ONLINE TRAVELER REVIEWS AS SOCIAL INFLUENCE: PRICE IS NO LONGER KING

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Price is a major influence on travel purchases; however, traveler reviews have also become a prevalent source of influence. Theories of social influence and cognitive dissonance provide insight into consumer decisions. This research investigated the effect of social influence in the form of traveler reviews and price on consumer decisions and postdecision dissonance. Student subjects evaluated two resorts for a Spring Break vacation in Cancun using a 2 (valence: positive or negative) × 2 (unanimity: unanimous or nonunanimous) × 3 (price: same, slightly lower, much lower) experimental design. The results reveal that social influence had a strong effect on both resort evaluations and postdecision dissonance. Nonunanimous reviews reduced the prevailing valence of reviews, but increased dissonance. The lack of results for price suggests that price may not be the predominant influence on decisions, as previously thought. This research provides new insight into the effect of traveler reviews on decisions by evaluating the unanimity of social influence, the effect of price differences, and the extent to which consumers engage in postdecision dissonance reduction.

KEYWORDS: *cognitive dissonance; social influence; traveler reviews; price; travel purchasing; experiment*

INTRODUCTION

Industry data and academic research suggest that traveler reviews are a powerful determinant of purchase decisions (e.g., Chipkin, 2014; Gretzel & Yoo, 2008; Mauri & Minazzi, 2013; Noone & McGuire, 2013, 2014) but we have yet to understand how and why these effects occur. The growing importance of review sites on travelers' decisions was identified as one of the two key findings of the Travel Weekly 2014 Consumer Trends survey (Chipkin, 2014). Furthermore, industry reports highlight the heavy usage of sites such as Trip Advisor, which attracts more than 280 million visitors to its website each month

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(Schoettle, 2014). The ubiquitous nature of online traveler reviews coupled with their ability to influence consumers' decisions creates a need to investigate the spanning impact of reviews. Such understanding is critical to predict, explain, and respond to consumer behavior in a rapidly changing environment.

Price is a well-established determinant of consumer behavior (Zeithaml, 1988) but the purchasing environment has become more complex with the advent of social media and the Internet. For many years, price was considered paramount, but nonprice influences such as online reviews are becoming more pervasive. Therefore, it is imperative to reevaluate our assumptions about the key drivers of consumer decisions in the information age.

Social influence and cognitive dissonance are the theoretical underpinnings applied in the current research to provide insight into the psychological influence of price and reviews on travel purchase decisions. The significance of these theories should not be understated as both can form behavioral predictions and provide insight into the consumer decision-making process. Moreover, hospitality purchases create the necessary conditions for these theories to operate. Theories of social influence (e.g., Asch, 1951; Crano, 2000) explain that people influence others' decisions. When taken as a whole, customer reviews represent a group opinion, which may influence travel decisions along with objective information such as price and product features. Moreover, reviews can vary in their degree of agreement, which reflects the unanimity principle that is instrumental in producing conformity to a group (Asch, 1956). In particular, the research indicates that conformity declines when influence is not unanimous (Asch, 1956). The only study to apply social influence principles to traveler reviews (Tanford & Montgomery, 2014) did not consider the critical element of unanimity.

The theory of cognitive dissonance (Festinger, 1957) posits that people experience conflicting thoughts when deciding between alternatives. They seek to reduce dissonance by engaging in various postdecision dissonance reduction strategies, including seeking out information to validate their decision or adjusting their attitudes to conform to their decision. The applicability of dissonance theory to consumer behavior (Cummings & Venkatesan, 1976) and service industries (Kim, 2011) has been recognized, but it has received limited attention in the hospitality literature. This omission exists despite the fact that hospitality purchases meet many of the requirements for dissonance to occur, that is, they are important, desirable, costly, highly involved, and often irrevocable (i.e., nonrefundable; Cummings & Venkatesan, 1976; Tanford & Montgomery, 2014). The only study to apply dissonance theory to traveler reviews (Tanford & Montgomery, 2014) did not include the price component or measure attitude change following the decision.

The balance between price and reviews is increasingly apparent, which has practical implications for hospitality operators seeking to understand the role of customer reviews and develop informed pricing and marketing strategies taking into account the psychological processes involved in the decision. The current

research contributes to this understanding by applying key tenets of two classic social psychological theories that have not previously been considered and investigating their role in the modern day context of online reviews and pricing.

The research has the following broad objectives:

1. Investigate the relative impact of price differences and reviews on travel purchase decisions.
2. Evaluate predictions derived from social influence theories under varying conditions of review valence and unanimity.
3. Determine the conditions under which consumers experience dissonance as a function of price and social influence.
4. Evaluate the extent to which consumers engage in dissonance reduction strategies following a purchase decision.

LITERATURE REVIEW

The Influence of Customer Reviews

Relevance of Customer Reviews. Many travelers seek out information from customer reviews found on websites such as TripAdvisor® and Expedia™. Research has demonstrated that as many as three quarters of travelers have consulted online customer reviews and comments as an information source when making travel decisions (Gretzel & Yoo, 2008; Mauri & Minazzi, 2013). Research continues to support the relevance of online traveler reviews in consumer behavior (Browning, So, & Sparks, 2013; Noone & McGuire, 2013, 2014; Sparks & Bradley, 2014; Tanford & Montgomery, 2014; Zhang, Wu, & Mattila, 2014). This study expands on how consumers use reviews as an information source and what influence online traveler reviews have on consumers' decision-making process. It is important to note that the term *customer reviews* is defined in this study as user-generated text pertaining to a travel product. This term does not refer to aggregate ratings associated with reviews.

Reviews as an Information Source. The prevalence of online customer reviews contributes to information search, which is an early influential stage in the decision-making process (Murray, 1991). Consumers seek out and use information as a way to reduce uncertainty and perceived risk involved with decision-making. Intangible services are higher in perceived risk, thereby creating distinctive information needs (Murray, 1991; Murray & Schlacter, 1990). Travelers typically collect information early in the decision-making process to assist in finalizing a destination choice, maximizing the perceived quality of travel experiences, and minimizing the risk and uncertainty of a decision (Cox, Burgess, Sellitto, & Buultjens, 2009; Jeng & Fesenmaier, 2002).

Customer reviews are a prominent source of nonprice information that can influence sales and consumers' prepurchase evaluations (e.g., Browning et al., 2013; Chevalier & Mayzlin, 2006; Noone & McGuire, 2014; Sparks & Browning, 2011; Ye, Law, & Gu, 2009). Customer reviews are an external information source that reduces consumers' cognitive load (Ye, Law, Gu, & Chen, 2011) by providing an easily accessible and easy-to-process source of information (Sparks & Browning, 2011). Some consumers may be cognitive misers who prefer to limit their cognitive effort in order to simplify the decision process (Fiske & Taylor, 1991). Numerous mixed reviews can increase cognitive load, and lead consumers to rely on peripheral cues in their decisions (Zhang et al., 2014). In this case, customer reviews may not be as useful as aggregate ratings. As an information source, customer reviews inform and recommend the product or service, positively or negatively, thereby influencing the decision-making process (Park & Lee, 2008).

Reviews as Influence. Interpersonal influence stemming from customers' opinion exchange has a powerful effect on purchase decisions (Pan, MacLaurin, & Crotts, 2007). Furthermore, recommendations from others are typically the most trusted and influential sources of information (Marketing Charts, 2013). Online customer reviews provide a source of information and recommendations by previous consumers in the form of electronic word-of-mouth (eWOM; e.g., Litvin, Goldsmith, & Pan, 2008; Park & Lee, 2008; Sparks & Browning, 2011; Ye et al., 2011). Similar to traditional WOM, eWOM has a powerful effect on decisions, but has the potential to reach many more consumers. Furthermore, eWOM simultaneously presents positive and negative online reviews, thus casting a pivotal influence on the hospitality industry, where intangible services are hard to evaluate before purchase (Cantallops & Salvi, 2014; Litvin et al., 2008).

