>Number of Thoughts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Thoughts</td>
<td>6.36</td>
<td>2.04</td>
</tr>
<tr>
<td>Content/Schedule Related Thoughts</td>
<td>4.88</td>
<td>2.32</td>
</tr>
<tr>
<td>Positive Thoughts</td>
<td>2.44</td>
<td>2.17</td>
</tr>
<tr>
<td>Negative Thoughts</td>
<td>1.07</td>
<td>1.44</td>
</tr>
<tr>
<td>Neutral Thoughts</td>
<td>1.30</td>
<td>1.94</td>
</tr>
</tbody>
</table>

Figure 7: The effect of experience structure on evaluation in Experiment 3.

Complementarity Inferences: Eighteen (out of 28) participants who viewed the alternating structure generated complementarity inferences (CIs), whereas only 6 (out of 30) of those who evaluated the sequential structure listed such inferences. A crosstab analysis revealed significant differences between structure conditions regarding participants’ probability of generating complementarity inferences ($\chi^2(1) = 11.71, p < .01$; see Figure 8).
Figure 8: Number of people with/without CIs in Experiment 3.

Variety Related Thoughts: Thirteen (out of 28) participants who evaluated the alternating structure listed thoughts that were related to variety, and 13 (out of 30) of those who viewed the sequential structure listed similar thoughts. A crosstab analysis did not show a statistically significant difference between structure conditions ($X^2(1) = .06$, $p = 1$; see Figure 9).

Figure 9: Number of people with/without variety related thoughts in Experiment 3.
Other Thoughts: On average, each participant listed 6.4 thoughts (out of 8), among which the average number of content and schedule related thoughts was 4.5. However, no difference was found on the number of total thoughts, total content and schedule related thoughts, or the number of positive, negative, and neutral thoughts between structure conditions ($F$’s < 1.48).

5.1.4 Experiment 3 Discussion

The results of Experiment 3 support Hypothesis 1; alternately structured hybrid experiences are evaluated more favourably than sequentially structured hybrid experiences. The findings suggest that the more favourable evaluation of an alternating structure is not attributable to differences in anticipated mental or physical fatigue or differences in positive and negative thoughts regarding the experience. A more favourable hybrid experience evaluation instead results from consumers generating a greater number of complementarity inferences.

Notably, only 18 of the 28 participants who evaluated the alternating experience structure generated complementarity inferences in this experiment. This could be due to the thought-listing task that was used. Participants were only allowed to write up to 8 thoughts regarding the French festival. This quantity restriction could have constrained participants from writing down all of the thoughts they had in mind, consequently under-representing the number of complementarity inferences that were actually generated. This logic may also suggest that the number of listed variety related thoughts may be under-represented. If this was the case, the observation that the alternately and the sequentially structured French festival were perceived equally varied might be an experimental
artefact. To further rule out differences in variety perceptions as an alternative explanation, I conducted a post-test where perceived variety in several hybrid experiences (including the French festival) was examined as a function of experience structure. The additional hybrid experiences in this post-test were included for use in Experiments 4 and 5.

Eighty students (44% female) participated in this post-test for partial course credit. All participants viewed three hybrid experiences, consisting of the French festival used in Experiment 3, the Sunday Funday tour used in Experiment 4, and the educational trip used in Experiment 5. These experiences were structured either alternately or sequentially. The presentation order of the three hybrid experiences was randomized. After viewing each experience itinerary, participants rated five statements on a seven-point scale (anchored with “strongly disagree/strongly agree”): “the festival consists of a number of activities”; “the festival includes varied sorts of activities”; “the variety of this festival is high”; “several activities are available for consumers in this festival”; and “the activities selection of this festival is good” (61% of the variance explained; adapted from Morales et al., 2005). Item scores were averaged to create a variety perception index ($\alpha = 0.80$), with a higher score indicating greater perceived variety and vice versa. I ran the analysis with variety perception as the dependent variable and experience structure as the independent variable. The analysis revealed that the alternately structured French festival ($M_{alternating} = 4.72, SD = 1.76$) was perceived similarly varied as the sequentially structured one ($M_{sequential} = 4.21, SD = 1.53$; $F(1,77) = 1.94, p = .17; \eta^2 = .03$). This

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2 Variety perceptions of the other two hybrid experiences (the Sunday Funday tour and the Educational trip) will be discussed in the experiments where each was used as the research stimulus.
finding further confirmed the main results; structuring a hybrid experience alternately or sequentially does not alter variety perceptions. This suggests indirectly that preference for an alternately structured hybrid experience may not be due to differences in variety perceptions.

With Experiment 3, I replicated the basic effect of experience structure on evaluations for hybrid experiences. I also found initial evidence that people are more likely to generate complementarity inferences when evaluating an alternating (vs. sequential) experience. In Experiment 4, I examined the role of complementarity inferences using a different hybrid experience and a more indirect approach.

5.2 Experiment 4

The objective of Experiment 4 was to demonstrate the role of complementarity inferences by manipulating participants’ motivation to generate such inferences. Before describing the experimental design, it is important to understand why generating complementarity inferences is expected to be an effortful process and therefore subject to availability of cognitive resources.

As discussed previously, when in the market for a new product, consumers usually generate inferences to assess a product’s functionality and benefits (Gregan-Paxton & Roedder John, 1997; Moreau et al., 2001). This can be an effortful process, requiring consumers to be motivated and able to do so (Goode et al., 2010; Maheswaran & Sternthal, 1990; Roehm & Sternthal, 2001; Sawyer & Howard, 1991). For example, consider a package of coffee that is green with a label saying “choice for health”. For many consumers, neither the green color nor the health claim may fit with the existing
knowledge about coffee. However, if motivated, consumers may infer that the new coffee is enriched with health boosting ingredients. With hybrid experiences, I expected that inferring additional benefits (i.e., complementarity inferences) from the experience structure would also be cognitively demanding. Further, this inferencing process is likely quite similar to the process consumers go through to resolve product incongruences and to comprehend analogies in product advertisements, both of which are cognitively demanding. Thus, I expected if individuals were less motivated to devote cognitive resources to the experience evaluation task, they would generate fewer complementarity inferences. This would, in turn, have a negative impact on experience evaluations.

5.2.1 Design and Procedure

One hundred and nineteen undergraduate students (55% female) participated in this 2 (experience structure: alternating vs. sequential) x 2 (task involvement: low vs. high) between-subjects experiment in exchange for partial course credit. Participants were randomly assigned to one of the four experimental conditions to evaluate a hybrid experience called the Sunday Funday tour. At the beginning of the survey, all participants read the following introduction:

Best Tours (www.bestours.com), a global tour company that specializes in stylish and buzz-worthy city tours, is coming to Canada in 2016!

With highly curated movie, cultural, street-arts, and food-tasting tours, Best Tours offers city visitors a unique opportunity to savour the real charm of the city they are experiencing.

To make an exciting debut next year, Best Tours has created some special tours for three major cities, Toronto, Vancouver, and Montreal, and will soon introduce them for trial across Canada.
Before officially promoting their tours, Best Tours contracted some top business schools across Canada to pretest the itineraries of these curated tours. In Ontario, four business schools (Ivey at Western, Schulich at York, Rotman at UofT, and Smith at Queens) were selected for the test of the “Sunday Funday Tour” in Toronto. The goal is to make the tour as appealing as possible to its potential consumers.

I manipulated participants’ motivation to the task through involvement (Yang, Cutright, Chartrand, Fitzsimons, 2014). I expected that only when participants were highly involved in the task would they devote greater cognitive resources to generate complementarity inferences. Participants in the high task involvement condition group were instructed that as one of the fifty students selected from Ivey, their responses would have substantive consequences for the design and implementation of this tour (see Appendix E for the manipulation of high task involvement). Participants in the low task involvement condition group read that as a member of a broad and anonymous group sample (500 to 800 students), they did not need to worry too much about their responses, as Best Tours was only interested in the overall response patterns across groups (see Appendix F for the manipulation of low task involvement).

Participants then evaluated either an alternately or a sequentially structured Sunday Funday tour itinerary. This hybrid experience was a full-day trip in Toronto (operating from 9:30 a.m. to 3:30 p.m. on a weekend day), which consisted of two street discovery activities (a graffiti tour and a ghost tour, labeled as “Toronto Exploration” in the itinerary) and two food-tasting activities (a street food tour and a best chocolate tour, labeled as “Toronto Savouring”). In the sequential structure (see Appendix G for the sequential tour itinerary), participants would finish the street discovery activities in the morning and then attend the two food-tasting activities in the afternoon, whereas in the
alternating structure (see Appendix H for the alternating tour itinerary), participants started their day with the graffiti tour, followed by the street food tour. They went on the ghost tour in early afternoon, which was then followed by the best chocolate tour. Contents of each activity were described in a short paragraph in the itinerary. Participants were told that each activity would last about one to one and a half hours and breaks were scheduled between activities. Information on transportation, where to meet, and where the trip would end was also provided in the itinerary to increase external validity.

After the evaluation task, all participants responded to two items on a seven-point scale (anchored with “very low/very high”) that measured their involvement in the task. Participants read, “How much thought did you put into evaluating the tour?” and “How much effort did you put into evaluating the tour?” \( \alpha = 0.79; \) adapted from Petty & Cacioppo, 1979), and ratings on these two items were averaged to create an involvement index. A greater number indicated higher involvement in the task, a lower number indicated lower involvement in the task. The experiment concluded with questions on gender and whether the participants’ first language was English.

5.2.2 Measurements

Dependent Variable. The dependent variable was experience evaluation. In addition to the five items used in Experiments 2 and 3, participants also rated if “attending the trip would make a good memory” (a seven-point scale, anchored with “strongly disagree/strongly agree”) \( \alpha = .94 \) for the total of six evaluation items). The addition of this item was driven by a recent finding that consumers’ purchase choice of an experience is sometimes highly correlated with experience memorability (Keinan &
This item is different from experience pleasure, which is usually captured using evaluation items such as “desirable,” “enjoyable,” “interesting,” “attractive,” and “exciting” that were employed in Experiments 2 and 3.

In addition to experience evaluation, I also collected participants’ ratings of physical fatigue and mental exhaustion, the itinerary’s credibility and informativeness, the ease of comprehension of the itinerary, and the attractiveness of the advertisement’s design and compared these variables between structure conditions.

5.2.3 Results

Manipulation Check. The manipulation of task involvement was successful. Participants in the high involvement condition devoted more cognitive resources ($M_{high} = 4.56$) in the evaluation task than those in the low involvement condition ($M_{low} = 4.15$; $F(1, 117) = 3.96, p = .05; \eta^2 = .03$).

Experience Evaluation. A significant interaction was observed between task involvement and experience structure on evaluations ($F(1, 112) = 3.95, p = .05; \eta^2 = .03$; see Figure 10). Specifically, the alternating Sunday Funday tour ($M_{alternating} = 4.88, SD = 1.35$) was evaluated more favourably than the sequential tour ($M_{sequential} = 4.39, SD = 1.39; p = .04$) only when individuals were more involved in the task. No evaluation difference was observed between experience structures when individuals were less involved in the evaluation task ($M_{alternating} = 4.74, SD = 1.24$ vs. $M_{sequential} = 4.72, SD = 1.30; p = .43$; see Table 3). Notably, experience structure, task involvement, and their interaction had no significant impact on the ratings of physical fatigue ($F$’s < 1.36, $p$’s > .25) and mental exhaustion ($F$’s < .08, $p$’s > .78). There was also no significant influence of experience
structure, task involvement, or their interaction on perceptions of the itinerary’s credibility ($F^* < 3.36, p^* > .07$); informativeness ($F^* < .94, p^* > .33$); ease of comprehension ($F^* < 1.32, p^* > .25$); or attractiveness of advertisement’s design ($F^* < .35, p^* > .56$).