The credibility and valence of reviews can determine the level of persuasive influence reviews have on hotel customers (Xie, Miao, Kuo, & Lee, 2011). Research has shown that customer reviews, whether positive or negative, affect overall quality and value judgments more than aggregate customer ratings (Noone & McGuire, 2014). An analysis of more than 60,000 reviews demonstrated that approximately three fourths of the travelers writing reviews would recommend the hotel to others (Stringam, Gerdes, & Vanleeuwen, 2010) indicating that traveler reviews tend to be mostly positive in valence. Peoples' responses to stimuli often exhibit an asymmetry between positive and negative events, such that negative events have a more powerful effect than positive (Taylor, 1991). Therefore, even if online reviews are mostly positive, a negative review may carry more weight. This is supported by research showing that negative reviews affect consumers' attributions of service quality to a greater extent than positive reviews (Browning et al., 2013). Moreover, consumers' perceptions of service quality can be decreased as the number of recent negative online reviews increases (Jin, Hu, & He, 2014; Lee, Park, & Han, 2008). Given the demonstrated importance of customer reviews

on travel decisions, they were used to manipulate influence in the current study. Both negative and positive review conditions were included since asymmetry may exist between the two.

The Influence of Price

Price has long been a basic strategic option for marketers (Curry & Riesz, 1988) and a significant influence on consumers' decisions. As a psychological component, price serves as an informational cue to the consumer (Curry & Reisz, 1988; Theysohn, Klein, Völckner, & Spann, 2013). However, price is only one extrinsic cue confronting consumers (Bojanic, 1996; Monroe, 1973). The emergence of other influencing factors, such as customer reviews, has increased the importance of understanding the role of price in customers' decision-making process.

Previous literature has documented a relationship between price and consumers' perceptions of quality and value (e.g., Chang & Wildt, 1994; Dodds, Monroe, & Grewal, 1991; Monroe, 1973; Zeithaml, 1988). Price can serve as an indicator of the amount of sacrifice needed to purchase a product—a concept often defined as "value" (Zeithaml, 1988). Consumers normally associate a decrease in price with a corresponding increase in value (Bojanic, 1996) thus, creating a negative relationship between the two (Dodds et al., 1991). Additionally, price can play an important role in the formation of consumers' quality perceptions whereby a higher price increases perceived quality (Chang & Wildt, 1994; Dodds et al., 1991; Lewis & Shoemaker, 1997; Ye, Li, Wang, & Law, 2014). Furthermore, research has demonstrated that perceptions of quality and value have a significant direct effect on consumers' purchase intentions (e.g., Cronin, Brady, & Hult, 2000; Tanford, Erdem, & Baloglu, 2011).

Factors That Undermine Price Influence. Consumer purchase decisions are jointly influenced by price and nonprice information (Chernev, 2003); however, when integrated with other nonprice information, price can have a reduced effect on consumers' decisions (Dodds et al., 1991). Forms of nonprice information can include a variety of sources spanning from user-generated content (e.g., Noone & McGuire, 2013, 2014) to nonprice advertising positioning (Kalra & Goodstein, 1998). Within the hospitality domain, nonprice factors including price transparency (e.g., Miao & Mattila, 2007; Tanford, Erdem, et al., 2011), customer loyalty (e.g., Tanford, Raab, & Kim, 2011), and user-generated content (e.g., Noone & McGuire, 2013, 2014) have all been demonstrated to decrease the influence of price.

In the presence of user-generated content, price has a decreased influence on consumers' quality assessments (Noone & McGuire, 2014) as well as their choices (Noone & McGuire, 2013). Consumers view price as a financial sacrifice that can negatively affect their value perceptions (Noone & McGuire, 2014). Moreover, travelers tend to balance review information with price, and reviews are overtaking price as the main influence on choice (Noone & McGuire, 2013).

Like Noone and McGuire (2013, 2014), this study investigates the influence of price on consumer decisions in the presence of nonprice information in the form of customer reviews. It expands on that research by including unanimity, which is a critical element in classic conformity theory (Asch, 1956), but has not been considered in research on customer reviews. This study involves a choice between price points, which reflects typical travel purchases. Choice is essential for dissonance to occur, and the theory makes specific predictions about post-purchase behaviors (described below). Whereas Noone and McGuire (2014) focused on prepurchase evaluations, this study includes postpurchase evaluations to test these predictions.

Social Influence

One of the most prevalent motivations of consumer behavior is the influence of others (Burnkrant & Cousineau, 1975). In today's digital society, social influence is rapidly transmitted through various channels, creating the potential to affect millions of customers. Theories of social psychology make predictions about the outcomes of social influence under varying conditions (Asch, 1956; Cialdini & Goldstein, 2004; Crano, 2000). It is imperative to reexamine social influence principles within the modern day context to understand the role of electronic influence on consumers' decision-making process. The current research examines three principles of social influence: conformity, compliance, and unanimity as they relate to travel purchase decisions.

Conformity Versus Compliance. Conformity refers to a shift in consumers' evaluations, behavioral intentions, or actual behavior because of being exposed to how others think or act (Lascu & Zinkhan, 1999). Simply stated, conformity refers to changing one's behavior to match the actions of others (Cialdini & Goldstein, 2004). Conformity can take the form of private acceptance, a term defined by Turner (1991) as "the influence that leads to private attitude change, but may or may not be directly expressed in overt words and deeds" (p. 4).

Compliance occurs when people publicly conform to the group, yet they keep their original opinions outside the group influence situation (Kelman, 1958). Turner (1991) defines compliance as "influence that changes overt behavior in the intended direction, but may or may not lead to private attitude change" (p. 4). In compliance, the individual's satisfaction comes from the reward of accepting influence instead of opposing it (Kelman, 1958). In regards to traveler reviews, potential consumers may go along with the recommendations from the reviews as a way to enhance their satisfaction, although their own attitudes may not change.

Unanimity. Unanimity or lack thereof affects the extent and type of social influence. For example, research found that conformity decreased by approximately

25% if just one person broke the unanimity (Turner, 1991). A lack of unanimity can create uncertainty regarding the credibility and accuracy of the influence. This can also take place if at least one person's opinion opposes the group thus creating a minority influence. When a minority influence is present, it exerts its influence on the majority, creating a lack of a unanimous majority (Moscovici, 1980). According to Cohen and Golden (1972), social influence acceptance tends to be greater under higher uniformity. Additionally, a unanimous majority may be more likely to produce public compliance, however it may not influence lasting opinion change (Kelman, 1958).

Hypothesis 1 addresses the effect of social influence on consumer decisions, where social influence is defined by two variables: unanimity and valence of customer reviews. Previous research has investigated valence (Browning et al., 2013; Noone & McGuire, 2014, Tanford & Montgomery, 2014) but not unanimity. In those studies the valence manipulation consisted of reviews that were primarily positive or negative, but contained one or more reviews of the opposite valence. Therefore, the critical element of unanimity has not been investigated. Social influence theories predict an interaction between unanimity and valence, such that nonunanimous reviews will reduce the predominant effects of valence:

> **Hypothesis 1:** The effect of customer reviews on travel purchase decisions will be reduced when the reviews are not unanimous in valence.

Hypothesis 2 addresses the effects of price and valence of customer reviews. Noone and McGuire (2013, 2014) found that the effect of price differences on perceptions and choices of hotel accommodations were weakened in the presence of negative reviews, suggesting that a lower price may not effectively counteract the impact of negative reviews. Likewise, the current research involves a comparison between resorts that differ in price by varying degrees in the presence of negative reviews. Existing literature on the effects of price and customer reviews leads to a predicted interaction between the two variables, such that whichever predominates will become the prevailing factor in decisions:

> **Hypothesis 2:** When price is the same or slightly lower than an alternative, the valence of reviews will drive travel purchase decisions.

Cognitive Dissonance

Cognitive dissonance theory (Festinger, 1957) states that people experience conflicting thoughts when deciding between alternatives. The relevance of dissonance theory to consumer behavior is apparent, since buying almost always involves a choice (Awa & Nwuche, 2010; Cummings & Venkatesan, 1976). The theory is especially applicable to travel purchase decisions, which meet most of

the conditions under which dissonance occurs. For example, travel entails high-involvement decisions that are costly and require a thorough search to reduce risk, all of which increase dissonance (Awa & Nwuche, 2010). Travel decisions are important, voluntary, and frequently irrevocable (i.e., nonrefundable), thereby creating conditions for dissonance (Aronson, 1969; Bawa & Kansal, 2008; Cummings & Venkatesan, 1976). Dissonance increases when choosing freely between similar or desirable alternatives, which characterize choice of travel options (Awa & Nwuche, 2010). Dissonance is greater for hedonic/experiential purchases, such as travel purchases, which reflect an individual's personal taste (Bawa & Kansal, 2008).

Research suggests that WOM, including traveler reviews, can produce dissonance when making travel decisions. A recent study investigated the effect of proenvironmental attitudes and customer reviews on choices between a sustainable and nonsustainable resort (Tanford & Montgomery, 2014). Subjects with strong proenvironmental attitudes experienced dissonance when making a nongreen choice that was influenced by negative reviews for the green alternative. In another study, hotel customers who had high involvement with a hotel and placed high reliance on WOM experienced dissonance when exposed to negative WOM about a poor service experience (Kim, 2011).

People enlist subconscious strategies in an effort to reduce the discomfort associated with dissonance. Dissonance reduction strategies include evaluating the chosen item more favorably and the nonselected item less favorably (Bawa & Kansal, 2008; Festinger, 1957; Gbadamosi, 2009). People experiencing dissonance seek out information to confirm the decision while avoiding disconfirming information (Festinger, 1957). Like social influence theories, early dissonance research generated several principles that predict the psychological occurrence and outcomes of dissonance in research subjects. The current research applies two of these principles: insufficient justification and selective exposure, to travel purchase decisions.

Insufficient Justification. The principle of insufficient justification indicates that when people make an unfavorable choice, they experience dissonance if they cannot provide an external reason to justify their behavior (Cooper & Fazio, 1984; Festinger & Carlsmith, 1959; Harmon-Jones & Mills, 1999). In the original Festinger and Carlsmith (1959) experiment, subjects who received $1 for expressing a counterattitudinal opinion changed their private opinion in the direction of the expressed attitude, whereas those who received $20 did not. The $20 incentive provided external justification for this action, whereas $1 was insufficient justification, so subjects reduced dissonance through opinion change. This principle translates directly into the effects of price on consumer decisions. For instance, if a consumer chooses a slightly lower priced product that has less desirable qualities than an alternative (such as negative reviews), then the consumer may experience dissonance due to this insufficient justification. If the price is substantially lower, it provides greater justification and

dissonance is less likely to occur. In Tanford and Montgomery's (2014) research, the predicted effect of insufficient justification did not occur when making a choice that was inconsistent with proenvironmental attitudes under minority and majority influence conditions. However, price is a more powerful influence on purchase decisions and more closely reflects insufficient justification as operationalized in the original experiment (Festinger & Carlsmith, 1959). Therefore, it provides a stronger test of this principle.

The concept of insufficient justification can be linked to the unanimity effect in social influence theory. In the original Festinger and Carlsmith (1959) experiment, one could argue that the small incentive produced internalization whereas the large incentive led to compliance (Kelman, 1958). Conversely, a nonunanimous majority may offer less justification for an unpopular or incorrect choice than a unanimous majority. In the original conformity studies, nonunanimity reduced conformity, but did not eliminate it (Asch, 1956). Although the two theories were not connected at the time, subjects who conformed to a nonunanimous majority likely experienced more dissonance than those for whom the majority was unanimous.

The current research integrates social influence and cognitive dissonance theories by investigating the level of dissonance experienced when choosing a resort under manipulated conditions of review unanimity and price. Previous research measuring dissonance (Tanford & Montgomery, 2014) did not include either of these variables. Both nonunanimous reviews and slightly lower price create a more ambiguous situation than unanimous reviews or a much lower price, leading to insufficient justification for choosing a negatively reviewed resort. There is less need for justification when choosing a positively reviewed resort, because the choice is consistent with the valence of reviews. Inconsistency is an exacerbating condition of dissonance (Festinger, 1957):

Hypothesis 3: Subjects will report more dissonance when reviews for the chosen travel product are not unanimous versus unanimous.

Hypothesis 4a: When choosing a negatively reviewed travel product, subjects will report more dissonance when it is priced the same or slightly lower versus much lower than a positively reviewed travel product.

Hypothesis 4b: When choosing a positively reviewed travel product, price will not affect dissonance ratings.

Postdecision Dissonance Reduction. Selective exposure is a general phenomenon whereby people are motivated to confirm their attitudes, beliefs, and behaviors through supporting information, while avoiding contradictory information (Hart et al., 2009). Dissonance theory posits that selective exposure is a way to reduce dissonance, and is therefore more likely to occur under dissonance-producing conditions (Festinger, 1957). Although the selective exposure phenomenon has been criticized over the years, a recent meta-analysis obtained

support for the effect particularly in defensive situations such as those involving personal values (Hart et al., 2009). Selective exposure is typically evaluated by allowing research participants to receive more information about an issue after reaching a decision.

In the context of travel purchase decisions, selective exposure can take the form of seeking out confirming information such as customer reviews on the Internet. In a study that investigated this issue, Tanford and Montgomery (2014) found that subjects experiencing dissonance requested more favorable reviews than those with low dissonance, but dissonance did not affect the desire to see unfavorable reviews. Subjects also requested more favorable reviews for the resort they chose versus the one they did not choose. However, the desire to seek out more information was not affected by choice as dissonance theory would predict. Before ruling out this particular dissonance-reduction strategy, this study reexamines the selective exposure principle under different dissonance-producing conditions.

Hypothesis 5a: Subjects experiencing high dissonance will request more favorable reviews for the travel product they selected than those experiencing low dissonance.

Hypothesis 5b: Subjects experiencing high dissonance will request more unfavorable reviews for the travel product they did not choose than those experiencing low dissonance.

Another way to reduce dissonance is to "spread the alternatives," that is, value the chosen item more and devalue the nonselected item (Aronson, 1969; Brehm, 1956). This outcome is more likely when the choice is difficult because the alternatives are similar, compared with a situation in which one alternative is clearly more desirable than the other (Brehm, 1956). The original demonstration of this effect occurred in a marketing context, and other researchers have subsequently recognized its relevance to buyer behavior (Awa & Nwuche, 2010; Bawa & Kansal, 2008; Cummings & Venkatesan, 1976; Schewe, 1973). Price can also play a role in dissonance reduction. A study of low-income buyers found that they enhanced the perceived quality of the lower priced products that they purchased and devalued more expensive brand name products (Gbadamosi, 2009).