Table 3: Experiment 4 summary statistics.

<table>
<thead>
<tr>
<th>DV</th>
<th>High Involvement Condition</th>
<th>Low Involvement Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Alternating ($n = 29$)</td>
<td>Sequential ($n = 34$)</td>
</tr>
<tr>
<td></td>
<td>Alternating ($n = 28$)</td>
<td>Sequential ($n = 27$)</td>
</tr>
<tr>
<td>Experience Evaluation</td>
<td>$M$</td>
<td>$SD$</td>
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<td>Physical Fatigue</td>
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<tr>
<td>Mental Exhaustion</td>
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<td>1.31</td>
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<td>Credibility</td>
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<td>.97</td>
</tr>
<tr>
<td>Easy to Comprehend</td>
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<td>1.14</td>
</tr>
<tr>
<td>Informativeness</td>
<td>5.43</td>
<td>1.22</td>
</tr>
<tr>
<td>Design Appealing</td>
<td>5.13</td>
<td>1.41</td>
</tr>
</tbody>
</table>

Figure 10: The effect of task involvement and experience structure on evaluation in Experiment 4.
5.2.4 Experiment 4 Discussion

I expected that only when participants devoted a significant amount of cognitive resources would they be able to generate enough complementarity inferences to enhance experience evaluations. In other words, increased preference for an alternating experience structure would only result when individuals were highly involved in the evaluation task and thus motivated to generate more complementarity inferences. However, Experiment 4 does not provide confirming evidence for this expectation. The observed interaction between experience structure and task involvement seems to be driven by reduced preferences for the sequential tour in the high involvement condition. That is, motivating participants to devote more cognitive resources to the task, which was supposed to lead to a greater number of complementary inferences, did not result in enhanced evaluations for the alternating structure ($M_{\text{high-involvement}} = 4.88$ vs. $M_{\text{low-involvement}} = 4.74$; $p = .27$). Instead, participants evaluated the sequential tour less favourably at a marginal level ($M_{\text{high-involvement}} = 4.39$ vs. $M_{\text{low-involvement}} = 4.72$; $p = .09$).  

The failure to find support for Hypotheses 1 and 2 could be due to a design limitation. In the task instruction, I informed participants that the company would like feedback on a new tour to make the itinerary more appealing. This instruction may have implied that the company was not satisfied with the current itinerary, which might have put participants in a mindset of looking for problems, rather than appreciating the benefits of the itinerary. Thus, the observation of reduced preferences for the sequential tour may

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3 I also investigated perceived variety as an alternative explanation. Referring back to the post-test in Experiment 3, the alternately structured Sunday Funday tour ($M_{\text{alternating}} = 4.59$, $SD = 1.00$) was perceived as being equally varied as the sequentially structured one ($M_{\text{sequential}} = 4.48$, $SD = 1.11$; $F(1,77) = .23$, $p = .64$). Again, suggesting that variety perceptions may not account for the hypothesized effects.
be because participants came up with more drawbacks for the sequential (vs. alternating) structure when motivated to think about the tour. In addition, asking participants to evaluate rather than imagine their participation in the tour, like I did in Experiments 2 and 3, may have emphasized their perspective as an observer rather than a potential consumer of the experience (Jones & Nisbett, 1971). This difference in perspective may have caused participants to focus less on their internal feelings (Storms, 1973). That is, the manipulation itself was not motivating enough for participants to generate complementarity inferences.

Although Experiment 4 does not provide evidence for the role of complementarity inferences, the results are still interesting and important and imply another possible explanation for the hypothesized effect of experience structure. That is, differing preferences for experience structure may be due to a greater number of incompatibility inferences generated for the sequential structure, rather than a greater number of complementarity inferences for the alternating structure. This possibility is to be considered in Experiment 5. In addition, in Experiment 5, I investigate the link between experience structure, complementarity inferences, and experience evaluations directly and indirectly, as well as account for satiation avoidance as another alternative explanation for the hypothesized effect of experience structure.

5.3 Experiment 5

In this experiment, I measured participants’ thoughts related to a hybrid experience through two thought tasks. Two research assistants coded the collected thoughts for complementarity inferences and incompatibility inferences, the numbers of
which were then treated as mediators in a series of mediation analyses. What I refer to as incompatibility inferences were negative outcomes identified by participants and attributed to the hybrid experience’s structure. Besides the two structure conditions (alternating vs. sequential), I also included an additional structure condition. In this new condition, I asked participants to evaluate a sequentially structured hybrid experience while providing them with complementarity inferences similar to those that would have been generated in response to evaluating an alternating experience structure. If enhanced preferences for the alternating structure were indeed due to complementarity inferences that were generated, then reminding participants of such inferences should also boost experience evaluation for the sequential structure. I expected that participants would evaluate the sequential experience more favourably if complementarity inferences were present.

I also accounted for satiation avoidance as an alternative explanation in this experiment. Findings from the variety seeking literature suggest that an alternating consumption pattern might be more favoured than a sequential one. This is because repeatedly consuming an experiential product (e.g., strawberry flavoured chocolate) results in satiation (Coombs & Avrunin, 1977; Rolls, 1986), but an alternating consumption pattern (i.e., consuming strawberry and raspberry flavoured chocolates in alternation) helps to avoid anticipated satiation (Kahn, 1995; McAlister & Pessemier, 1982). With a hybrid experience, however, each of its constituent experiences usually involves a series of distinct events. A voluntary service experience, for example, may consist of events such as tree planting, river cleanup, animal protection, and archaeological restoration. Doing voluntary services for one day is thus different from
eating strawberry flavoured chocolates for one day. With a hybrid experience, satiation is a less likely explanation for the hypothesized differences in the evaluations between alternately and sequentially structured hybrid experiences because events involved in the constituent experiences vary. The role of satiation avoidance, however, was examined in Experiment 5 to determine if this is the case.

5.3.1 Design and Procedure

Three hundred and forty-five undergraduate students participated in this 2 (constituent experience order: EDU-first vs. TOUR-first) x 3 (experience structure: alternating vs. sequential vs. inference-provided) between-subjects experiment for partial course credit (see Figure 11 for the experimental procedure). Specifically, participants were randomly assigned to one of six experimental conditions to evaluate a three-day educational trip to Singapore.

**Figure 11: The experimental procedure of Experiment 5.**
At the beginning of the study, I created a hypothetical scenario to introduce an educational trip to participants. In the scenario, participants read the information of a travel and learning program called Semester At Sea (SAS) that was running a thirty-day cruise to ten East Asia countries during the summer of 2015. They were then requested to imagine that they were with the program and going to embark on a three-day educational trip in Singapore from August 20 to 22, 2015. The trip would consist of two days of SAS pre-arranged field trips and one day of self-exploration of the capital city of Singapore. The two-day pre-arranged trip was a hybrid of two educational engagement activities (a workshop on ecosystems and a multiculturalism consortium) and two sightseeing activities (a river safari and a city quarter tour).

After reading the scenario description, participants got a hardcopy of the trip’s itinerary from the research assistant. They were then requested to read the itinerary thoroughly and respond to two thought-listing questions and a series of evaluation questions.

5.3.1.1 Constituent Experience Order

I arranged the two constituent experiences (the educational engagements and the sightseeing tours) in two orders. In the EDU-first order, the educational engagements were scheduled before the sightseeing tours, whereas in the TOUR-first order, the sightseeing tours were scheduled before the educational engagements, regardless of experience structure. People usually prefer an experience to be ordered in an improving-trend (Loewenstein & Prelec, 1993). When designing hybrid experiences, this would translate to the less preferred constituent experience (the educational engagements in this
experiment) needing to be ordered before the more preferred experience (the sightseeing tours) in order to enhance overall experience evaluations. Although flipping the order of two constituent experiences may have a main effect on experience evaluation, as it may change the improving-trend into a deteriorating-trend or vice versa, it should not influence how experience structure is evaluated. That is, no interaction is expected between experience order and experience structure, and an alternating experience should always be preferred, as this structure motivates and enables the generation of more complementarity inferences.

5.3.1.2 Constituent Experience Structure

I manipulated experience structure in three ways in this experiment: alternating, sequential, and sequential with inference-provided. For simplicity, I illustrate below the experimental procedure using only the EDU-first order as an example.

**Alternating and Sequential Structure Conditions:** In the alternating structure condition, the educational engagements and the sightseeing tours were scheduled across two days. That is, participants read in the itinerary that they would be attending the workshop on ecosystems (an educational engagement) in the morning of the first day and then join in the river safari (a sightseeing tour) in the afternoon. On the second day, they would participate in the multicultural consortium in the morning and then visit city quarters in the afternoon. In the sequential structure condition, participants read that they would finish the two educational engagements (the workshop on ecosystem and the multicultural consortium) on the first day, and then spend the second day participating in
sightseeing tours (the river safari and the city quarter tours; see Appendices I & J for the sequential and alternating educational trip itineraries).

After viewing the itinerary, participants listed their thoughts about the trip. Instead of using the free thought-listing task from Experiment 3, which limited the number of thoughts listed, I employed two new thought tasks in this experiment. In the first thought task, participants were requested to “discuss what you find appealing or unappealing about the organization of events in the trip itinerary (i.e., how the two educational engagements and the two touring activities are ordered). Please be as specific as possible in explaining your answers.” In the second thought task, participants who saw the alternating structure were asked: “As a student on this trip, do you like the plan of having ‘workshop on ecosystem’ and ‘river safari’ on one day, and having ‘multiculturalism consortium’ and ‘city quarter tours’ on the other day? Please explain your answer.” Those who saw the sequential structure were asked: “As a student on this trip, do you like the plan of having ‘workshop on ecosystem’ and ‘multiculturalism consortium’ on one day, and having ‘river safari’ and ‘city quarter tours’ on the other day? Please explain your answer.” Two coders, blind to the research hypotheses, not only counted the number of positive and negative thoughts from both thought tasks and coded all the listed thoughts for *complementarity inferences* (CIs) and *incompatibility inferences* (IIs; $r$’s > .60). What I refer to as incompatibility inferences were negative outcomes identified by participants and attributed to the hybrid experience’s structure. The final count of CIs and IIs is from tallying up responses to both thought-listing questions. Disagreements were resolved through discussion. To illustrate, one participant provided the following response to one of the thought-listing questions:
I do like the plan of having those events on those particular days because they follow a theme. The workshop on ecosystem follows the river safari in the sustainable park. With the educational aspect following the trip to the park, we are able to connect more with the idea of sustainability with the ecosystem. After experiencing the nature of Singapore ourselves with a trip to the park in the morning, we will be able to have a deeper understanding of Singapore's ecosystem. In terms of the multiculturalism consortium following the city quarter tours, I believe this is an excellent idea. This way, we will be able to experience first-hand the different cultures of Singapore as we tour through the different city quarters of Singapore. By having the multiculturalism consortium afterwards, we will already have a basis of understanding in regards to the different cultures and we will be able to expand our knowledge and learn more about the things we have already witnessed.

Four CIs would be coded in this response. By having “the educational aspect following the trip to the park,” the participant would be able to “connect more with the idea of sustainability in the ecosystem” (CI #1) and would have “a deeper understanding of Singapore's ecosystem,” (CI #2) and by having “the multiculturalism consortium afterwards [of the city quarter tours],” the participant felt he or she would have “a basis of understanding for the different cultures” (CI #3) and be able to “expand knowledge and learn more about the things they have already witnessed” (CI #4). These inferences went beyond the advantages of each individual event to link the events in a way that resulted in the identification of novel benefits.

As to the IIs, one participant wrote, “Having both workshops on the same day can make Day One seem dreary. Both tours on Day Two might make people too tired.” Two incompatibility inferences would be coded in this response, “dreary” (II #1) and “tired” (II #2), due to having events from the same constituent experience on the same day.
After the two thought-listing tasks, participants evaluated the educational trip on six 100-point scale items. The items used were the same as those employed in Experiment 4: “undesirable/desirable,” “not enjoyable/enjoyable,” “not interesting/interesting,” “not attractive/attractive,” “not exciting/exciting,” and “not memorable/memorable” ($\alpha = .93$). In addition, participants indicated on a 100-point scale (anchored with “not at all/very much”) whether they would feel bored if they attended the trip. Including this measure allows me to examine if participants expected satiation to occur during the educational trip (Roehm & Roehm, 2005). They also indicated on a 100-point scale whether they perceived the trip as being negative or positive (anchoring with “negative/positive”). The addition of this item allows me to examine if manipulating experience order and experience structure would change the valence perception of the educational trip. Finally, I measured on seven-point scales participants’ perceptions of physical fatigue and mental exhaustion, as well as their familiarity with and perceived novelty of the trip. The experiment concluded with questions on gender and whether the participants’ first language was English.

**Sequential with Inference-Provided Condition:** I included this condition for an indirect test of the role of complementarity inferences. As in the sequential condition, participants evaluated the same sequentially structured educational trip; however, they were provided with complementarity inferences that would have been generated from evaluating the alternating structure but are also viable benefits if presented with the sequentially structured experience. The rational of doing so was that if preferences for the alternating structure were driven by a greater number of complementarity inferences, then informing participants who saw only the sequential structure of such inferences should
enhance experience evaluations. Complementarity inferences that were provided to participants in the EDU-first order are as follows:

The educational engagements and touring activities in your itinerary have been carefully arranged in an order that will benefit your entire experience in the following ways:

- By integrating key aspects from the guest lecturer with the tour of the sustainable park, you will be able to better identify future areas of focus for the Singapore government’s environmental efforts.
- While the ecosystem workshop provides you with basic information on the role that government plays in maintaining healthy ecosystems, participating in the river safari adds to your knowledge with first-hand experience of how environmental protection policies are translated into actions.
- The various cultural traditions you learn about in the consortium will come alive during the quarter tour. Specifically, you will experience how Singapore’s government has succeeded in maintaining social cohesion among various cultures.
- Visiting the city quarters right after the multiculturalism consortium will not only enhance your level of understanding of Singapore’s history and cultural diversity, but will also ensure retention of the key concepts you have learned.

For this condition, I did not ask participants to write down their thoughts on the trip. They only evaluated the trip using the same items as those used in the other two structure conditions. They also rated how bored they expected to feel if attending the trip.

5.3.2 Results

5.3.2.1 Experience Evaluations

An interaction was found between experience structure and experience order on evaluations, but the significance was marginal \( F(2,340) = 2.77, p = .06; \eta^2 = .02 \); see Figure 12). The alternately structured educational trip \( M_{\text{alternating}} = 82.19, SD = 13.42 \) was evaluated more favourably than the sequentially structured one in the TOUR-first condition \( M_{\text{sequential}} = 76.39, SD = 18.79; p = .02 \); see Table 5 for summary statistics), but was evaluated similarly to the sequentially structured one in the EDU-first condition.
Because experience order was not expected to impact how experience structure was evaluated, a potential explanation for the order effects was explored in a post-test (detailed in the discussion section).

Pairwise comparisons also showed that, when participants were provided with complementarity inferences in the TOUR-first condition, their evaluations of the sequential structure were significantly enhanced ($M_{\text{inference-provided}} = 83.08, SD = 12.34$ vs. $M_{\text{sequential}} = 76.39, SD = 18.79; p = .01$) and were as positive as those of the alternating structure ($M_{\text{alternating}} = 82.19, SD = 13.42; p = .73$). But in the EDU-first condition, participants’ evaluations of the sequential structure with inferences provided ($M_{\text{inference-provided}} = 81.80, SD = 11.41$) were similar to those of the alternating ($M_{\text{alternating}} = 79.88, SD = 13.75; p = .49$) and sequential structure ($M_{\text{sequential}} = 81.86, SD = 11.87; p = .95$). Except for experience evaluations, none of the other variables (i.e., physical fatigue, mental exhaustion, experience familiarity, experience novelty) were affected by experience structure, experience order, or their interaction ($F^*s < 1$).
Table 4: Experiment 5 summary statistics.

<table>
<thead>
<tr>
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<th>EDU-First</th>
<th>Tour-First</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Alternating (n = 56)</td>
<td>Sequential (n = 59)</td>
</tr>
<tr>
<td></td>
<td>M(SD)</td>
<td>M(SD)</td>
</tr>
<tr>
<td><strong>Dependent Variable</strong></td>
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<td></td>
</tr>
<tr>
<td>Evaluation</td>
<td>79.88 (13.75)</td>
<td>81.86 (11.87)</td>
</tr>
<tr>
<td><strong>Other Variables</strong></td>
<td></td>
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</tr>
<tr>
<td>Physical Fatigue</td>
<td>55.33 (26.77)</td>
<td>56.16 (27.63)</td>
</tr>
<tr>
<td>Mental Exhaustion</td>
<td>46.49 (28.84)</td>
<td>49.13 (24.42)</td>
</tr>
<tr>
<td>Familiarity</td>
<td>3.70 (2.03)</td>
<td>3.75 (2.13)</td>
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<tr>
<td>Novelty</td>
<td>4.55 (1.58)</td>
<td>4.61 (1.64)</td>
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<tr>
<td>Boredom</td>
<td>25.11 (25.24)</td>
<td>32.18 (24.37)</td>
</tr>
</tbody>
</table>

Figure 12: The effect of experience structure and constituent experience order on evaluation in Experiment 5.

5.3.2.2 Accounting for the Role of Satiation Avoidance

With respect to satiation, I did not expect that consuming events from the same constituent experience category would increase feelings of boredom. I measured participants’ expected boredom in this experiment to directly account for satiation avoidance as an alternative explanation.
Neither experience order \((F(1, 340) = 1.45, p = .23; \eta^2 = .00)\) nor the interaction of order and experience structure \((F(2, 340) = .14, p = .87; \eta^2 = .00)\) influenced the extent to which participants expected to feel bored while attending the trip. However, a main effect of experience structure on expected boredom was significant \((F(2, 340) = 4.36, p = .01; \eta^2 = .03)\). Notably, this main effect was primarily driven by a significant drop on boredom ratings in the inference-provided condition \((M_{\text{inference-provided}} = 20.67, SD = 20.53; p's < .01)\) whereas participants’ boredom ratings were greater with the sequential structure than the alternating one at a marginal significance level \((M_{\text{sequential}} = 29.76, SD = 24.74 \text{ vs. } M_{\text{alternating}} = 24.29, SD = 25.38; p = .08)\).

To answer the question of whether the expected feeling of boredom explains preference for an alternating experience structure, I re-examined the interaction between experience structure and order on evaluations by controlling for the effects of boredom. A significant interaction was still present \((F(2,338) = 3.22, p = .04; \eta^2 = .02)\) with the sequential structure in the TOUR-first condition evaluated less positively than the alternating structure \((M_{\text{sequential}} = 76.39, SD = 18.79 \text{ vs. } M_{\text{alternating}} = 82.19, SD = 13.42; p = .04)\) and the sequential structure with complementarity inferences provided \((M_{\text{inference-provided}} = 82.80, SD = 12.28; p = .04)\). But in the EDU-first condition, experience structure had no influence on experience evaluations \((p's > .22)\).

To summarize, although individuals expected to feel more bored (i.e., the measure of satiation) with a sequentially structured educational trip, the fact that an alternating experience was preferred went beyond the influence of expected boredom.
As with prior experiments, perceived variety was investigated as an alternative explanation. Referring back to the data collected in the post-test in Experiment 3, the alternately structured educational trip ($M_{alternating} = 4.25$, $SD = .80$) was perceived equally varied as the sequentially structured one ($M_{sequential} = 4.53$, $SD = 1.08$; $F(1,77) = 1.68; p = .20$), again ruling out variety perceptions as an alternative explanation.

### 5.3.2.3 The Role of Complementarity Inferences

To investigate the role of complementarity inferences, I conducted a moderated mediation analysis. Research assistants coded participants’ thoughts from the two thought-listing questions for complementarity inferences. The number of these inferences was designated as the mediator, and the moderation mediation analysis was conducted using the macro developed by Hayes (2013, Model 8). This model estimated the interaction effect of experience structure (sequential vs. alternating) and experience order (EDU-first vs. TOUR-first) on evaluations through the number of complementarity inferences generated. I did not include the inference-provided condition in this analysis, as no thoughts were collected in this condition. Because participants indicated that they expected to feel slightly more bored with the sequential than the alternating structure, I controlled for expected boredom in the analysis (see Table 5). However, even if this factor was not controlled for, the same results were obtained (see Table 5).

Regardless of how constituent experiences were ordered, structure had a significant influence on the number of complementarity inferences that were generated ($F(1,230) = 126.12; M_{sequential} = .13$ vs. $M_{alternating} = 1.86; p < .001; \eta^2 = .35$). That is,
participants generated more complementarity inferences when the trip was structured alternately.