In their investigation of resort choice decisions, Tanford and Montgomery (2014) found that people rated the chosen resort more favorably and the one they did not choose less favorably, but not as a function of dissonance. However, they did not measure ratings before the decision, so it is unknown whether polarization occurred. In addition, the ratings were made immediately following the decision, whereas dissonance may take time to manifest (Kim, 2011). The current study uses a paradigm similar to Tanford and Montgomery (2014), but includes pre- and postdecision ratings and allows time to elapse between the two. Dissonance theory predicts that once people make their choice, their evaluation should be in alignment with the choice. If they are experiencing dissonance,

dissonance reduction strategies may come into play. This leads to the following hypotheses:

Hypothesis 6: Subjects experiencing high dissonance increase their ratings for the travel product they chose and decrease their ratings for the travel product they did not choose.

METHOD

Subjects

The research used a convenience sample of 327 undergraduate students enrolled in a hospitality program at a university. Students made hypothetical travel decisions for Spring Break in Cancun, which is the number one Spring Break destination (Brown, 2012). When conducting applied research, there are two objectives: generalizing to real-world settings and theory testing (Calder, Phillips, & Tybout, 1981). The current research served the latter objective, in which the goal is to develop testable (i.e., falsifiable) hypotheses and generate results that cannot be attributed to extraneous sources. A homogenous sample is preferred that is "similar on dimensions likely to influence the variables of interest" (Calder et al., 1981, p. 200). Research indicates that college students are more homogeneous than nonstudent samples (Peterson, 2001). Moreover, they represent the target population of Spring Break travelers.

The sample contained all class ranks of which nearly half were first-year students (44.6%) and the remaining participants were sophomores (8%), juniors (13.5%), and seniors (33.9%). The sample was composed of 65.0% females and 35.0% males, with 65.1% of participants aged 21 years and younger. The sample contained a wide set of ethnicities with 38.2% Asian, 34.9% Caucasian, 15.4% Hispanic, 7.3% African American, and 4% other.

Design

Subjects completed a questionnaire containing descriptions of two resorts that varied by price and included customer reviews for which valence and unanimity were manipulated. All participants compared the same fictional resorts, the Grand Paradise and Sapphire, which were adapted from Expedia.com. The resorts were displayed side-by side, and each included a photo, a brief description, price per night, and five traveler reviews. The terms and conditions stated that purchases are nonrefundable to capture the dissonance requirement of irrevocability (Cummings & Venkatesan, 1976).

The design was a 2 (valence: positive, negative) × 2 (unanimity: unanimous, nonunanimous) × 3 (price: same, slightly lower, much lower) × 2 (resort: Grand Paradise or Sapphire) between-subjects experimental design. The "base resort" had unanimously positive reviews and standard set pricing of $225 per night, whereas the "alternative resort" had varying reviews and price by condition and

served as the target resort. In other words, manipulations were only performed on the alternative resort, which was displayed on the right. Which of the two resorts (Sapphire or Grand Paradise) served as the base and alternative was systematically manipulated. Resort served as a covariate to eliminate any potential bias due to the particular resort description.

Social influence was manipulated using traveler reviews from online travel agencies (OTA) sites (TripAdvisor and Expedia) for various Cancun hotels, which were edited for use in this study. Five reviews were presented for each resort. This number was dictated by the goal to mirror the classic social influence research, in which the influence source typically consisted of 4 to 6 group members (Tanford & Penrod, 1984). In the nonunanimous condition, four of the five reviews were in the influence direction. In the unanimous condition, five of the five reviews were in the influence direction. In the positive valence condition, the majority of reviews was favorable, and in the negative valence condition, the majority of reviews was unfavorable. Specifically, the positive valence condition was either unanimously positive (PPPPP) or nonunanimously positive (PPNPP). Likewise, the negative valence condition was either unanimously negative (NNNNN) or nonunanimously negative (NNPNN). Review length was similar between conditions.

Price was manipulated using three different pricing levels. In all conditions, the base resort was at the standard price of $225 per night. For the target (alternative) resort, the same price was $225, the slightly lower price was $214 (5% lower) per night, and the much lower price was $169 (25% lower) per night.

Materials and Pretesting

Materials were extensively pretested prior to distribution. The two resorts, Grand Paradise and Sapphire, were selected because they were rated the best choice for Spring Break and received the highest ratings on likelihood to choose for Spring Break vacation out of 12 resorts in the pretest. Each review was pretested for valence and strength. First, approximately 70 subjects (23-24 per group) evaluated a large number of reviews on favorability (1 = *extremely unfavorable*, 7 = *extremely favorable*) and effect on likelihood of Spring Break choice (1 = *much less likely to choose the resort*, 7 = *much more likely to choose the resort*). The list was narrowed to 8, and a second group of 44 subjects rated a combination of 12 new and original reviews to select seven more that were suitable. The final set consisted of reviews with the strongest positive or negative valence. Word counts were compared to ensure that the reviews for the two resorts were similar in length. Table 1 displays an example of one positive and one negative review, which also served as the opposite-valence review in the nonunanimous conditions.

Pretesting was conducted to determine the appropriate base price, as well as the large price difference at which most people would choose the alternative resort. Previous pretesting suggested that a 5% discount led to less than 25% of

Table 1
Customer Review Examples

Positive review
"We just got back yesterday and had the time of our lives! The resort was amazing, the staff were so friendly, and the food/drinks unlimited! We got a great deal on our package and our time was better than we could have ever expected. We cannot wait to go back!"
Negative review
"Let me give you the real "5 Star review"! If you like old, dirty and run down hotels-5 stars! If you like hard beds and bring your own air mattress-5 stars! If you like a cesspool for a swimming pool-5 stars! If you like run-down furniture from the dump-5 stars!"

subjects switching to a less preferred hotel, so 5% was used to calculate the slightly lower price. For the current study, price pretesting consisted of showing four pairs of Cancun resorts, each with a resort description and a corresponding daily rate. Subjects ($n = 42$) rated the likelihood to choose each resort and chose one of the resorts for each pair. Each resort pair had two different prices based on varying levels of high, medium, and low pricing categories, all of which were representative of nightly rates during Spring Break sold on Expedia.com. The discount rate of 25% was established as the level at which the large majority, more than 75%, of people chose the alternative resort. Several base prices were pretested and $225 was selected because it was high enough for the discount to be effective.

Instrument

The packet began with two resort descriptions, including photos of each resort, and corresponding reviews. Following both scenarios, a disagree–agree Likert-type format was used to rate each resort on four attributes: "This resort is appealing to me," "This resort offers good value for the money," "This resort is a good choice for Spring Break," and "Based on the quality, the price charged is fair." Participants indicated likelihood to choose each resort in response to the question "How likely are you to choose each resort for your Spring Break vacation?" followed by a numerical rating scale for each resort from 1 (*extremely unlikely*) to 7 (*extremely likely*). Participants made a dichotomous choice for one of the resorts.

Postdecision dissonance was measured using the eight-item Dissonance Scale developed and validated by Köller and Salzberger (2007), which is shown in Table 2. The scale uses a 7-point disagree–agree format, and had a Cronbach's alpha value of .926 in the current study, indicating high reliability. Dissonance reduction was measured in two ways. To measure selective exposure, participants were given the option to request additional reviews for both resorts that would be given to them at a later date. Participants could select between 0 and 5

Table 2
The Cognitive Dissonance Scale

Perhaps I should have spent the money on something else.
I am not quite sure about my decision.
I am annoyed that I have to do without other things now.
When thinking of the decision, I feel uncomfortable.
I don't know whether the booking was right.
Now, after the booking, I feel uneasy.
I do not know whether this was right choice.
I would like to undo my decision.