Support for moderated mediation was not found ($B = .10, se = .74, 95\% CI = -1.42, 1.51$), suggesting that the number of complementarity inferences did significantly mediate between experience structure and experience evaluation for both EDU-first and TOUR-first educational trips. The results are not surprising because the expectation that an alternating experience structure motivates and facilitates the generation of complementarity inferences should hold regardless of how the hybrid experience is ordered. Specifically, in the TOUR-first condition, the number of complementarity inferences fully mediated the effects of experience structure on experience evaluations ($B_{\text{indirect}} = 3.68, se = 1.57, 95\% CI = .78, 7.22$; $B_{\text{direct}} = 1.57, se = 2.95; 95\% CI = -4.25, 7.38$). In other words, participants generated more complementarity inferences for the alternately structured educational trip, which significantly enhanced experience evaluations. In the EDU-first condition, the number of complementarity inferences partially mediated the relationship between experience structure and experience evaluations ($B_{\text{indirect}} = 3.59, se = 1.72, 95\% CI = .57, 7.34; B_{\text{direct}} = -6.58, se = 2.96; 95\% CI = -12.42, -.74$). Interestingly, after controlling for the number of complementarity inferences, experience structure still significantly affected experience evaluations, but in a negative direction.
The findings for the EDU-first condition are notable. Results from the mediation analysis suggested that participants generated more complementarity inferences for the alternating structure than the sequential structure, which enhanced experience evaluations. However, results from the ANOVA analysis, where experience structure and order were treated as the independent variables and experience evaluation as the dependent variable, showed that the two experience structures were evaluated similarly ($M_{alternating} = 79.88, SD = 13.75$ vs. $M_{sequential} = 81.86, SD = 11.87; p = .44$). These findings suggest that there may exist certain factors, such as different perceptions of the constituent experiences, which helped increase evaluations of the sequential structure so that it was ultimately evaluated similarly to the alternating structure. Although I did not directly test all the potential factors in this dissertation, I consider one possibility in the discussion section and explore its influence through a post-test.
Incompatibility inferences are judgments that pertain to the negative outcomes that may result from consumers thinking about the pairing of the constituent experience events. The possibility that preference for the alternating over the sequential structure was due to a lesser number of incompatibility inferences rather than a greater number of complementarity inferences was considered. Because no interaction effect was observed between experience structure and order on the number of incompatibility inferences that were generated ($F$'s < 1), the order conditions were collapsed for subsequent analyses. Although participants generated more incompatibility inferences for the sequential structure ($F(1,230) = 26.89; M_{\text{sequential}} = .52$ vs. $M_{\text{alternating}} = .15; p < .01; \eta^2 = .11$), the number of such inferences did not mediate the relationship between experience structure and evaluations ($B_{\text{indirect}} = .73, se = .81, 95\% CI = -.71, 2.39$; Hayes 2013, Model 4). In other words, preference for an alternating structure was not because participants generated fewer incompatibility inferences.

In addition, the mediating role of complementarity inferences was re-examined by controlling for the influence of incompatibility inferences. Again, the number of complementarity inferences mediated the relationship between experience structure and evaluations ($B_{\text{indirect}} = 3.26, se = 1.31, 95\% CI = .90, 5.88; B_{\text{direct}} = -2.55, se = 2.33; 95\% CI = -7.14, 2.04$; Hayes 2013, Model 4). I also re-ran the moderated mediation while controlling for the influence of incompatibility inferences (Hayes 2013, Model 8). Again, the moderated mediation was not present ($B = -.09, se = .74, 95\% CI = -2.34, .88$). Specifically, in the TOUR-first condition, the number of complementarity inferences fully mediated the effects of experience structure on evaluations ($B_{\text{indirect}} = 3.35, se = 1.42, 95\%$)
CI = .74, 6.34; \( B_{\text{direct}} = 1.69, se = 2.98; 95\% \text{ CI} = -4.18, 7.57 \). In the EDU-first condition, the number of complementarity inferences \textit{partially} mediated the relationship between experience structure and evaluations (\( B_{\text{indirect}} = 3.44, se = 1.67, 95\% \text{ CI} = .74, 7.55; B_{\text{direct}} = -6.55, se = 2.97; 95\% \text{ CI} = -12.40, -.70 \)). These findings provide additional evidence that preference for an alternating structure over a sequential one is indeed because a greater number of complementarity inferences are generated for the former structure.

Finally, I found that experience structure had no significant influence on the number of positive thoughts (\( F(1,230) = .11; M_{\text{sequential}} = 2.60 \) vs. \( M_{\text{alternating}} = 2.66; p = .74; \eta^2 = .00 \)) reported by participants, and its influence on the number of negative thoughts was only at a marginal level (\( F(1,230) = 3.38; M_{\text{sequential}} = 2.03 \) vs. \( M_{\text{alternating}} = 1.75; p = .07; \eta^2 = .01 \)). These findings suggest that the valence of thoughts does not account for the hypothesized effects.

\section*{5.3.3 Experiment 5 Discussion}

The results of Experiment 5 provide evidence for the mediating role of complementarity inferences. In this experiment, individuals generated more complementarity inferences when evaluating the alternately structured educational trip. This mediating effect held regardless of how the constituent experiences were ordered (i.e., EDU-first or TOUR-first). However, the positive effect of generating a greater number of complementarity inferences on experience evaluations depended on how the constituent experiences were ordered. In addition, when participants were provided with complementarity inferences in the sequentially structured hybrid experience condition, evaluations were significantly enhanced. This finding offers additional evidence that the
increase in experience evaluations is driven by complementarity inferences. Meanwhile, individuals were also found to generate incompatibility inferences for both experience structures, but the number of these inferences did not predict experience evaluations. Moreover, after accounting for the influence of incompatibility inferences, the number of complementarity inferences still mediated the relationship between experience structure and evaluations.

Counter to expectations, preference for an alternating structure seems to depend on how the constituent experiences of a hybrid are ordered. Here, the alternating structure was evaluated less favourably than the sequential structure when the educational engagements were scheduled before the sightseeing tours (EDU-first condition). The alternating structure was evaluated more favourably than the sequential one when the sightseeing tours were scheduled first in the trip (TOUR-first condition). Based on prior research, we know that consumers prefer experiences with an improving-trend to a deteriorating-trend (Ariely, 1998; Loewenstein & Prelec, 1993). With respect to my research, this finding suggests a main effect of constituent experience order and, specifically, that the EDU-first trip would be evaluated more favourably than the TOUR-first one, which was confirmed in this experiment ($F(1,118) = 5.30$, $M_{\text{EDU-first}} = 81.86$ vs. $M_{\text{TOUR-first}} = 76.39$, $p = .02$; $\eta^2 = .04$). However, the findings in prior research (Ariely, 1998; Loewenstein & Prelect, 1993) do not imply that, with the EDU-first order, preference for an alternating structure would disappear.

Research on consuming experience categories offers some insight into the unexpected order effects I found. According to Shah and Alter (2014), consumers rely on
the valence of an experience to plan how to consume its involved events. Specifically, consumers are reluctant to consume in a way that eliminates event categories if the experience is framed positively, but the opposite is true if the experience is framed negatively. To illustrate, consider my previous example again: An individual plans to visit six cities in Canada. These cities can be further classified into two equal visit categories: West and East. If the person has already visited two western cities and one eastern city, and is deciding which city to visit for the next trip, findings from the Shah and Alter (2014) study would predict that the last city from the West category will be chosen (thus eliminating the category of western cities) only if the whole trip is framed as an unpleasant journey. This is because eliminating categories leads to a great subjective feeling of making progress, which is important to the consumption of negative experiences. On the other hand, the person will choose to visit another city from the East category if the trip is framed as a pleasant journey.

These findings suggest that consumers of hybrid experiences may prefer to consume the constituent experiences in a sequential pattern (i.e., to eliminate all events from one constituent and then consume events from the other constituent) if the hybrid is perceived as a negative experience, but in an alternating pattern (i.e., to preserve both constituents to prolong the consumption) if the hybrid is perceived positive. If this reasoning explains the observed order effects (i.e., the alternating structure was preferred in the TOUR-first condition, while the sequential structure was slightly more preferred in the EDU-first condition), I would expect the educational trip to be evaluated positively in the TOUR-first condition but negatively in the EDU-first condition. Analyses revealed that the educational trip was rated similarly positive ($F(1,232) = 1.06$, $M_{EDU-first} = 83.36$)
vs. $M_{\text{TOUR-first}} = 81.37, p = .30; \eta^2 = .01$). This finding helps to rule out the hybrid experience valence as an explanation to the order effects.

Another possibility considered was whether different perceptions of the constituent experiences could account for the observed order effects. Anecdotally, this seems possible. The educational constituent experience (the workshop on ecosystems and the multicultural consortium) may have been perceived as more utilitarian or instrumental (e.g., consuming educational engagements for the benefits of knowledge-enhancement; Batra & Ahtola, 1990; Botti & McGill, 2011). In contrast, the sightseeing constituent experience (the river safari and the city quarter tours) may have been perceived as serving more hedonic motives (e.g., consuming sightseeing tours simply for the enjoyment it provides). Thus, if participants begin the trip with an educational engagement (e.g., the workshop on ecosystem; EDU-first condition), they may have preferred to finish another educational engagement (the multicultural consortium) because the completion of the more utilitarian constituent experience means they could more fully indulge in the hedonic constituent that follows. In other words, a sequential structure may be preferred in this case. However, a trip that starts with a sightseeing activity (e.g., the river safari; TOUR-first condition), may have resulted in participants wanting to delay consumption of another sightseeing activity (the city quarter tour); thus, extending pleasure from the fun part of the trip by maximizing anticipation. On the other hand, if a hybrid experience is composed of two hedonic constituents (e.g., the French Festival), their order may have less of an impact on evaluations.
To test this possibility, I conducted a between-subjects post-test \((n = 71, 55\%\) female) to measure differences in how utilitarian or hedonic the constituent experiences are perceived in each of the experiences I have used thus far (Experiments 2 and 3: film watching & acrobatic shows; Experiment 4: street exploration tours and food-tasting events; Experiment 5: educational engagements and touring activities). Three seven-point items, anchored with “about thinking/about feeling,” “about work/about fun,” and “reasonable/emotional” \((\alpha = .78)\), were used to measure how hedonic each constituent experience is perceived. Five seven-point items, anchored with “not beneficial/very beneficial,” “not important/very important,” “not meaningful/very meaningful,” “not valuable/very valuable,” and “not useful/very useful” \((\alpha = .93)\), were used to measure how utilitarian each constituent experience is perceived (Batra & Ahtola, 1990; Dhar & Wertenbroch, 2000). An index labeled as Hed-Uti-Diff was created by subtracting the utilitarian score from the hedonic score with a positive score indicating that a constituent experience is perceived as more hedonic, and a negative score indicating that a constituent experience is perceived as more utilitarian. Consistent with my expectations, the Hed-Uti-Diff score differed significantly between educational engagements and sightseeing tours for the educational trip used in this experiment \((M_{edu} = -1.86 \text{ vs. } M_{tour} = -0.21; p < .01)\). This indicates that these two constituent experiences were perceived differently in terms of the type of benefits delivered. The educational engagements were viewed as more utilitarian, and the sightseeing tours as more hedonic compared to the educational engagements. However, constituent experiences used in Experiments 2 to 4 did not differ significantly on the Hed-Util-Diff score \((p’s > .40)\). All the constituent
experiences from Experiments 2 to 4 scored similarly on the Hed-Uti-Diff index, indicating that they were all considered as being hedonic experiences (see Figure 13).

Results from this post-test imply that differences in how utilitarian or hedonic the constituent experiences are perceived may cause an order effect for hybrid experiences. That is, an alternating experience structure is preferred to a sequential one only when the hedonic constituent is ordered before the utilitarian constituent; however, preference for the alternating structure disappears if the hedonic constituent is ordered after the utilitarian one. Although prior findings (e.g., Loewenstein & Prelec, 1993) suggest the utilitarian constituent (usually less preferred) should be ordered first within a hybrid to enhance overall experience evaluations, results from Experiment 5 and the post-test imply that this may not always be true if experience structure is taken into account. When structured alternately (vs. sequentially), a deteriorating-trend hybrid experience (hedonic constituent ordered first) may be evaluated more favourably, whereas an improving-trend hybrid experience (utilitarian constituent ordered first) less favourably

![Figure 13: Hedonic-utilitarian perceptions across experiments.](image-url)
Chapter 6

6 Constituent Experience Similarity and Experience Evaluation

The results of my experiments thus far suggest that individuals prefer an alternating hybrid experience to a sequential one because the alternating structure motivates and facilitates the generation of more complementarity inferences, which enhances experience evaluations. Notably, however, the presentation order of utilitarian and hedonic constituent experiences seems to impact how much an alternating experience structure is preferred. In this chapter, I focus on another potential moderator, constituent experience similarity. In designing a hybrid experience, marketers must determine whether the constituent experiences should be more or less similar. In the volunteer tour example, trail maintenance may be perceived more similar to tree planting, because both involve a great amount of physical work. In contrast, a trail walk may be perceived less similar to tree planting because they differ in their potential to contribute to a goal of relaxation. It is theoretically interesting and managerially important to know whether constituent experience similarity may also enhance or mitigate the impact of experience structure on evaluations.

6.1 Experience Similarity

Similarity is a central construct in models of cognitive processing (Markman & Gentner, 1996). It serves as an organizing principle by which individuals classify objects, form concepts, and make inferences about objects and concepts. One important approach
in determining the similarity between two tangible products is through the number of their shared properties (Rosch, 1978; Markman & Wisniewski, 1997). Two objects are perceived to be more similar when they share more properties, and less similar when they share fewer properties. For example, desktop computers and laptops share several properties (e.g., hard drive, central processing unit, keyboard, and monitor screen), but desktop computers and laser printers share very few, if any, properties. Thus, the desktop computer and laptop seem similar to one other while the computer and laser printer do not. As taxonomic categories cohere around shared properties, taxonomic category membership is usually considered a proxy for object similarity (Estes, Golonka, & Jones, 2011). In other words, before comprehending specific product properties, simply knowing that desktop computers belong to the same taxonomic category as laptops (computers), whereas desktop computers and laser printers come from a different taxonomic categories (computers and printers), could help individuals to infer that the first two products share more properties and thus are more similar than the latter ones.

Taxonomic category structures also apply to life experiences (Morris & Murphy, 1990; Rifkin, 1985). Specifically, from a top-down, activity-based categorization perspective, people taxonomically organize their knowledge of experiences in three levels: a basic level (e.g., dancing), a subordinate level (e.g., disco dancing), and a superordinate level (e.g., entertainment). As mentioned previously, most life experiences can be classified into only a few superordinate taxonomic categories (e.g., entertainment, sports, and school activities; Morris & Murphy, 1990; Rifkin, 1985). As has been observed for objects (Rosch, Mervis, Gray, Johnson, & Boyes-Braem, 1976), experiences that are from the same superordinate taxonomic category may appear more similar than
those that are not from superordinate categories. For example, disco dancing seems more similar to hip-hop, as both are types of dancing but less similar to running as the latter is a type of sports.

As discussed previously, life experiences can also be categorized based on other conceptual category cues. Beach and club activities, for example, differ on where they take place, which is a location classification; while activities for elders or teenagers involve categorization by participants’ age (Barsalou et al., 1998). Life experiences can also be categorized according to the goals that the experience accomplishes (e.g., an event for leisure or for work; Barsalou, 1983; Conway, 1990), the emotional concepts that the experience elicits (e.g., positive or negative; Conway, 1990), and the experience’s temporal structure (e.g., an activity that took place ten years or five years ago; Conway & Bekerian, 1987). Regardless of how experiences are categorized, however, those that belong to the same superordinate category are seen as more similar than those that do not share the same superordinate category. Teaching English in jungle villages may be considered similar to jungle restoration activities, as both are volunteer services, require significant preparation and work, take place in the jungle, and serve the goal of helping local communities. A visit to a popular beach, on the other hand, may be seen as less similar to a jungle restoration experience, as the former is an experience that is self-focused, takes place in a different location, and fulfills a more leisure or entertainment-oriented goal.

Experiences that are from the same category may also share more or few properties and be perceived as more or less similar. For instance, jungle restoration,
teaching English, and taking care of impoverished children are all volunteer services. The latter two seem more similar, as both are volunteer events involving less physical work with children. Jungle restoration, on the other hand, is a volunteer event that involves physical work and no contact with children. Importantly, regardless of how experiences are categorized, life experiences can be perceived as more or less similar, and this perceived similarity may have a profound influence on experience structure evaluations.

6.2 Hypothesis Development

A hybrid experience may be comprised of constituent experiences that are perceived as more or less similar. I propose that constituent experience similarity moderates the effect of experience structure on experience evaluation. That is, preference for an alternating structure would be greater for hybrids composed of less similar constituent experiences (less similar hybrids) and less for hybrids composed of more similar constituent experiences (more similar hybrids). This prediction is motivated by findings from the schema congruity literature. Next, I discuss how this line of research relates to and motivates my investigation of constituent similarity.

According to the schema congruity literature, the evaluation of a schema incongruent product varies as a function of incongruence resolution (Aggarwal & McGill, 2007; Meyers-Levy, Louie, & Curren, 1994; Meyers-Levy & Tybout, 1989). If individuals are motivated (Maoz & Tybout, 2002) and able (Peracchio & Tybout, 1996) to generate meaningful inferences to integrate the incongruent product with its category schema, the product will be evaluated more favourably. If, however, they fail to generate such inferences, the schema incongruent product will be evaluated less favourably than
the congruent one. For example, Maoz and Tybout (2002) examined the evaluation of congruent and incongruent brand extensions by manipulating participants’ motivation to elaborate. They found that the incongruent brand extension (BMW branded lawnmower) was evaluated more favourably than the congruent brand extension (BMW branded motorboat) only when participants were prompted to infer the rationale for the extension.

Similar to the tangible products examined in prior research (e.g., Meyers-Levy & Tybout, 1989), consumers may also perceive constituent experiences to be more or less congruent (i.e., similar). In fact, there may have been some evidence of this in Experiment 5 with the differences in hedonism and utilitarianism perceived between the educational and sightseeing events. In general, less similar constituent experiences likely have fewer multi-sensory, emotional, and locational details in common, which according to the schema congruity literature may lead to a greater desire to resolve their incongruences. Similarly, motivated by script theory and the conversation implicature literature, I have already suggested and found empirical support for the generation of complementarity inferences motivated and facilitated by an alternating structure, which contribute to the meaningful integration of constituent experiences. At a high level, this may be considered similar to the incongruence resolution that is central in the schema congruity literature.

Despite the broad parallels between my dissertation research and the schema congruity literature, I have not taken into account how perceived similarity of a hybrid’s constituent experiences may contribute to inference generation and evaluation. However, this is theoretically and managerially important. Thus, I draw on the schema congruity literature to motivate my investigation of constituent experience similarity as an important moderator of the effect of experience structure on evaluation. See Figure 14
for a revised conceptual model that incorporates this moderator. Specifically, I hypothesize that:

\[ H_3: \text{An alternately structured hybrid experience will be evaluated more (less) favourably when the constituent experiences are less (more) similar.} \]

![Conceptual model for the role of constituent experience similarity.](image)

**Figure 14: Conceptual model for the role of constituent experience similarity.**

### 6.3 Experiment 6

The objective of Experiment 6 was to examine how constituent experience similarity (termed as *experience similarity* hereafter) moderates the impact of experience structure on experience evaluations. To do so, I created a hybrid experience that was composed of more or less similar constituent experiences, manipulated the hybrid’s structure (alternating or sequential), and then measured overall experience evaluations.

#### 6.3.1 Design, Procedure, and Measurements

Two hundred and twenty-two undergraduate students participated in this 2 (experience structure: alternating vs. sequential) x 2 (experience similarity: similar vs. dissimilar) between-subjects experiment for partial course credit. Participants were randomly assigned to one of four experimental conditions and informed that they would
evaluate a tentative schedule for a hybrid Halloween adventure called “Haunt”, organized by Canada’s Wonderland.

The dissimilar Haunt adventure was composed of two less similar constituent experiences. The first constituent experience was comprised of zombie makeup demonstrations, a facial makeup session and accompanying competition and a body makeup session and another competition. The second constituent experience was comprised of two zombie runs: a regular 1 km run and a 1 km obstacle course run. Events from the two constituent experiences were either structured sequentially or alternately. In the sequential structure, the two makeup demonstrations were arranged in the afternoon and the two running activities were scheduled in the early evening (see Appendix K for the schedule). Between the two runs, attendees rested (with refreshments served) for an hour and a half to reduce physical fatigue. In the alternating structure, the 1 km run followed the facial makeup demonstration in the afternoon, and, in the early evening, the 1 km obstacle course followed the body makeup demonstration.

The similar Haunt adventure was composed of two more similar events: zombie film watching (Dawn of the Dead [1978] directed by George A. Romero and Shaun of the Dead [2004] directed by Edgar Wright) and zombie runs (a regular 1 km run and a 1 km obstacle course run), which were again structured either sequentially or alternately. In the sequential structure, two zombie films were scheduled in the afternoon with a one-hour

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4 In a pretest (n=50), I asked participants to rate on two seven-point items “How similar to one another are the Zombie Run event and Zombie Movie event”, and “How similar to one another are the Zombie Run event and Zombie Makeup Demonstrations” (both anchored with “dissimilar/similar”). I found that the zombie run events were perceived to be more similar to the zombie movie events (M = 4.00, SD = 1.91), than with the zombie makeup demonstrations (M = 3.19, SD = 1.86; p < .01). All three types of zombie events were evaluated marginally different with each other on experience evaluation (p = .08).
break between the two films to reduce mental exhaustion (see Appendix L for the schedule). The two running activities were scheduled in the early evening with a rest (with refreshments served) for one and a half hours. In the alternating structure, the 1 km run was scheduled after the film *Dawn of the Dead* in the afternoon, and the 1 km obstacle course was scheduled after the film *Shawn of the Dead* in the evening.

After reading the itinerary, participants evaluated the hybrid experience on six seven-point items ($\alpha = .93$). In addition to the five items (desirable/enjoyable/interesting/attractive/exciting) used in Experiments 2 to 5, participants also indicated whether they would look forward to the adventure (anchored with “not at all/very much”). It was expected that the first five items would capture the pleasure expected to occur during the adventure, while the looking forward item would capture anticipatory pleasure associated with fantasizing about the adventure (Loewenstein et al., 2001). The Haunt event was expected to be more emotionally arousing than the events in other experiments given its Halloween theme and the nature of the events involved, so including one item to capture the anticipatory affect seemed prudent. Participants also evaluated on four seven-point items that measured perceived novelty and uniqueness of the experience, as well as how physically and mentally fatigued they would expect to feel if attending the adventure.

The similarity of constituent experiences was measured as a manipulation check. Specifically, participants, who evaluated the Haunt adventure with dissimilar events indicated on a seven-point scale “How similar is the zombie makeup demonstration event to the zombie run event?” while those who evaluated the Haunt adventure with similar
events rated “How similar is the zombie movie event to the zombie run event?” (both anchored with “dissimilar/similar”). The experiment concluded with a demographic question on gender and whether the participants’ first language was English.