Source: Köller and Salzburger (2007).

favorable and unfavorable reviews for each resort. The additional reviews were not actually provided. To measure polarization of ratings, after sufficient time had passed since the first part of the survey (approximately 1 hour), participants reevaluated both resorts on the same Likert-type scales as before on a follow-up questionnaire. Subjects were clearly instructed to rate the resorts according to how they currently perceived each resort, regardless of their previous ratings.

Procedure

Materials were distributed in several classes during the latter portion of the 2013 Fall semester, approximately 4 months prior to Spring Break. Within each class, students participated in all the experimental conditions. Random assignment was implemented by prearranging the packets in random order. Between 26 and 30 subjects participated in each of the 12 experimental conditions. Packets included a numbered questionnaire, as well as a corresponding follow-up questionnaire in a sealed envelope. Subjects were directed not to open the sealed envelope until instructed. This procedure was used so that the postdecision resort ratings could be matched to the initial ratings for coding. The first questionnaire was collected immediately on completion, so subjects could not compare their ratings.

RESULTS

A summary of support for hypotheses is provided in Table 3. The predecision analyses focus on ratings of the alternative resort only, which was subjected to the experimental manipulations, although respondents also rated the base resort to avoid demand characteristics. Evaluations of the resort were analyzed using a 2 (valence) × 2 (unanimity) × 3 (price) multivariate analysis of covariance (MANCOVA) on the four evaluation scales, with resort as a covariate. The analysis revealed significant multivariate main effects for price (Wilks's $\Lambda = .948$, $F_{8, 622} = 2.12$, $p = .032$) and valence (Wilks's $\Lambda = .560$, $F_{4, 311} = 61.10$, $p = .000$). The mean ratings for univariate tests are presented in Table 4. The results

Table 3
Summary of Hypothesis Support

Hypothesis	Predicted Effect	DV/Condition	Support
1	Valence × Unanimity	Likelihood/Resort ratings	Y
2	Price × Valence		N
3	Choice × Unanimity	Dissonance	Y
4	Price × Valence × Choice		
4a		Dissonance/negative	Partial
4b		Dissonance/positive	Y
5	Choice × Dissonance		
5a		Selective exposure/negative	N
5b		Selective exposure/positive	N
6	Polarization of ratings		Partial

Table 4
Main Effects on Resort Ratings

	Price				
	Same	Slightly Lower	Much Lower		
	$n = 107$	$n = 102$	$n = 100$	$F_{(2, 314)}$	Effect Size
Appealing	4.09 (2.30)	4.23 (2.32)	4.37 (2.08)	0.70	n/a
Good value	3.93 (2.23)	4.27 (2.20)	4.49 (2.10)	2.93*	.018
Good Spring Break choice	4.06 (2.24)	4.21 (2.27)	4.40 (2.12)	1.11	n/a
Price fair based on quality	3.74_a (2.22)	4.05_{ab} (2.22)	4.48_b (2.07)	5.48**	.034
	Social Influence (Reviews)				
	Positive	Negative			
	$n = 158$	$n = 151$		$F_{(1, 314)}$	Effect Size
Appealing	5.51 (1.63)	2.95 (2.01)		161.18***	.339
Good value	5.55 (1.49)	2.91 (1.97)		191.30***	.379
Good Spring Break choice	5.60 (1.51)	2.84 (1.93)		210.51***	.401
Price fair based on quality	5.48 (1.46)	2.70 (1.90)		229.11***	.422

Means without matching subscripts are significantly different at $p \leq .05$. Standard deviations in parentheses.
*$p \leq .05$. **$p \leq .01$. ***$p \leq .001$.

demonstrate that the manipulations of price and valence worked as intended. Perceptions of value and price fairness increased as price decreased, whereas nonprice evaluations were not affected by price. Effect size measures (partial eta^2) indicate that the effects of price on ratings were small in magnitude. Guidelines established by Cohen (1988) specify that eta-square values of .01, .06, and .14 represent small, medium, and large effects. Using this standard, the effects of valence on ratings were large. Positive reviews produced higher ratings than negative reviews on all measures. The price and valence main effects show that both manipulations were effective, but the valence manipulation was much stronger. The multivariate effect of the covariate was significant ($F_{4, 311}$ = 2.90, p = .022); however, follow-up tests did not reveal significant effects for the covariate on any of the individual resort ratings.

Box's M test was conducted to evaluate the assumption of equal covariances. The result was significant at $p < .001$, $M = 301.97$, $F = 2.58$, indicating inequality of covariances across groups. Examination of the distribution of responses for individual items revealed some deviation from normality, with slight negative skewness (z scores from −2.13 to −2.36) on all ratings except price fairness. The Box's M test is very sensitive to the number of groups, "even in simple research designs (four to six groups)" (Hair, Black, Babin, & Anderson, 2010, p. 365) and researchers are advised to use very conservative significance levels. Moreover, violations of normality and equal covariance assumptions have "minimal impact if groups are of approximately equal size (i.e., largest group size / smallest group size <1.5)" (Hair et al., 2010; p. 365). In this study, group sizes ranged from 25 to 29, so the formula produces a value of 1.16. Therefore, the violations are not problematic.

Valence × Unanimity Interactions (Hypothesis 1)

There was a significant interaction between valence and unanimity on three of the four resort ratings, although the multivariate effect was only marginally significant (Wilks's $\Lambda = .973$, $F_{4, 311} = 2.12$, $p = .079$). The means for these interactions are shown in Table 5. Follow-up tests indicated that when reviews were positive, there was no significant effect for unanimity. When reviews were negative, the effect of unanimity was significant for appealing ($F_{1, 159} = 4.75$, $p = .031$) and Spring Break choice ($F = 5.50$, $p = .020$), and marginally significant for good value ($F = 3.07$, $p = .082$). The resort was rated more favorably when the negative reviews were not unanimous. However, the effect sizes were small (.019 to .034). The findings support Hypothesis 1.

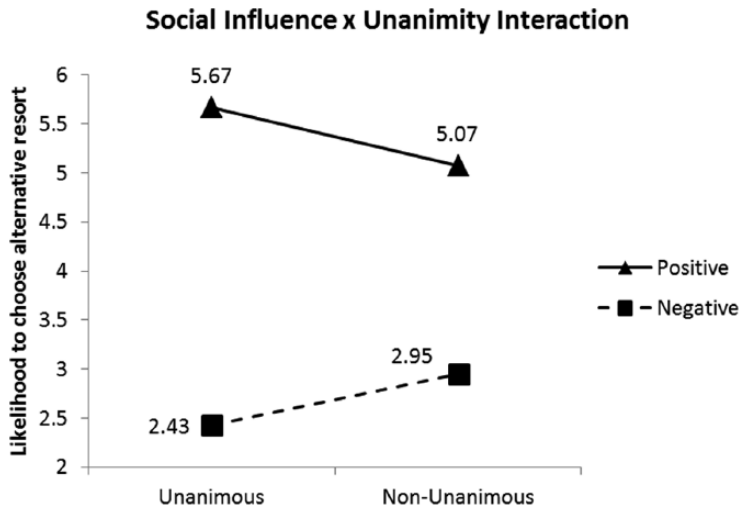
There was a significant interaction between valence and unanimity on rated likelihood to choose the alternative resort ($F_{1, 314}$=11.31, $p = .001$). Follow-up tests indicated that there was a significant effect of unanimity in the positive valence condition ($F_{2, 165} = 8.74$, $p = .004$, $\eta^2 = .050$), such that likelihood was lower when positive reviews were nonunanimous ($M = 5.67$, $SD = 1.27$) versus

Table 5
Social Influence × Unanimity Interaction on Ratings

	Social Influence (Reviews)					
	Positive		Negative			
	Unanimous	Nonunanimous	Unanimous	Nonunanimous		
	n = 83	*n* = 80	*n* = 85	*n* = 79	$F_{(1, 314)}$	Effect Size
Appealing	5.61 (1.70)	5.42 (1.56)	2.60 (1.77)	3.30 (2.19)	4.94*	.015
Good value	5.75 (1.53)	5.36 (1.44)	2.62 (1.84)	3.19 (2.07)	6.23*	.019
Good choice	5.67 (1.49)	5.53 (1.53)	2.50 (1.86)	3.21 (1.94)	5.22*	.016

*$p \leq .05$.

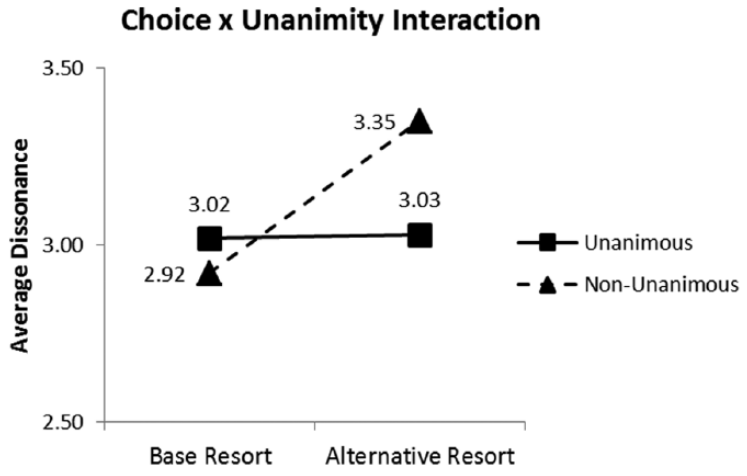
Figure 1
Social Influence × Unanimity Interaction on Likelihood to Choose Alternative Resort



Note: Dashed line indicates a significant difference (p = .004), solid line is marginally significant (p = .06). Partial η^2 for the interaction = .035.

unanimous (M = 5.07, SD = 1.37). There was a marginally significant effect of unanimity in the negative valence condition ($F_{1, 226}$ = 3.58, p = .06, η^2 = .016), for which likelihood was higher when the negative reviews were nonunanimous (M = 2.96, SD = 1.73) versus unanimous (M = 2.43, SD = 1.68; see Figure 1). This finding again supports Hypothesis 1.

Figure 2
Choice × Unanimity Interaction on Dissonance



Note: Dashed line indicates near-significant difference (p = .057), solid line is not significant. Partial η^2 for the interaction = .014.

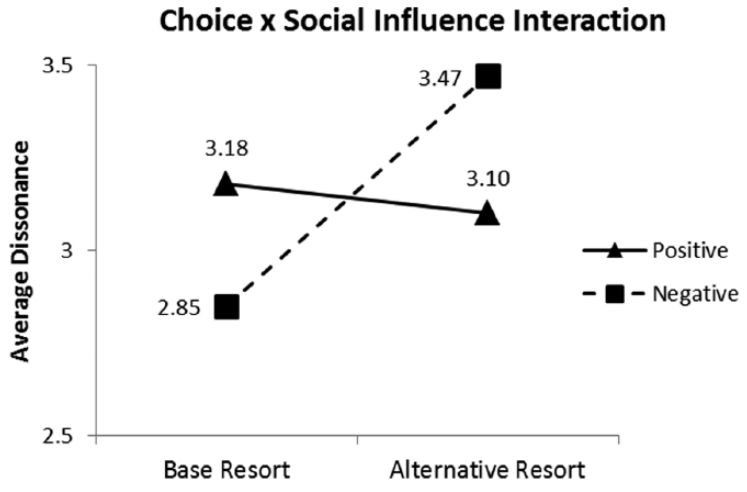
Valence × Price Interactions (Hypothesis 2)

No significant interaction was found between price and valence on the four resort ratings of the alternative resort or on the rated likelihood to choose the alternative resort. Moreover, the three-way interaction between price, valence, and unanimity was not significant in either analysis. Therefore, Hypothesis 2 was not supported.

Dissonance Ratings (Hypotheses 3 and 4)

The research used average dissonance as the dependent variable, which was each subject's mean score on the eight-item dissonance scale. Overall, dissonance was relatively low, with means below the midpoint of 4 on the 7-point scale. Since dissonance was expected to be influenced by choice (base or alternative resort), choice was included as an independent variable in a 2 (choice) × 2 (valence) × 2 (unanimity) × 3 (price) ANCOVA on the average dissonance score. A significant interaction was found between choice and unanimity ($F_{1, 302}$ = 4.26, p = .040). Follow-up tests indicated that there was a marginally significant effect of choice in the nonunanimous condition (p = .063), whereas the effect of choice in the unanimous condition was not significant. Subjects in the nonunanimous condition who chose the alternative resort felt more dissonance (M = 3.35, SD = 1.40) than those who chose the base resort (M = 2.85, SD = 1.22; see Figure 2). This finding supports Hypothesis 3.

Figure 3
Choice × Social Influence Interaction on Dissonance



Note: Dashed line indicates marginal significance (p = .063), solid line is not significant. Partial η^2 for the interaction = .013.

There was a significant interaction between choice and valence on average dissonance ($F_{1, 302} = 3.96$, $p = .047$). Simple effects tests indicated a near-significant effect of choice in the negative valence condition ($p = .057$), whereas the effect of choice was not significant in the positive valence condition. Means for this interaction are shown in Figure 3. Subjects experienced more dissonance when reviews were negative and they chose the alternative resort ($M = 3.47$, $SD = 1.22$) versus the base resort ($M = 2.85$, $SD = 1.22$). Therefore, Hypothesis 4a was partially supported, in that choosing the alternative resort produced dissonance when the review valence was negative. Inconsistent with Hypothesis 4a, dissonance did not increase when the price was the same or slightly lower. When subjects chose the alternative resort with positive review valence, the manipulations did not affect dissonance, supporting Hypothesis 4b.

Selective Exposure (Hypothesis 5)

It was hypothesized that subjects experiencing dissonance would want to see more positive reviews for the resort they chose and more negative reviews for the resort they did not choose, while subjects lower in dissonance would not engage in selective exposure. Thus, choice and dissonance were the relevant independent variables, and the hypothesis predicts an interaction between the two. Subjects were assigned to high or low dissonance groups using a median split on average dissonance ratings. The number of additional reviews requested was analyzed in four 2 (choice) × 2 (dissonance) ANOVAs, one for each review category

Table 6
Main Effects of Resort Choice on Change in Resort Ratings of Base Resort

		Choice			
		Base Resort	Alternative Resort		
		n = 229	*n* = 98	$F_{(1, 326)}$	Effect Size
Good value	Pre	5.93	4.96	0.01	
	Post	5.59	4.98		
	Difference	–0.33	0.02	4.12*	.013
	SD	(1.41)	(1.43)		
Price fair	Pre	5.89	4.95	0.66	
	Post	5.59	4.99		
	Difference	–0.31	0.04	3.82*	.012
	SD	(1.49)	(1.42)		
		Low	High		
Dissonance		*n* = 168	*n* = 159		
Good choice	Pre	5.88	5.66		
	Post	5.90	5.30		
	Difference	.077	–0.38	6.91**	.021
	SD	(1.45)	(1.42)		

*$p \leq .05$. **$p \leq .01$.

(positive-base, positive-alternative, negative-base, negative-alternative). For both resorts, there were no significant effect of choice or dissonance on either positive or negative reviews. Therefore, Hypothesis 5 was not supported.

Polarization of Evaluations (Hypothesis 6)

As part of dissonance reduction, subjects may increase their ratings of the resort they chose and devalue their ratings of the resort they did not choose. Therefore, difference scores between the first (predecision) and second (postdecision) evaluation of each resort were used to measure polarization of ratings. The four resort ratings "appealing, value, good Spring Break choice and price fair" were analyzed in separate 2 (choice) × 2 (dissonance) MANCOVAs for each resort. The covariate of resort was not significant.

There were significant multivariate effects for choice on change in resort ratings for the base resort (Wilks's $\Lambda = .967$, $F_{4, 318} = 2.68$, $p = .032$) and for the alternative resort (Wilks's $\Lambda = .930$, $F_{4, 319} = 5.96$, $p = .000$). Results of the significant univariate effects are displayed in Table 6 for the base resort and Table 7 for the alternative resort. For the base resort, the ratings of "good value" and

Table 7
Main Effects of Resort Choice on Change in Resort Ratings of Alternative Resort

		Choice			
		Base Resort	Alternative Resort	$F_{(1, 322)}$	Effect Size
Appealing	Pre	3.65	5.72		
	Post	4.79	5.98		
	Difference	1.15	0.26	12.45***	.037
	SD	(2.18)	(1.80)		
Good value	Pre	3.62	5.78		
	Post	4.62	5.68		
	Difference	1.00	–0.10	23.05***	.067
	SD	(2.02)	(1.60)		
Good choice	Pre	3.61	5.80		
	Post	4.64	5.83		
	Difference	1.03	0.03	17.91***	.053
	SD	(2.09)	(1.61)		
Price fair	Pre	3.50	5.62		
	Post	4.43	5.60		
	Difference	0.93	–0.02	17.65***	.052
	SD	(1.98)	(1.65)		

***$p \leq .001$.

"price fair" decreased. This finding indicates that subjects who chose the base resort reduced their favorability of the base resort, which is not consistent with the hypothesis. However, this effect only occurred on price-related ratings. There was a single significant effect of dissonance on change in ratings of the base resort for "good Spring Break choice." Subjects experiencing high dissonance rated the base resort less favorably over time, while those with low dissonance did not change their evaluations noticeably. This finding provides partial support for Hypothesis 6, since dissonance produced polarization of evaluations, although not as a function of choice.

For the alternative resort, all four ratings increased among subjects who chose the base resort. This is contrary to Hypothesis 6, since the change is opposite to the prediction that subjects would evaluate the resort they did not choose less favorably. It appears that instead of dissonance, subjects who chose the base resort experienced "buyer's remorse" and increased their evaluations of the resort they did not choose. There was a marginally significant effect of dissonance on the rating of "price fair" ($F_{1, 322} = 3.20$, $p = .075$) such that subjects experiencing low dissonance increased their perceived fairness (change = 0.69) to a greater extent than those experiencing high dissonance (change = 0.37). A possible explanation is that subjects did not reduce their dissonance effectively and were therefore less satisfied with the price they paid.

Diagnostic tests were conducted to evaluate the assumptions of equal variances/covariances and normality for the change score analyses. The MANOVA for Resort 1 revealed a significant Box's M statistic of 97.09, $F = 3.15$, $p < .001$, indicating nonequivalence of covariance. However, Levene's test for equality of variances was nonsignificant except for the "spring break choice" difference score, which was significant at $p = .03$. In terms of normality, the appealing rating exhibited positive skewness (z score = 3.25) while the remaining measures showed no evidence of skewness. Since the effects of choice occurred on other variables (value, fairness) and the effect of dissonance on spring break choice was highly significant ($p = .008$) these assumption violations do not alter any of the findings.

For the alternative resort, Box's M was significant with a value of 94.74, $F = 3.07$, $p < .001$. Levene's test was also significant, suggesting that the variance was not equivalent across groups. Ratings for the alternative resort were positively skewed, that is, there were more changes in the positive direction. This was to be expected based on the hypotheses. Because choice was a variable in the postdecision analysis, the sample sizes were no longer equal. A log transformation was applied as recommended for positively skewed data (Hair et al., 2010) but unequal variances remained. In that case, researchers are advised to adjust significance levels for interpreting effects (Hair et al., 2010). Significance levels should be decreased if variance is higher in larger groups and increased if variance is higher in smaller groups, which was the case in this study. Since the results were already significant at $p < .001$, setting a higher significance threshold (e.g., .10 instead of .05) would not change any of the findings. There were not any marginal results that would become significant through this process.

DISCUSSION

The results demonstrate that social influence, in the form of traveler reviews, has a strong effect on consumers' evaluations and choices. The lack of results for price suggests that it may not be as predominant an influence on decisions as it has been historically. This finding supports previous literature that demonstrates the importance of nonprice information (i.e., reviews) in travel decisions (Browning et al., 2013; Noone & McGuire, 2013, 2014). It extends our knowledge by investigating the underlying psychological processes that drive the decision, that is, the unanimity of social influence, as well as the resulting outcome, that is, cognitive dissonance. Why was the effect of reviews so powerful, when price is typically a major determinant of purchase decisions? One possible explanation is the salience of the information, since the reviews were strong positive or negative narratives, whereas prices were simply listed. Research on salience effects indicates that people are more strongly influenced by vivid information that captures their attention (Taylor & Fiske, 1978). This possibility is supported by Noone and McGuire (2014), who obtained a larger effect for review descriptions versus aggregate ratings on perceptions of hotel value and quality.

Unanimity is a key tenet of social influence that has not been investigated in prior research on the effects of reviews. The predicted effect of unanimity occurred, but only when reviews were negative. Subjects rated the resort more favorably when negative reviews were not unanimous, but were equally favorable whether positive reviews were unanimous or not. In the original conformity research (Asch, 1956), a nonunanimous majority significantly reduced the tendency to make an unpopular (i.e., incorrect) choice. It may be that breaking unanimity is necessary to defuse the effect of negative reviews, but not sufficient to undermine positive reviews. This is in line with research suggesting that there is asymmetry between positive and negative information (Noone & McGuire, 2014; Taylor, 1991).

Following the decision, greater dissonance was experienced when reviews for the chosen resort were negative or not unanimous. Both these situations produce conditions of insufficient justification (Festinger & Carlsmith, 1959), suggesting that subjects choosing a negatively or nonunanimously rated resort lacked a compelling reason for doing so and experienced discomfort as a result. However, dissonance was not experienced in relation to price and choice. This could be due to the lack of effect for price in this study, or to the fact that overall dissonance was fairly low even in the higher dissonance conditions. This is the second study to obtain lack of support for insufficient justification, providing more compelling evidence that this principle may not operate for travel purchase decisions.

The study did not obtain support for the selective exposure phenomenon, in that subjects did not seek out additional information under dissonance-producing conditions. Previous research obtained limited support for selective exposure as a function of dissonance when choosing between a sustainable and nonsustainable resort (Tanford & Montgomery, 2014). The lack of support could be because of the research setting, since the study was contained within a finite class period. Alternatively, it could be that selective exposure operates differently or not at all in the online consumer environment. People have access to a plethora of information online, reducing the need to seek out information actively. It is also difficult to filter the information, since both positive and negative reviews are typically intermingled, making selective exposure less feasible.

Theoretical Implications

Of the two theories investigated, the study obtained stronger support for social influence processes than cognitive dissonance. Although dissonance occurred under certain conditions, respondents did not engage in dissonance reduction strategies predicted by the theory. In particular, they enhanced the undesirable qualities of the result they chose and the desirable qualities of the one they did not choose. This may be because the conflicting information still existed, that is, the base resort was still priced the same or higher, and the

alternative resort was still reviewed the same or less favorably. Since dissonance reduction strategies serve to reduce conflicting cognitions, it is possible they were not used in the face of objective evidence to the contrary. Alternatively, sufficient time may not have elapsed between the decision and subsequent rating, despite a delay. The study was constrained to one class period, as it would not have been feasible to match up respondents while maintaining anonymity with a subsequent administration. Travelers may even engage in dissonance reduction during the travel experience. For example, they may justify paying a higher price by perceiving that the amenities are more desirable, or increase their perceptions of an unfavorably reviewed resort by enhancing positive and discounting negative aspects of their visit. This is the first study to measure polarization before and after the decision; therefore, future research is needed before this phenomenon can be ruled out.

The principle of unanimity was one of the most powerful influences in this research. This represents a major contribution of this research, since none of the prior studies on reviews has manipulated unanimity. Like Asch's (1956) research, a single dissenting opinion significantly reduced the effect of a majority espousing the opposite choice. This finding suggests that minority influence (Moscovici, 1980) may be an important factor in the online environment. In the nonunanimous conditions, the opposing viewpoint represented a minority. The Internet provides the opportunity for all opinions to be aired, allowing a persuasive minority to offset the majority sentiment.

Social influence is a broad theoretical perspective that encompasses the myriad ways people can be influenced by others (Crano, 2000; Turner, 1991). This study demonstrated that the principle of unanimity established in the classic literature is relevant to the modern online environment. However, the powerful effect of customer reviews suggests that a new type of social influence is taking form. Unlike face-to-face influence, reviewers are unfamiliar to the travelers they are influencing. Whereas traditional social influence has been associated with factors such as source credibility (Cialdini & Goldstein, 2004), today's social influence takes form through content provided by virtually unknown reviewers. Moreover, motivations for conformity, such as a desire for acceptance or belonging (Kelman, 1958) are very different when manifested through online traveler forums and communities. Although classic theories are still applicable, they should be modified and extended to explain influence in the social media environment.

Practical Implications

Social influence in the form of traveler reviews was the prevailing influence on subjects prepurchase evaluations and decisions. This brings about several practical implications for hospitality operators. Online reviews influence consumers; however, merely one contradictory review can reduce the strength of the influence by breaking the harmony of prevalent reviews. Moreover, dissonance increases when reviews are not unanimous, which could affect consumer

perceptions beyond the purchase decision if they still have conflicting cognitions. It could affect their experience during the trip, causing them to notice events that contradict the prevailing sentiment of reviews. Hospitality companies could encourage and perhaps incentivize customer testimonials in an effort to counteract negative reviews with the same type of nonprice information but in a positive direction. Encouraging customer reviews could include having employees take a proactive approach in urging guests to leave a review on an OTA site, having some form of in-room information about the importance of sharing opinions with others via an OTA site, or rewarding customers for posting reviews with loyalty membership points.

Another important implication is that although price is important, it does not have the same influence in the presence of customer reviews. Operators should be cognizant that simply reducing price is not an effective strategy for hotels with unanimously negative reviews. If expected service levels are not achieved during a traveler's stay and this is communicated to other travelers via online reviews, a low price will not be enough to win over consumers. Price reduction strategies could have a negative impact on profitability without achieving their desired goal of increasing demand.

Given that reviews are a vital part of consumers' decision-making, reviews could be considered as part of a hotel's revenue management strategies. Traditionally, revenue management departments adjust pricing levels in response to expected occupancy levels, competitive pricing, and marketing objectives, yet fail to take into account the impact that online traveler reviews have on the number of bookings. Specifically, revenue managers could include the percentage of recent reviews that are positive or negative in their rolling occupancy forecasts. Although the findings suggest that price reductions may not be effective, operators could remove rate fences such as minimum stay requirements, closed to arrivals, and nonrefundable rates. These could entice booking and have the added benefit of reducing dissonance that results from irrevocable decisions. Incorporating reviews into revenue management practices can provide an improved approach to achieving optimal pricing strategies.

Although reviews overshadowed price in the current study, this could be because of salience effects (Taylor & Fiske, 1978). By making price/discount information more vivid, the effects of reviews may be diminished. If a property has similar offerings to a competitor at a lower price, this should be featured prominently on the website and through advertising. Operators can feature highly favorable reviews in their advertising, making them salient to offset negative reviews posted on TripAdvisor and other public sites. Operators should take steps to reduce "buyer's remorse," which seemed to occur rather than dissonance reduction. For example, the common policy of nonrefundable pricing may increase buyer's remorse because there is no feasible way to reduce dissonance if the travel experience is unsatisfactory. The dissonance phenomenon could have a spiraling effect if customers return from their trip and post their own negative reviews.

Limitations and Future Research

A convenience sample of students was used, which does not generalize to a larger population. However, the sample represents the target population of Spring Break travelers. Moreover, this sample represents the Millennial generation, which appear to be more influenced by the opinions of others than previous generations (Marketing Charts, 2014). The research used two resorts that pretesting revealed were the most suitable for students' Spring Break vacations. Although the findings held up for both resorts, they do not generalize to other properties or destinations. In addition, travelers have many more choices in the actual purchasing situation. This experimental study focused on demonstrating a cause and effect through maintaining internal validity, rendering external validity less critical (Campbell & Stanley, 1973). Future research can extend the findings to different target populations, destinations, and hospitality segments as well as more complex decision situations.

Subjects made a hypothetical choice, not an actual purchase; therefore, the results may not reflect true purchase intention. This is true for much of the research on the effects of traveler reviews (Browning et al., 2013; Noone & McGuire, 2014; Tanford & Montgomery, 2014). Data were collected in a classroom setting with a written questionnaire, whereas reviews and travel purchases are typically done online. However, the stimuli contained realistic product descriptions and reviews adapted from online sources. The resort choice paradigm has proven successful in experimental studies on the effects of traveler reviews (Tanford & Montgomery, 2014) and pricing strategies (Tanford, Erdem, et al., 2011). By using a similar methodology to the other study that applied the same two theories (Tanford & Montgomery, 2014), the reliability of findings across the two investigations is enhanced. The setting was chosen for pragmatic reasons to establish the effects of the independent variables with sufficient sample sizes and achieve experimental control. By collecting data in the classroom it was possible to obtain close to 100% participation, achieve true random assignment, and control the delayed postdecision measures. Future research should extend the methodology to online experiments that simulate the booking experience with travel consumers. Research that examines consumer choices in the live booking environment could be conducted to determine the effects of price, reviews, and other factors on actual decisions.

Although carefully pretested, the price manipulations in this study could have been more extreme to provide a stronger manipulation. Future research could investigate varying the salience and extremity of price and review information to determine the point at which one overtakes the other. Five reviews were used to establish the effects of social influence as defined in the classic social psychology literature; however, in today's environment consumers have access to a larger number of reviews. Future research could investigate how review valence and price affect decisions when a larger number of reviews is provided.

Reviews covered a variety of topics found on OTA sites, and did not control for content. Previous research found that valence was more important than content (Noone & McGuire, 2013) but this remains an area for future research. Social influence takes form in online reviews from virtually unknown reviewers, which could lack credibility. However, several OTA sites are starting to provide information about the reviewers, such as the number of reviews written by each person and how helpful each review is perceived by shoppers. Additionally, some OTA sites, particularly Trip Advisor, are linking to the online user's Facebook accounts and highlighting reviews from their Facebook friends. Future research could examine the perceived usefulness and credibility of reviews from users who are known by the traveler.

Social media and online travel sites continue to expand and are shifting into mobile devices that increase the ease of access of customer reviews. As we step into a new digital frontier, it is imperative to assess the role of different influences on consumer behavior. This new frontier brings about new ways of thinking of previous notions on what influences travelers. Contrary to widespread belief, price is no longer undoubtedly king. Price has been dethroned.

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