6.3.2 Results

**Manipulation Check:** The manipulation of similarity worked at a marginal level of significance. The zombie makeup demonstrations and zombie run combination ($M_{\text{makeup-run}} = 3.11$) was perceived as more dissimilar than the zombie film watching and zombie run combination ($M_{\text{movie-run}} = 3.51$; $F(1, 213) = 3.15, p = .08; \eta^2 = .02$).

**Experience Evaluation:** I conducted a two-way ANOVA with experience structure and experience similarity as the between-subjects independent variables and experience evaluation as the dependent variable. A main effect of experience structure was not observed ($F < 1$), but there was a marginally significant main effect of experience similarity ($F(1,213) = 3.67, p = .06; \eta^2 = .02$; see Figure 15), where the dissimilar pair ($M_{\text{dissimilar}} = 4.69$) was evaluated more favourably than the similar one ($M_{\text{similar}} = 4.32$). More importantly, a significant interaction effect between experience structure and experience similarity on experience evaluations was found ($F(1,213) = 5.81, p = .02; \eta^2 = .03$). Pairwise comparisons showed that, for the dissimilar Haunt adventure (composed of zombie makeup demonstrations and zombie runs), participants evaluated the alternating structure more favourably than the sequential one at a marginal significance level ($M_{\text{alternating}} = 4.96$ vs. $M_{\text{sequential}} = 4.44, p = .06$; see Table 7). However, with the similar Haunt adventure (composed of zombie film watching and zombie runs), participants evaluated the sequential structure and the alternating structure similarly ($M_{\text{alternating}} = 4.11$.
vs. $M_{\text{sequential}} = 4.53, p = .13$). In addition, participants evaluated the dissimilar Haunt adventure equivalently to the similar one if both adventures were structured sequentially ($M_{\text{dissimilar}} = 4.44$ vs. $M_{\text{similar}} = 4.53, p = .73$), but evaluated the dissimilar adventure more favourably when they were structured alternately ($M_{\text{dissimilar}} = 4.96$ vs. $M_{\text{similar}} = 4.11, p < .01$). No other variables were significantly impacted by experience structure, experience similarity, or their interactions ($F$’s < 1.65).

**Table 6: Experiment 6 summary statistics.**

<table>
<thead>
<tr>
<th>DV</th>
<th>Dissimilar Experience</th>
<th>Similar Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Alternating $(n = 53)$</td>
<td>Sequential $(n = 55)$</td>
</tr>
<tr>
<td>Experience Evaluation</td>
<td>$M$</td>
<td>$SD$</td>
</tr>
<tr>
<td>Physical Fatigue</td>
<td>4.22</td>
<td>1.95</td>
</tr>
<tr>
<td>Mental Exhaustion</td>
<td>3.54</td>
<td>1.87</td>
</tr>
<tr>
<td>Novelty</td>
<td>3.89</td>
<td>1.67</td>
</tr>
<tr>
<td>Uniqueness</td>
<td>4.13</td>
<td>1.68</td>
</tr>
</tbody>
</table>

**Figure 15: The effect of experience structure and constituent experience similarity on evaluation in Experiment 6.**
6.3.3 Experiment 6 Discussion

Findings from Experiment 6 indicate that only for the dissimilar hybrid experience (i.e., the hybrid composed of dissimilar constituent experiences) the alternating structure was more preferred to the sequential one; thus supporting H₃.

Although experience similarity was expected to be the only moderator in Experiment 6, a closer look at the research stimuli found that a confounding factor may exist. Although rated dissimilar, the hybrid experience with the makeup demonstrations and zombie runs seem to be more coherent (i.e., the constituent experiences may have been perceived more logically related given their scheduled order; e.g., Murphy & Medin, 1985) than the hybrid experience with the zombie movies and zombie runs. The perception of coherence for the first pair may come from a convention that individuals usually apply zombie-themed makeup before participating in zombie run activities, as with a popular 5km Zombie run (http://www.the5kzombierun.com/), for example. On the other hand, it is less conventional to watch zombie films before zombie run activities. While coherence might explain why the dissimilar hybrid was evaluated more positively than the similar hybrid (i.e., the main effect of similarity), it cannot account for why the two experience structures, alternating versus sequential, were evaluated differently (i.e., the interaction effect of experience similarity and experience structure). Both structures had makeup demonstrations before runs and should be perceived similarly coherent according to convention. To further follow up on the potentially confounding role of coherence, I conducted a post-test (n = 72, 43% female).
All the measurements used in the post-test were the same as those used in Experiment 6, except that the order of the makeup demonstrations and zombie runs was reversed to manipulate experience coherence while maintaining experience dissimilarity.\(^5\) The rationale for this post-test was that if conventional knowledge suggests that makeup demonstrations take place before zombie runs, then flipping the order of these two constituents will work against convention and this will reduce coherence perception. Further, if coherence, rather than dissimilarity, drives preferences for the alternating structure, the preference will be greatly reduced if coherence decreases. Experience coherence was operationalized as constituent experience order (makeup demonstrations first vs. runs first). The interaction between experience coherence and structure was not significant \((F(1,174) = .01, p = .92; \eta^2 = .00)\). The alternating structure was more favourably evaluated \((M_{\text{alternating}} = 4.64 \text{ vs. } M_{\text{sequential}} = 4.12; F(1,174) = 6.13, p = .01; \eta^2 = .03)\) regardless of the perceived coherence of the experience. Notably, reversing the order of the makeup demonstrations and zombie runs did not change similarity ratings \((F(1,179) < 1; M_{\text{makeup-run}} = 3.11 \text{ vs. } M_{\text{run-makeup}} = 2.89; \eta^2 = .01)\). These results suggest that experience coherence does not influence how experience structures are evaluated, ruling out coherence as a confounding moderator in Experiment 6.

Combining the data from the post-test with that from Experiment 6, and treating it as additional responses for the dissimilar experience condition, I ran a two-way ANOVA to examine the interaction between experience similarity and experience structure. Again, a significant interaction was observed \((F(1,283) = 6.64, p = .01; \eta^2 = .02)\). Pairwise

\(^5\) The data collected was combined with that from Experiment 6 for the post-test analyses (resulting in a data file with 295 responses).
comparisons indicated that for the dissimilar Haunt adventure (composed of makeup demonstrations and zombie runs, with two experience orders), the alternating structure was evaluated more favourably than the sequential one ($M_{alternating} = 4.64$ vs. $M_{sequential} = 4.12, p = .02$). However, with the similar adventure (composed of zombie film watching and zombie runs), the two structures were again evaluated similarly ($M_{alternating} = 4.11$ vs. $M_{sequential} = 4.52, p = .14$). In addition, the dissimilar Haunt adventure was evaluated similarly to the similar one if they were both structured sequentially ($M_{dissimilar} = 4.12$ vs. $M_{similar} = 4.52, p = .11$), but the dissimilar adventure was evaluated significantly more favourably to the similar one when they were structured alternately ($M_{dissimilar} = 4.64$ vs. $M_{similar} = 4.11, p = .04$).

The post-test analyses thus empirically rules out experience coherence as confound, confirming the moderating effect of experience similarity on the relationship between experience structure and evaluations.
Chapter 7

7 General Discussion

The overarching objective of this dissertation was to investigate how a hybrid experience structure influences experience evaluations. Across all the six experiments (Experiments 1-6), I consistently found that an alternately structured hybrid experience was more preferred to a sequentially structured one. Enhanced preference for the alternating structure was not because individuals felt more satiated with a sequential structure (Experiment 5) or because individuals perceived an alternating structure to have greater variety (Experiment 3 and the post hoc study checking perceived variety), but because the alternating structure motivated and facilitated the generation of more complementarity inferences (Experiments 3 and 5). Finally, the effect of experience structure was contingent on constituent experience similarity (Experiment 6), with the alternating structure more preferred only when the hybrid experience was composed of less similar constituents.

7.1 Theoretical and Managerial Contributions and Implications

These results extend several findings from the literature. My dissertation is the first to conceptualize and investigate hybrid experiences in the consumer behaviour literature. While such experience offerings are not uncommon in the market (e.g., educational trips and voluntourism), and industries have started to give consumers opportunities to self-create such experiences (e.g., Expedia), prior research has only examined functional hybrid products (Moreau et al., 2001; Gregan-Paxton et al., 2005;
Hybrid experiences are rarely discussed. This dissertation not only defines a hybrid experience but also identifies how its structure and composition influence experience evaluations. Thus, my dissertation provides a strong conceptual foundation from which future work on hybrid experiences can build upon.

My conceptualization of complementarity inferences extends our understanding of complementarity in the literature of service bundling in two ways. First, I show that changing the structure of the same bundle of events affects complementarity perceptions. The service bundling literature has not examined this type of design effect. Second, I demonstrate that consumers engage in an inferential process to identify complementarities between bundled experiences, regardless of whether the experiences are complementary per se. The service bundling literature assumes that complementarity is only present when complementary products are bundled together. And observing such complementarities does not require inferencing.

My dissertation results also extend findings on hybrid product learning. In particular, it seems that the single category belief bias, which has been consistently observed for hybrid functional products (e.g., Apple’s iWatch and the LG cellphone–headphone hybrid; Moreau et al., 2001; Gregan-Paxton et al., 2005; Rajagopal & Burnkrant, 2009; Noseworthy & Goode, 2011; Noseworthy et al., 2012), may not apply to hybrid experiences. The single category belief bias refers to the tendency of individuals to classify a hybrid product, such as the LG cell phone–headphone hybrid, into one category (e.g., the cell phone category), and to primarily rely on this single
category to infer product performance (e.g., the hybrid can help to make phone calls).
This can be a problem for a hybrid product, as functionalities from the other product
category (e.g., the headphone category) may be ignored or underappreciated. With hybrid
experiences, however, the generation of complementarity inferences indicates that people
simultaneously consider events from both constituent categories to make sense of a
hybrid experience; they do not make inferences based on one experience category as has
been found in prior work.

Throughout my dissertation research, I attempted to identify and account for
potential competing explanations in addition to my hypothesized effects. I will next
discuss these explanations and how my findings go beyond their predictions.

**Satiation Avoidance.** The variety seeking literature suggests that to reduce
satiation that arises from repeated consumption (Rolls, 1986), people prefer to consume
hedonic products in alternation rather than in sequence (Kahn, 1995; McAlister &
Pessemier, 1982), even if the switched-to option is less preferred (Ratner et al., 1999).
According to this literature, then, the alternately structured hybrid experience should be
preferred to the sequentially structured one. Data from Experiment 5, however, shows
that people expect to feel only slightly more satiated (i.e., at a marginal level of
significance) when consuming a sequential hybrid experience. Notably, after accounting
for expected satiation, individuals still like the alternating structure more, and this is
because they generated more complementarity inferences with this structure.

**Perceived Variety.** Research has found that the same assortment of products may
be perceived as more or less varied depending on the assortment display. The display can
make it more or less difficult for consumers to recognize and appreciate the full extent of the assortment’s variety (Hoch et al., 1999; Kahn & Wansink, 2004; Morales et al., 2005). This suggests that the variety perceived in a hybrid experience may more or less depend on its structure. However, results from Experiment 3 and a post-test show that hybrid experiences are rated as equally varied regardless of the structure. This is presumably because the number of events involved in a hybrid experience is usually small (between four and six events), and structuring them differently may not produce the same difficulty in recognizing actual variety as found in prior research (Kahn & Wansink, 2004; Morales et al., 2005).

**Consuming Experience Categories:** Findings from a study by Shah and Alter (2014) imply that individuals may prefer to consume two experience categories sequentially in a negatively framed experience but prefer to consume them alternately if the experience is framed positively. This is because eliminating experience categories increases a subjective feeling of making progress, which is more important to the completion of negative rather than positive experiences. Although Shah and Alter (2014) also suggest an alternating consumption pattern for positive experiences, their study does not provide an explanation for this preference. While not refuting their claims, my findings suggest that the reason consumers prefer an alternating structure is because they infer more benefits from consuming experiences structured as such. In addition, results from the post-test in Experiment 5 extend Shah and Alter’s findings by showing that consumers may, in fact, also prefer a sequential structure even if the whole experience is not framed negatively, if the constituent experiences of a hybrid are perceived to be more or less utilitarian or hedonic.
In addition to these alternative explanations, I considered the relevance of hedonic editing (Thaler & Johnson, 1990), trend (Loewenstein & Prelec, 1993), and licensing effects (Khan & Dhar, 2005) to my findings. Ultimately, I conclude that findings in this research would either predict and/or require a different organizing structure for hybrid experiences. This not only goes beyond my investigation, but is inadequate in accounting for all of my experimental effects. I will next discuss this in detail.

**Hedonic Editing:** This hypothesis (Thaler, 1999; Thaler & Johnson, 1990) suggests that individuals prefer to segregate positive experiences on different days. With a hybrid experience consisting of two positive constituents, each with two positive events, this hypothesis would predict that consumers may want to consume these four events on four days to extend anticipatory pleasure. While not refuting this prediction, I focus on whether or not individuals prefer to consume a sequentially versus alternately structured hybrid experience with a predetermined consumption episode (e.g., within 2 days).

**Trend Effects:** Loewenstein and Prelec (1993) found that individuals prefer an improving-trend experience to a deteriorating-trend one. This finding suggests a main effect of experience order: hybrid experiences ordered in an improving sequence will be evaluated more positively than a deteriorating sequence. Indeed, I found evidence for this in Experiment 5, where the TOUR-first educational trip was evaluated less favourably than the EDU-first trip. However, this literature does not suggest anything about preference for experience structure.

**Licensing Effects:** Khan and Dhar (2005) reported that after choosing to do community services, individuals were more likely to select for themselves a pair of
designer jeans than a vacuum cleaner (both priced at $50). This is because making commitment to virtuous services reduces the feeling of guilt in individuals, and thus licenses subsequent indulgence in luxury purchases. The implication from this research is that if a hybrid experience is composed of hedonic and utilitarian constituents,\(^6\) individuals may prefer an alternating structure where each utilitarian event is followed by a hedonic event. In other words, the utilitarian events license the indulgences associated with hedonic events. Only the educational trip employed in Experiment 5 was a combination of utilitarian and hedonic constituents. With this hybrid experience, however, an alternating structure was not preferred to the sequential one when the educational engagements (the utilitarian constituent) were ordered before the sightseeing tours (the hedonic constituent). Thus, findings from the licensing effect literature do not seem relevant for explaining findings in my dissertation.

From a substantive viewpoint, the hybrid experiences offered in the marketplace necessitate a more informed understanding of how consumers process and evaluate these offerings. The findings from this research suggest that marketing practitioners should consider what constituents to use in designing a hybrid experience. Once the constituent experiences of a hybrid are determined, they need to decide how to structure the events to maximize experience evaluations. My research suggests it is better to combine dissimilar constituents together in a hybrid and structure them alternately to maximize favourable experience evaluations. Further, if marketing practitioners want to create a hybrid

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\(^6\) Prior research on luxuries and necessities has used several labels interchangeably for the products, such as virtues and vices by Wertenbroch (1998), hedonic-utilitarian by Dhar & Wertenbroch (2000), luxury and necessity by Kivetz and Simonson (2002). But a common assumption is that the purchase of relative hedonic products or luxuries is associated with guilt (Khan & Dhar, 2005) and sometimes requires justifications (Simonson, 1989).
experience with utilitarian and hedonic constituents, then they should consider how to order these two constituents. If the hedonic constituent has to be scheduled first in the hybrid given budget, time, or location constraints, an alternating structure may help increase consumer evaluations. If the utilitarian constituent has to be scheduled first then a sequential structure may be a better choice.

7.2 Limitations and Future Research

The order effects in Experiment 5 suggested another potential moderator for the effect of experience structure on evaluations. Although I explored an explanation for this effect through a post-test, and the results were consistent with my expectations, a controlled experiment is needed to understand the order effects. In Experiment 6, I found that the alternating structure was more preferred when the hybrid experience was composed of less similar constituents. This finding implies that the hybrid experiences used in Experiments 1 to 5 were composed of less similar constituents; otherwise, preference for the alternating structure would not have been found.

The theorizing in Experiment 6, where I identify parallels between my research and the product congruity literature could have been elaborated on further to suggest the existence of an inverted U relationship between constituent similarity and experience structure. In this experiment, the dissimilarity ratings of the two constituents, zombie makeup and zombie run, were only slightly below the midpoint of 3.5 on a 7-point scale (anchored by dissimilarity/similarity; 3.12 in the pre-test and 3.11 in the manipulation check). Therefore, the results can only speak to constituent experiences that are moderately dissimilar with each other. When it comes to extremely dissimilar constituents, I expect that the advantage of an alternating structure may disappear as
observed for similar constituents. For example, the experience of fox hunting and karaoke may be considered extremely dissimilar from each other, because they are about different types of activities, require different skills and equipment, take place at different locations, etc. With this hybrid, structuring the constituents alternately (fox hunting-karaoke-fox hunting-karaoke) may not facilitate inference generation. Instead, an alternating structure may make consumers feel even more confused about the experience’s benefits. This assumption, of course, must be tested in future research. Finally, future experiments should also take into account coherence effects in stimuli design.

An additional limitation of the current research is that the generalizability of the findings seems to be restricted to a younger adult population (i.e., early twenties) who have completed approximately two years of post-secondary education. This is because all the experiments were collected using student participants. Future research should aim to use a sample that possesses broader variance on the key demographic variables measured in this study. Indeed, there are reasons to believe that certain demographic variables may also moderate the effects of experience structure on evaluations. For example, age has been found negatively correlated with need for cognition (Salthouse, Kausler, & Saults, 1988), which refers to an individual’s tendency to engage in effortful cognitive tasks (Cacioppo & Petty, 1982). With hybrid experiences, this finding suggests that preference for an alternating structure may not be true for the elder as they may be less motivated to generate complementarity inferences for this structure.

Across all six experiments, hypothetical hybrid experience itineraries were created to examine anticipated evaluations of the experiences. This design has two potential limitations. First, using hypothetical hybrid experiences may limit the
generalizability to real hybrid experiences in the market. Second, findings on anticipated evaluations may have limited predictive power for real-time feelings (for a review, see Gilbert & Wilson, 2007; but see Ratner, Kahn, and Kahneman [1999] for an exception). Indeed, people tend to overestimate how much they will like a future experience and underestimate feelings while immersed in an experience, a phenomenon referred to as focalism bias (Wilson et al., 2000). People also sometimes fail to recognize how quickly they will emotionally adapt to an experience (Gilbert et al., 2002). Although consumers usually evaluate and choose trips prospectively, as we have shown here, it is still important to understand how experience structure impacts real-time affect and evaluations. This is important for obvious reasons, because a positive consumption experience increases the possibility of re-consumption and positive word-of-mouth.
Chapter 8

8 Bibliography


Appendices

Appendix A: Fitness-Leisure Choice Task in Experiment 1.

Consider that you are going to attend a 4-day hybrid fitness-leisure event. The "fitness" component consists of a variety of indoor and outdoor fitness programs, fitness related talks, and group works; and the "leisure" component consists of beach activities, pub activities, and shopping.

Now the event planner organizes the event in TWO ways. Please let me know which one you would prefer more:
- Both fitness and leisure events scattered in each of the 4 days (mixed option)
- Fitness events in the first 2 days + leisure events in the last 2 days (sequential option)

Please briefly explain why you made the above choice:
Appendix B: Summer Camp Design Task in Experiment 1.

Regardless of transportation costs and other feasibility issues, please use all, or most of the provided events from both components to create a 5-day Summer Camp that you think will be most attractive to and desirable for first-year university students (please be reminded that there is no right or wrong answer. Just design by your gut feeling):

Day 1: 

Day 2: 

Day 3: 

Day 4 

Day 5
Appendix C: Sequential French Festival Itinerary in Experiments 2 & 3.

Celebrating the richness and excitement of French Culture through the best of contemporary French Films and unforgettable Cirque-inspired acrobatic performances.

Don’t miss out on this unique French Experience!

7 November 2015

11:00am  Paris, je t’aime, a movie directed by Olivier Assayas & Frédéric Auburtin  
Through the neighborhoods of Paris, love is veiled, revealed, imitated, sucked dry, reinvented, and awakened.

3:00pm  Once upon a Forest, a movie directed by Luc Jacque  
Packed with fascinating facts from acclaimed botanist, Francis Hallé, and featuring a brilliant soundtrack, this cinematic feat offers a rare look into the wonders of the forest.

7:00pm  Léolo, a movie directed by Michael Brooke  
A young man is torn between two worlds – the squalid tenement that he inhabits with his dysfunctional family, and the glamour and glitz associated with his high rolling, but secret, weekend job.

8 November 2015

11:00am  Amaluna, an acrobatic extravaganza on a mysterious island!  
In the wake of a storm caused by tsunami Prospera, a group of young men become embroiled in an epic love story while trapped on a remote island.

3:00pm  KOOZA, an adrenaline rush of acrobatics in a zany kingdom!  
On a life changing journey, a young girl comes into contact with a panoply of comical characters: the King, the Trickster, and the Obnoxious Tourist and his Bad Dog.

7:00pm  OVO, an acrobatic immersion into the energetic world of insects!  
When a mysterious egg appears in their midst, the insects are awestruck with and intensely curious about this enigmatic object.
Appendix D: Alternating French Festival Itinerary in Experiments 2 & 3.

Celebrating the richness and excitement of French Culture through the best of contemporary French Films and unforgettable Cirque-inspired acrobatic performances.

Don’t miss out on this unique French Experience!

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Packed with fascinating facts from acclaimed botanist, Francis Hallé, and featuring a brilliant soundtrack, this cinematic feat offers a rare look into the wonders of the forest.

7:00pm *OVO*, an acrobatic immersion into the energetic world of insects!
When a mysterious egg appears in their midst, the insects are awestruck with and intensely curious about this enigmatic object.
Appendix E: High Task Involvement Manipulation in Experiment 4.

To largely keep tour information confidential, ONLY 50 students from each school will be randomly selected to play the role as a tour participant, to view and then provide their opinions about the itinerary.

“Congratulations, You Are One of 50 from Ivey!

So Your Opinion Matters! 😊”

Below, you will find the detailed itinerary of this “Sunday Funday Tour.”

Your responses have substantive consequences for the design and implementation of this tour. Please read through the itinerary very carefully, evaluate all aspects (type of events included, the organization of events, etc.) of the tour, as you are a real tour participant, and provide us your feedback! At the end of the study, we may also ask you to participate in a follow-up interview with a representative of Best Tours to understand exactly how you evaluated the tour.

Appendix F: Low Task Involvement Manipulation in Experiments 4.

Around 500-800 students will be randomly recruited to play the role as a tour participant, to view and then provide their opinions about the itinerary.

“You Are One of This Broad and Anonymous Group Sample.”

Below, you will find the detailed itinerary of this “Sunday Funday Tour.”

Please read through the tour itinerary and evaluate it according to your true feelings. However, you do not need to over-think or worry too much about the responses you made, as Best Tours is ONLY interested in overall response patterns across large, anonymous groups. Nothing will be connected to you personally.
Appendix G: Sequential Sunday Funday Tour Itinerary in Experiment 4.

Itinerary Details

Schedule:

- **Toronto Discovery: Graffiti Tour (9:30 AM – 10:30 AM)**

  Graffiti, public art that beautifies our streets or vandalism indicative of urban decay and crime? On this tour, you will stroll the back alleys and laneways of downtown Toronto with an expert local tour guide and learn about the history of graffiti, the different forms and styles, and the controversial place it occupies in our urban landscape. This part of the tour encourages debate and discussion — it’s more than just looking at painted walls.

- **Toronto Discovery: Fact or Fiction Ghost Tour (10:45 AM – 11:45 PM)**

  On this tour, we talk about ghosts and tell stories of haunted Toronto as we walk the streets, but we do more than that! We reveal what ghost investigators contend with when they look into reported hauntings, and reveal some of the natural phenomena that could be mistaken for the paranormal.

  The goal of this tour is to educate and entertain! We attempt to separate the folklore from the fact, the legends from the actual history.

  ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
  Break for Rest, Chat, and Coffee (till 12:15 PM)
  ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

- **Toronto Savouring: Street Food Tour (12:15 PM – 1:45 PM)**

  Explore the vibrancy of Toronto’s hippest neighbourhoods through diverse foodies! See where celebrity Chef’s have hung a shingle, and be regaled with local stories as we tempt your taste buds every step of the way. Tastings include sustainable seafood, incredible double-smoked bacon, 100% Canadian Cheese, Ontario wines, and a light treat at one of the area’s trendiest restaurants.

- **Toronto Savouring: Best Chocolate Tour (2:00 PM – 3:30 PM)**

  Toronto chocolatiers and bakers have an adventurous palate creating experimental delights on old classics. From classic truffles to salty caramels, from dark chocolate almond bark to the most exquisite chocolate macaron, you’ll be tasting the greatest chocolates Toronto has to offer.

  **When:** 9:30 AM – 3:30 PM

  **Where to meet:** This tour starts at the Coffee Time at 2688 Dundas St. West, Toronto, ON.

  **Where it ends:** This tour ends on Dundas St. West and Keele St. in the junction neighbourhood with plenty of options for further drinks, shopping or dinner after the tour!

  *Note: Transportation service will be provided between tours!*
Appendix H: Alternating Sunday Funday Tour Itinerary in Experiment 4.

Itinerary Details

Schedule:

- **Toronto Discovery: Graffiti Tour (9:30 AM – 10:30 AM)**

  Graffiti, public art that beautifies our streets or vandalism indicative of urban decay and crime? On this tour, you will stroll the back alleys and laneways of downtown Toronto with an expert local tour guide and learn about the history of graffiti, the different forms and styles, and the controversial place it occupies in our urban landscape. This part of the tour encourages debate and discussion—more than just looking at painted walls.

- **Toronto Savouring: Street Food Tour (10:45 AM – 12:15 PM)**

  Explore the vibrancy of Toronto’s hippest neighbourhoods through diverse foodies! See where celebrity Chefs have hung out a shingle, and be regaled with local stories as we tempt your taste buds every step of the way. Tastings include sustainable seafood, incredible double-smoked bacon, 100% Canadian Cheese, Ontario wines, and a light treat at one of the area’s trendiest restaurants.

  __Break for Rest, Chai, and Coffee (till 12:45 PM)___

- **Toronto Discovery: Fact or Fiction Ghost Tour (12:45 PM – 1:45 PM)**

  On this tour, we talk about ghosts and tell stories of haunted Toronto as we walk the streets, but we do more than that! We reveal what ghost investigators contend with when they look into reported hauntings, and reveal some of the natural phenomena that could be mistaken for the paranormal.

  The goal of this tour is to educate and entertain! We attempt to separate the folklore from the fact, the legends from the actual history.

- **Toronto Savouring: Best Chocolate Tour (2:00 PM – 3:30 PM)**

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  **Where it ends:** This tour ends on Dundas St. West and Keele St. in the junction neighbourhood with plenty of options for further drinks, shopping or dinner after the tour!

  *Note: Transportation service will be provided between tours!*
Appendix I: Sequential and Inference-Provided Educational Trip (EDU-first)

Itinerary in Experiment 5.

Singapore is one of the most modern cities in the world. It is remarkable how Singapore manages to conserve its natural resources despite rapid urbanization, and how it maintains social cohesion in such a multicultural society.

In the next three days, you will learn and experience those remarkable aspects of Singapore through various educational engagements and tour activities. The first two days are structured in a sequential manner in which the educational engagements will be on the first day and the tour activities on the second day. The final day is free time for you to explore the city!

August 20th: Workshop on Ecosystems & Multicultural Consortium

Workshop on Ecosystem

You will learn and develop your perceptions of "ecosystem" through a fun and informative workshop. In a group show format, this workshop will quiz you on your current understanding of this topic and will introduce you to different types of ecosystems and the concept of sustainable parks.

9:00 a.m. - 11:30 a.m. A guest speaker will then provide specific information on the river ecosystem and wetland. He will talk about how environmental initiatives have helped foster a safe fresh water supply for wildlife consumption and use in the river ecosystem, as well as the role that environmental policies play in maintaining the healthy functioning of water cycle in wetlands and waterways.

12:00 p.m. - 1:00 p.m. Break for lunch

Multicultural Consortium

Hear about Singapore's formation and evolution, from the vantage point of different historians from the city's top university. Learn about the unique ancient civilizations of the Malaysian, Indian, and Chinese cultures, not only through lectures but also interactive historical activities. You will be informed on the peaceful exchanges and bloody clashes that underpin Singapore's contemporary culture.

1:30 p.m. - 4:00 p.m. Dinner

6:30 p.m. Return to the Ship

August 21st: River Safari at the Sustainable Park & City Quarter Tours

River Safari at the Sustainable Park

Enjoy a relaxing river safari at and touring around Asia's first and only river-themed sustainable park. With over 5,000 aquatic and terrestrial animals representing 300 species, it is one of the world's largest repositories for unique and endemic river dwelling animals. These animals rely on the waterways and wetlands for their survival and well-being. You will travel along several replica of the most iconic rivers of the world, including the Amazon Flooded Forest and River Nile.

9:00 a.m. - 11:30 a.m. Break for lunch

City Quarter Tour

1:30 p.m. - 4:00 p.m. Sightsee and explore the different city quarters of Singapore at your own pace. With their historical buildings, interesting shop houses, and delicious food, the three multicultural city quarters - Little India, Chinatown, and Arab Street - will provide for a unique cultural immersion. This unique tour allows you to experience different parts of the world all within one short walk.

5:00 p.m. Dinner

6:30 p.m. Return to the Ship

August 22nd: Full Day Free Exploration

9:00 a.m. Depart from the ship

5:00 p.m. Return to the ship
Appendix J: Alternating Educational Trip (EDU-first) Itinerary in Experiment 5.

*Singapore is one of the most modern cities in the world. It is remarkable how Singapore manages to conserve its natural resources despite rapid urbanization, and how it maintains social cohesion in such a multicultural, multicultural society.*

In the next three days, you will learn and experience these remarkable aspects of Singapore through various educational engagements and touring activities. The first two days are structured in a staggered manner where you will have both educational engagements and touring activities on each day. The final day is free time for you to explore the city!

### August 20th: Workshop on Ecosystems & River Safari at the Sustainable Park

**Workshop on Ecosystem**

You will learn and develop your perceptions of “ecosystem” through a fun and informative workshop. In a game show format, this workshop will quiz you on your current understanding of this topic and will introduce you to different types of ecosystems and the concept of sustainable parks.

9:00 a.m. – 11:30 p.m. A guest speaker will then provide specific information on the river ecosystem and wetland. He will talk about how environmental initiatives have helped foster a safe fresh water supply for wildlife consumption and use in the river ecosystem, as well as the role that environmental policies play in maintaining the healthy functioning of water cycle in wetlands and waterways.

12:00 p.m. – 1:00 p.m. Break for lunch

**River Safari at the Sustainable Park**

Enjoy a relaxing river safari and tour around Asia’s first and only river-themed sustainable park. With over 5,000 aquatic and terrestrial animals representing 300 species, it is one of the world’s largest repositories for unique and exotic river-dwelling animals. These animals rely on the waterways and wetlands for their survival and wellbeing. You will travel along several replicas of the most iconic rivers of the world, including the Amazon Flooded Forest and River Nile.

5:00 p.m. Dinner

6:30 p.m. Return to the Ship

### August 21st: Multicultural Consortium & City Quarter Tours

**Multicultural Consortium**

Hear about Singapore’s formation and evolution, from the vantage point of different historians from the city’s top universities. Learn about the unique ancient civilizations of the Malaysian, Indian, and Chinese cultures, not only through lectures but also interactive theatrical activities. You will be informed on the peaceful exchanges and bloody clashes that underpin Singapore’s contemporary culture.

9:00 a.m. – 11:30 p.m.

12:00 p.m. – 1:00 p.m. Break for lunch

**City Quarter Tour**

Sightsee and explore the different city quarters of Singapore at your own pace. With their historical buildings, interesting shops houses, and delicious food, the three multicultural city quarters – Little India, Chinatown, and Arab Street – will provide for a unique cultural immersion. This unique tour allows you to experience different parts of the world all within one short walk.

5:00 p.m. Dinner

6:30 p.m. Return to the Ship

### August 22nd: Full Day Free Exploration

9:00 a.m. Depart from the ship

5:00 p.m. Return to the ship
Appendix K: Sequential & Dissimilar Haunt Adventure Schedule in Experiment 6.

Late Afternoon:
Zombie facial makeup demonstration and competition
Zombie body make up demonstration and competition

Evening:
1 km Zombie run
(Rest for 1.5 hours between two runs, snacks served)
1 km Zombie obstacle course

Appendix L: Sequential & Dissimilar Haunt Adventure Schedule in Experiment 6.

Late Afternoon:
Movie: Dawn of the Dead[1978], indoor screening
(Rest for 1 hour between two movies)
Movie: Shaun of the Dead[2004], outdoor screening

Evening:
1 km Zombie run
(Rest for 1.5 hours between two runs, snacks served)
1 km Zombie obstacle course
## Curriculum Vitae

### Name:
Juan Wang

### Post-secondary

<table>
<thead>
<tr>
<th>Education and Degrees:</th>
<th>Nanjing University of Science &amp; Technology Nanjing, China 1999-2003 BBA. University of Guelph Guelph, Ontario, Canada 2006-2008 MSc. Western University London, Ontario, Canada 2009-2016 Ph.D.</th>
</tr>
</thead>
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### Honours and Awards:

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### Related Work Experience

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Publications:
