Understanding emotional customer experience and co-creation behaviours in luxury hotels

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Abstract

Purpose – A holistic understanding of sources that evoke customer emotions is essential for creating a positive emotional customer experience (ECX). Despite a significant focus on the cognitive aspect of customer experience and traditional customer behaviours (e.g., loyalty, satisfaction), limited attention has been paid to ECX and co-creation behaviours. The purpose of the paper is to address this important knowledge gap by identifying different emotions and prominent sources of ECX (i.e., emotion triggers and constructors) during service interactions. By doing so, key customer co-creation behaviours are also identified, which help enhance positive customer experience.

Design/methodology/approach – A combined application of the appraisal theory and thematic analysis was used to explore ECX, its sources and co-creation behaviours as observed from 1,063 TripAdvisor customer reviews of luxury hotels in Ireland.

Findings – The results show that a single service interaction can evoke multiple emotions during the interaction process. The findings capture prominent emotions that customers experience and various important emotion triggers (physical environment, service management and offerings, and human interaction) and constructors (customer expectation, accumulated service experience, and culture fusion and authenticity). Three main customer co-creation behaviours (reinforcing intention, active and resourceful behaviours), which help facilitate the co-creation of positive customer emotions, are also identified.

Originality/value – The study proposes a new framework that provides unique insights into ECX to guide service improvement and innovation. A novel approach of applying the appraisal theory to a netnographic study is used to develop an ECX framework, which integrates various emotion triggers and constructors, and subsequent customer co-creation behaviours in the hotel industry.

Keywords – emotional customer experience, emotion triggers and constructors, customer co-creation behaviours, hotels

Paper type/ Research paper
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1 Introduction

Memorable service experience cannot be sold ‘to’ customers, but must instead be co-created ‘with’ them (Chathoth et al., 2016). Customer experience is defined in terms of customers’ multi-dimensional (e.g., cognitive, emotional, physical, sensorial, and social) responses to direct or indirect interactions with a service provider throughout their consumption journey (Lemon and Verhoef, 2016). While customers increasingly engage in the processes of service co-creation (e.g., personalised Starbucks coffee, Lego ideas), customers have more opportunities to co-create better experiences with service providers (Ramaswamy and Ozcan, 2013). Service providers are facing increasing challenges to create, manage or even control customer experience within service settings. In response to such challenges, understanding and co-creating positive customer experience has been identified as an emerging priority for research (MSI, 2016; Ostrom et al., 2015).

In comparison to the cognitive aspect of customer experience, emotional customer experience (ECX) has received only scant attention (De Keyser et al., 2015). ECX is evoked following a cognitive appraisal of a service interaction with a service provider, which can subsequently influence customer co-creation behaviour (e.g., a disappointed customer decides to spread negative word-of-mouth) (Bagozzi et al., 1999). Existing studies also provide evidence that ECX has a significant impact on behavioural intentions such as loyalty and repurchase, particularly in the hospitality industry (Ladhari, 2009). In particular, hotel services provide not only functionality but also the pleasure and hedonic service experience (Wu and Yang, 2018). ECX is considered rather more as a core component in the creation of a memorable hospitality experience compared with other service industries (Bastiaansen et al., 2019).

Failures in hospitality services often occur when services providers do not pay sufficient attention to the emotional aspect of customer experience (Crosby and Johnson, 2007). A deep insight into ECX, its potential sources, and customer behaviours can facilitating the co-creation of more positive ECX (Delpechitre et al., 2018). A review of the existing literature on ECX and hospitality reveals three significant deficiencies: (1) The complexity of hotel services means that ECX sources could originate from both service providers and customers (e.g., staff, environment, trip-related factors) (Walls, 2013). However, existing studies have failed to capture this complexity regarding how emotions are elicited by various sources, leading to the need for more comprehensive studies; (2) Although a more recent study has provided evidence that a service interaction can trigger more than one customer emotion
(Maguire and Geiger, 2015), many previous hospitality studies only focused on examining the impact of service-related factors on customers’ binary emotions (i.e., pleasant or unpleasant) (Liu and Jang, 2009; Ryu and Jang, 2007). The ways in which service interactions trigger emotional change has not been adequately addressed in prior research; (3) Whilst some studies have found that positive emotions encourage co-creation behaviours such as WOM referrals (Wen et al., 2018), we still know very little about other co-creation behaviours that can be generated by different emotions.

With the increasing importance and growing complexity of ECX co-creation in the hotel industry, the present study aims to develop an ECX co-creation framework, which provides a holistic and comprehensive understanding of sources of emotion and associated co-creation behaviours. In so doing, it contributes to the literature in three main areas. Firstly, a nuanced account of discrete hotel-related and multiple emotions is presented, which advances our current rather limited understanding of ECX. Secondly, a more holistic examination of sources of ECX is provided, offering a guide to further service improvement and innovation. Thirdly, customer co-creation behaviours generated by ECX are identified, leading to new perspectives and allowing ECX co-creation to be fostered.

2 Theoretical background

2.1 Emotional customer experience based on the appraisal theory

Customer emotion is derived from a cognitive evaluation of service interactions with service providers (Bagozzi et al., 1999). Previous studies have used various terms interchangeably, such as mood, emotion, or affect (Schoefer and Diamantopoulos, 2008). To differentiate emotion from other related terms, customer emotion in the present study refers to a person’s mental state of readiness with regard to a specific referent, such as an object, event, or person (Johnson and Stewart, 2005).

Previous research on emotion has generally been based on three theoretical approaches. Firstly, the bipolar dimensional approach applies different bipolar dimensions to distinguish emotions (Mehrabian and Russell, 1974). Secondly, the categorical approach focuses on the classifications and semantic expression of emotions (Izard, 1992). Thirdly, the appraisal theory explores people’s discrete emotions based on their own evaluation of the social environment, which then leads to different behavioural responses (Lazarus, 1991).

The bipolar dimensional approach suggests that emotions can be measured in binary terms, where the dimensions may be positive versus negative valence, or high versus low levels of arousal, for example (Mehrabian and Russell, 1974). The assumption is that an emotion is a comparative reflection of different bipolar dimensions. This approach has been applied to examine the influence of
environmental stimuli and to predict customer behaviours such as purchasing and loyalty in the context of hospitality services (Jang and Namkung, 2009; Jani and Han, 2015). These studies tend to overlook extensive human interactions between customers and service staff, however, which also affect customer emotions (Anninou, 2018). Alternatively, the categorical approach has been used to identify a basic set of emotions from cross-cultural studies. Critics of this approach have argued that emotion classifications developed through other contexts (e.g., life experience and advertisements) are inadequate to explain customer emotions related to consumption experience (Han et al., 2010). Although the Consumption Emotion Set (CES) proposed by Richins (1997) captures primary emotions experienced directly from product consumption, emotions that emerge during service interactions are not well captured (Huang, 2001). There is evidence that emotions such as ‘sexy’, ‘panicky’ and ‘afraid’ as listed in CES are unlikely to be used in situations of consumption (Han et al., 2010). As such, in the present study a hospitality-specific emotion set is integrated and summarised based on CES and previous hospitality studies (Appendix 1).

It has been argued that the two foregoing approaches have significant limitations, in that the categorical approach is mainly limited to the communication of emotions, while the bipolar dimensional approach is restricted to examining nuanced emotion changes related to service interactions (Johnson and Stewart, 2005). Addressing these limitations, the appraisal theory offers an established foundation for the identification of ECX sources and subsequent behavioural tendencies (Ruth et al., 2002). Appraisal is a process through which an individual evaluates the significance of a stimulus or an event for one’s well-being (Bagozzi et al., 1999). A discrete emotion is one that arises from multiple appraisal dimensions such as goal congruency, motivation, pleasantness, agency or control (Smith and Ellsworth, 1985). Several studies have demonstrated that outcome desirability and agency are two dominant appraisal dimensions, and these explain most discrete emotions (de Hooge, 2017). The outcome desirability dimension contains both evaluative and motivational processes; the agency dimension is related to one’s appraisal of responsibility and ability to control service interactions (Watson and Spence, 2007).

The outcome desirability dimension includes two sub-dimensions: goal congruence and motivation. Goal congruence refers to individuals’ evaluation of service interaction outcomes concerning personal wellbeing (Lazarus, 1991). Usefulness, pleasantness, and rightfulness are three main criteria by which customers evaluate whether service interactions fulfil their needs or make them better-off (Desmet, 2010). A congruent goal leads to a positive emotion, while an incongruent goal results in a negative emotion. A customer’s motivational response further indicates whether a goal congruence focuses on achieving a positive outcome (i.e., appetitive motivation) or avoiding a negative outcome (i.e., aversive
The agency dimension refers to an evaluation of ‘who’ or ‘what’ is responsible for the result of a given situation. For example, anger is an emotion caused by others, but shame is a self-agency emotion (Agrawal et al., 2013). Agency also includes a sub-dimension related to controllability, meaning whether an agent has control over the service interaction. In other words, the agency dimension distinguishes emotions that are evoked by self, other people, an object, or an event.

Apart from the two appraisal dimensions, emotion intensity refers to the extent to which a service interaction matches the expectation or desired outcome (Clore and Ortony, 2000). Individuals evaluate every situation based on their unique sensation, expectation and goal (Johnson and Stewart, 2005). Customers’ emotions and intensities vary for the same service interaction (Wen et al., 2018). Table 1 combines the appraisal dimensions with the integrated hospitality emotion classifications given in Appendix 1. The table provides a comprehensive set of hospitality emotions for exploring different types of ECX. For example, joy is evoked by a congruent goal through self-agency. Thus, a customer feels joyful because the chosen hotel meets his/her appetitive motivation to have a comfortable stay.

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1 For example, frustration is the result of an incongruent goal with an appetitive motive (e.g., I wish to enjoy my hotel stay, but it is not possible) while relief emerges from a congruent goal with an aversive motivation (e.g., I do not want to miss my flight due to a long queue at the checkout. Fortunately, the hotel provides an express checkout service, which allows me to catch my flight) (Anninou, 2018).
Table 1 An integration of hospitality emotion classifications and appraisal dimensions (Adapted from Johnson and Stewart, 2005; Ma et al., 2013)

| Emotion Classification | Emotion Phrases | Intensity   | Appraisal Dimensions |
|------------------------|----------------|------------|----------------------|
|                        |                |            | Goal congruence      | Agency     |
|                        |                |            | Appetitive | Aversive |         |
| Happiness              | happy, cheerful, proud | Low/Moderate | Congruent | Self |
| Joy                    | joyful          | High       | Congruent | Self |
| Gratitude              | grateful, appreciated | Low/Moderate | Congruent | Others |
| Love                   | loving, sentimental, warm-hearted/sexy, romantic, passionate | High | Congruent | Others |
| Contentment            | contented, fulfilled, satisfied, pleased | Low/Moderate | Congruent | Object or circumstances |
| Delight                | delighted       | High       | Congruent | Object or circumstances |
| Optimism               | optimistic, encouraged, hopeful, anticipated | Low/Moderate | Congruent | Self/others/objects |
| Excitement             | excited, thrilled, enthusiastic, eager | Low/Moderate | Congruent | Self/others/objects |
| Pleasant Surprise      | pleasantly surprised, amazed, astonished | Low/Moderate | Congruent | Self/others/objects |
| Guilt/Distress         | guilty, embarrassed, ashamed, distressed | Low/Moderate | Incongruent | Self |
| Humiliation/Depression | humiliated, depressed | High       | Incongruent | Self |
| Anger                  | angry, irritated, annoyed, contempt | Low/Moderate | Incongruent | Others |
| Discontentment         | unfulfilled, discontented, dissatisfied; displeased | Low/Moderate | Incongruent | Object or circumstances |
| Disappointed/Sad       | disappointed, sad, upset | Low/Moderate | Incongruent | Object or circumstances |
| Frustration            | frustrated, miserable | High       | Incongruent | Object or circumstances |
| Worry                  | nervous, worried, tense | High       | Incongruent | Self/others/objects |
| Fear                   | scared, afraid, panicky | High       | Incongruent | Self/others/objects |
| Disgust                | disgusted       | Low/Moderate | Congruent | Object or circumstances |
| Relief                 | calm, peaceful, relaxed; relieved | Low/Moderate | Incongruent | Object or circumstances |
2.2 Emotion sources: Emotion triggers and constructors

ECX in hotels is affected by various sources, such as staff interactions, environment, customer personality, and trip-related factors (Walls, 2013). Appendix 2 summarises various sources, which are found to evoke ECX in hospitality studies. Emotion sources that originate from the service context are referred to as ‘emotion triggers’. In terms of the physical environment, ambience, product quality, and design factors are three common triggers in hospitality studies (see Appendix 2). Especially, the impact of ambience on positive ECX has been emphasised by several researchers (Jani and Han, 2015; Ribeiro and Prayag, 2019). However, the triggers representing ambience, product quality, and design factors are not the same in these studies. The significant impact of staff interactions such as staff empathy and reliability on positive ECX has also been highlighted (Bastiaansen et al., 2019; Torres and Kline, 2013). Service staff also play a critical role in engaging their customers in interactions that result in positive ECX (Harkison, 2018; Torres et al., 2014). In contrast, Lin and Liang (2011) suggest that ambience and design factors are more influential than employee-displayed emotions and customers’ collective perception of the environment. A review of hospitality studies showed that there is in fact only limited consensus on the sources that evoke ECX. A thorough examination of ECX sources and the representative elements thereof can offer some insights on how to enhance positive ECX and facilitate service innovation in the hotel industry.

While there is inconsistent evidence regarding ECX sources in a service context, the sources derived from a customer context have received little attention (see Appendix 2). Emotion constructors are contextual factors derived from a customer context, such as customers’ personalities, cultural background, and trip-related purposes (Jani and Han, 2015; Torres et al., 2014). The growing trend of research findings on customer emotion suggests the need to incorporate the exploration of contextual influence (So et al., 2015). Although emotion constructors are beyond the control of service providers, they have important implications as far as ECX is concerned. Chandler and Lusch (2015) suggest that customers’ social roles (e.g., mother, researcher) could also affect their assessment of service interactions and behavioural responses to a service provider. In other words, ECX could be shaped by several factors such as past experiences, cultural background, and interpretation based on personal traits.

2.3 Customer co-creation behaviours

Some studies have found that the physical environment affects ECX and can lead to customer behavioural responses of approach or avoidance (Mehrabian and Russell, 1974). In general, positive emotions encourage prosocial behaviours such as cooperation, helping, and altruism (Bagozzi et al., 1999; Cavanaugh et al., 2015), while negative emotions contribute to switching, avoidance, and
destructive behaviours (de Hooge, 2017; Roos et al., 2009). Customer satisfaction, loyalty, and purchasing affected by ECX have frequently been highlighted in hospitality studies (Ali et al., 2016; Ladhari, 2009). Zhang et al. (2018) suggest that customers tend to engage positively in co-creation activities when they feel delighted with something. Positive emotions also encourage a tendency for customers to engage in word-of-mouth referrals and revisits, while negative emotions lead to complaints (Wen et al., 2018). Prospective customers tend to rely heavily on online reviews and word-of-mouth when making hospitality purchases (Solnet et al., 2010), highlighting the importance of ECX and co-creation behaviours in the hotel industry.

Customer co-creation behaviour refers to customers’ spontaneous and discretionary behaviours when participating in and devoting certain resources to service interactions that create unique ECX for them (van Doorn et al., 2010). Co-creation behaviours incorporate customers’ active participation in transaction-related activities, as well as their engagement and citizenship behaviours towards a service provider (Yi and Gong, 2013). However, depending on the industrial context, customers might demonstrate different co-creation behaviours such as (e)word-of-mouth, blogging, sharing creative ideas, co-designing, and tolerance (Tommasetti et al., 2017; Yi and Gong, 2013). Moreover, co-creation behaviours do not always create reciprocal benefits for both customers and service providers (Chan et al., 2010). The exploration of various customer co-creation behaviours can be beneficial for facilitating the co-creation of positive ECX.

In summary, the representative elements of emotion triggers and constructors have not previously been explored sufficiently to allow a comprehensive understanding of ECX in the hospitality context to be drawn. Customer co-creation behaviours demonstrated during service interactions have never been studied thoroughly. To facilitate the co-creation of a positive ECX, the present study aims to provide a more holistic investigation of emotion sources, ECX typology and customer co-creation behaviours in the context of hotel services.

3 Methodology

3.1 Research design and data collection

Netnography refers to the approach of ethnography applied to the study of online culture and community (Kozinets, 2010). In the present study a netnographic approach is used through the examination of online customer reviews to assess customers’ hotel service experiences in a retrospective manner (Berezina et al., 2016). These narrative and user-generated online reviews provide rich descriptions of customers’ hotel journeys based on generally timely and trustworthy
information (Yu et al., 2017). Customer emotions and co-creation behaviours are interpreted in a natural setting that can deliver powerful customer feedback for researchers and hotel managers (Kozinets, 2010).

The study focuses on luxury hotels for two reasons. First, in upscale hotels, customers pay a significant premium and subsequently have higher expectations of service experiences. The consequences of these hotels failing to generate positive ECX can be more damaging than for mid-price and economy hotels (Barsky and Nash, 2002). Second, the wide variety of luxury hotel services has led to a dynamic environment that is particularly challenging for the co-creation of positive ECX across various service interactions. Luxury hotels in Dublin, the capital city of the Republic of Ireland, were sampled because the value of the tourism industry is forecast to rise from 5.4 billion euros in 2017 to 8.6 billion euros by 2028, which is estimated to be 2.3% of the total GDP in the Irish economy (World Travel and Tourism Council, 2018). These figures highlight the need for an improved understanding of the increases in international and domestic customers in the Irish hotel industry.

The TripAdvisor website was chosen for three reasons: It is one of the biggest and most vibrant online travel communities in the world (O’Connor, 2010); it is an online platform with ‘600 million reviews and opinions, a massive travel community of 455 million monthly unique users during our seasonal peak, and a diverse offering across a spectrum of travel products’ (TripAdvisor Inc., 2017, p. 2); its customer reviews have also been widely used in other hospitality and tourism studies (Xie et al., 2016; Yu et al., 2017).

A total of ten five-star hotels in Dublin were identified according to the Irish hotel classification developed by the Irish National Tourism Development Authority. The number of customers staying in a given hotel and reviewing it does not show significant seasonal variations (Fitzpatrick Associates, 2016). To ensure the most up-to-date information was obtained, 1,472 customer reviews written in English and posted between October 2016 and January 2017 were downloaded from TripAdvisor. Each customer review contains four elements: posting date, the month of a hotel stay, trip type, and comments. Reviewers’ information in the TripAdvisor community was also collected, including username and the total number of reviews posted. All data were further verified, reformatted and anonymised. Three criteria were used to ensure the quality of the sampling. Firstly, hotel reviews that were not posted in the months following the visit to the hotel were excluded from the database, because the accuracy of any review decreases with increasing time between stay and review (Lee et al., 2011). This criterion is also in line with common industry practice such as that adopted by Booking.com. Secondly, reviews without any indication of trip type were also excluded from the database. Thirdly, any content of hotel reviews written without detailed description and without
mentioning any service-related terms (e.g., hotel facilities, service staff and process) were excluded from the database. After all these constraints were applied, 72% (1,063 cases) of the data remained for further analysis.

3.2 Data analysis

A thematic analysis was used to identify emerging themes of ECX and to capture a qualitative, detailed, and nuanced account of customer co-creation behaviours based on the appraisal theory (Braun and Clarke, 2006). Discrete emotions were identified based on the combined appraisal dimensions and emotion classification presented in Table 1. The principle of thematic analysis is to capture external heterogeneity across themes and sub-themes, and internal homogeneity within themes and sub-themes. The study applied combined deductive and inductive approaches. All customer reviews were iteratively read and coded by the first author using Nvivo 11. This process included three main phases: (1) Open coding: detailed observation of the review data and identification of initial codes; (2) Developing categories: organising various codes and themes by merging and discarding codes, and (3) Abstraction and comparison. Insights from both the relevant literature, themes and codes emerged from the customer review data were used to form an analysis codebook, more holistic themes and patterns were drawn in further analysis.

As suggested by Guest et al. (2012), the reliability of the research was ensured via three stages: inter-coder agreement check, intra-coder reliability, and inter-coder reliability. Firstly, inter-coder agreement was checked by both authors at each stage of development of the codebook. Secondly, stratified random sampling was employed and deemed sufficiently rigorous for capturing diverse samples of reviews within the four months (Krippendorff, 2011). 31.2 % of the data were double-coded by the first author after two months following the first completion of the open coding. Intra-coder reliability reached 97.3 % agreement with a moderate Cohen’s Kappa coefficient (Viera and Garrett, 2005). Thirdly, another stratified random sample (30 %) of the data was double-coded by another experienced scholar after the codebook had been refined, followed by both an inter-coder agreement check and an intra-coder reliability check. The inter-coder reliability achieved a 95.9% agreement among the coders and a moderate Cohen’s Kappa coefficient (Viera and Garrett, 2005). The discrepancies in coding were discussed among the coders, and agreed revisions were inserted in the codebooks.

4 Results

4.1 Customer review profile

Among the 1,063 reviews, 855 reviewers posted more than one review. The highest number of reviews
undertaken by a single reviewer was 1,206 while the average number of reviews posted was 12. This result indicates that the majority of reviewers are likely to be genuine (O’Connor, 2010). The total word count within the full set of reviewed documents was 118,032 while the longest word count in a single review was 1,210. An overall profile of the customer reviews by rating months, travelling types, and hotels is summarised in Appendix 3.

4.2 A framework for capturing emotional customer experience

Based on the analysis of the customer review data, the following framework was developed (Figure 1). Three key aspects of ECX include emotion sources, ECX typology, and customer co-creation categories. The following sections report and discuss the findings of the netnographic study.

Figure 1 ECX co-creation framework in the hotel industry

4.3 Emotional customer experience typology

An ECX typology was developed to capture the characteristics of goal congruence and grouping of discrete emotions based on the appraisal theory (Figure 1). Each ECX category describes how ECX is affected during a service interaction. The frequency count and associated percentage of each discrete emotion in each ECX category are also listed in Figure 1. A total of 7,437 emotion triggers and 1,022 emotion constructors were identified.

Seven positive and four negative discrete emotions were identified from customer reviews. Interestingly, the negative emotions were mostly evoked by the agencies of others, objects or circumstance, whereas negative emotions related to self-agency (e.g., humiliation, distress) were not identified. In contrast, the positive emotions covered a more extensive range of emotion agencies including self-agency. Similar to Maguire and Geiger’s (2015) findings, customers have multiple changes of emotion in a service interaction. Ambivalent ECX indicates that customers have coexisting positive and negative emotions, conflicting emotions (i.e., pleasurable regret) or a resolving emotion (i.e., relief). Mixed ECX means that customers have more than one positive or negative emotion during a service interaction. Such a service interaction might involve various agencies or changes of emotion valence.
and intensity. Neutral ECX describes the low relevance of goal congruence for customers, and is often observed when customers share travelling information or service interactions that have no significant impacts on them.

Broadly in line with Barsky and Nash (2002), emotions such as romantic love, optimism, humiliation, disgust, fear, and shame are not observed in the customer reviews, but this does not imply that such emotions were not experienced during customers’ hotel stays. Similarly, excitement and pleasant surprise, caused by customers themselves, are also less observed. For example, one may feel excited about his/her first time ever staying in a five-star hotel, but one might not be willing to express this in public (i.e., TripAdvisor website). These findings highlight prominent discrete emotions during various service interactions in the hotel context. The represented discrete emotions for each ECX type are presented in Appendix 4, along with some examples and the percentage of the total emotion frequency count.

4.4 Emotion sources: triggers and constructors

**ECX evoked by emotion triggers.** Within three emotion trigger dimensions, service management and offering is the most frequently observed trigger dimension (44.9%), followed by physical environment (29.1%) and human interaction (26%). Comparing the three trigger dimensions (Figure 2), positive, ambivalent, and negative ECX are more frequently evoked by emotion triggers than neutral and mixed ECX. Consistent with previous studies, positive ECX is the most frequently observed ECX across the trigger dimensions (Ryu and Jang, 2007; Torres and Kline, 2013; Zhang et al., 2018), and is also the most frequently observed when customers interact with professional and friendly staff, as the examples demonstrated in Appendix 4. Such professional and friendly interactions delight customers, as does noticing their needs in advance (i.e., usefulness appraisal).
Figure 2 The proportion of ECX evoked by emotion triggers and emotion constructors

Note: The top five ranked relative importance of emotion triggers derived from a frequency count are: (1) Comfortable and high quality facilities; (2) Multi-sensory and festive ambience; (3) Professional hospitality skills and knowledge of staff; (4) Timely and flawless service process; (5) Variety and quality of food and beverage. The top three emotion constructors derived from a frequency count are: (1) Expectation on value of the price, hotel brand and reputation; (2) Expectation based on previous experience; (3) Unexpected service offering and upgrade.
As shown in Figure 2, within the trigger dimensions, customer contentment is the most frequently found emotion in the physical environment dimension. In line with Wu and Yang’s (2018) findings, customers have a relatively low intensity of positive emotions (e.g., contentment) rather than high-intensity emotions (e.g., delight) when they evaluate the physical environment in hotels. In this study, the design aspect of physical environment is merged into visual and aesthetic effect, because customers rarely assess what they ‘see’ separately (Lin, 2016). The findings indicate a different perspective from previous studies (Lin and Liang, 2011; Liu and Jang, 2009). In particular, customers tend to appreciate beautiful things or be surrounded by an aesthetic environment that evokes positive ECX (Desmet, 2010), in turn highlighting the significance of the visual and aesthetic aspects of ambience. Furthermore, festive ambience and location are also essential but distinct emotion triggers in the hospitality sector.

Service management and other offerings trigger the most negative and ambivalent ECX (Figure 2). Customers tend to be discontented and disappointed when the quality of a facility does not meet their expectations and liking of a luxury hotel (Lin and Liang, 2011). They also have the tendency to feel frustrated, angry and irritated when the service process does not address their needs/problems and particularly when the service provider is the responsible party (Maguire and Geiger, 2015). The intensity of negative emotions is raised when customers realise that their needs are neglected at a particular service point, which can lead to mixed negative emotions. As suggested, when resources (e.g., time and money) that are valued by customers are threatened or lost, customers might tend to experience negative emotions (Surachartkumtonkun et al., 2015).

The dimension of service management and offerings captures some of the constraints of hotel operations and services. The quality of the facilities generates positive, negative and coexisting ECX. Comfortable and high-quality hotel facilities elevate a hotel’s classification whilst also raising customers’ expectations. Other triggers such as the service process and the food and beverages require a collaborative effort to satisfy customer needs. When multiple personnel are involved in the service process and offerings, it becomes more complex to achieve the same level of customer satisfaction. The majority of the staff in luxury hotels appear to be well trained and more adaptable to individual service interactions. The ability to engage customers during personal interactions could also influence ECX in a positive sense (Delpechitre et al., 2018; Zhang et al., 2018). As examples demonstrated in Appendix 4, friendly personal interactions create an additional ‘aroma’, which could set the hotel apart from its competitors and make up for weaknesses in other services.

**ECX evoked by emotion constructors.** Within three emotion constructor dimensions, customer expectation (87.5%) is the most frequently observed dimension, followed by accumulated service
experience (9%), and culture fusion and authenticity (3.5%). Similar to trigger dimensions, positive ECX is the most frequently observed ECX across the constructor dimensions (Figure 2): culture fusion and authenticity (70%), customer expectation (56%), and accumulated service experience (49%). The dimension of culture fusion and authenticity evokes the most positive (70%) and the least negative (11%) ECX across the constructor dimensions. An example of positive ECX is:

'Don’t miss the James Joyce sundial statue in the garden! Even some native Dubliners don’t know about this gem. [...] It’s really clever and quite striking.'

Customers tend to appreciate local culture, leading to a positive ECX, while a minority of customers do not have significant changes of emotion caused by cultural fusion and authenticity. For international travellers, going somewhere far from home is deemed to be both an anxious and exciting experience. A luxury hotel is often perceived to be a home away from home, providing an environment that integrates various needs and elements of local culture for travellers to explore. Hence, positive ECX was very frequently observed when hotels incorporated the needs of international travellers and local culture at service interactions.

The dimension of customer expectation evokes the most negative ECX (26.6%) across the constructor dimensions (Figure 3). Customer expectation based on values of price, brand image, and reputation is the most frequently mentioned constructor. Consistent with previous studies, every customer’s idiosyncratic perspective leads to different emotions (Surachartkumtonkun et al., 2015). For example,

'We are [membership status] with [hotel chain] and have always had excellent experiences staying with [reviewed hotel] so we felt we could trust we would have a great experience. There is a first for everything and this is the first time I have been truly disappointed with a [reviewed hotel].'

ECX is also influenced by comparing with previous travelling experience. When customers’ positive ECX is evoked by comparing with their previous travelling experience, they often mention that their current experience is one of the best.

In summary, the above findings suggest that ECX is sometimes evoked by multiple triggers and constructors. Although emotion constructors are beyond the control of service providers, they can be equally important as emotion triggers. Emotion constructors capture customers’ subjective and personal assessments of service interactions. While hotels pay significant attention to orchestrating service elements and process in the service context, understanding emotion constructors will provide a more comprehensive insight into the appraisal process and the reasons why one or more specific emotions are experienced by a customer during service interactions.
4.5 Customer co-creation intentions and behaviours

Not all customer reviews explicitly demonstrate customer co-creation behaviours. Six types of co-creation intentions and behaviours were identified from 705 customer reviews (Figure 1). Out of 705 customer reviews, 455 reviews were observed with only one type of customer co-creation intention or behaviour, while 250 reviews were observed with more than one. Cases demonstrating each co-creation intention or behaviour were allocated into separate categories for analysis. The frequency counts of each ECX were added and standardised for comparison across the different types of customer co-creation intentions and behaviours. The interactions between ECX and co-creation intentions and behaviours are illustrated in Figure 3.

Customers’ recommendations and revisiting intentions are characterised as reinforcing co-creation intention (customers demonstrate an intention to be helpful to the hotel and prospective customers). As shown in Figure 3, the findings indicate that positive emotions encourage customers to provide a positive recommendation and revisit the hotel, while customers tend to exit the co-creative relationship with a service provider when they experience predominantly negative ECX during their hotel stay. This accords with prior studies (Cavanaugh et al., 2015; Jang and Namkung, 2009; Ma et al., 2017). Moreover, the recommendation and revisiting intention indicate the customer’s overall appraisal of service interactions, which potentially influence providers’ reputations and prospective customers’ decisions on hotel bookings. Thus, customers’ positive recommendation and revisiting intention demonstrate an assurance for a positive experience, which indirectly generates opportunities for hotels to co-create positive ECX with other customers.

Non-monetary rewards and expressing needs/problems are captured as ‘active co-creation behaviour’, as customers actively and explicitly express their evaluation to service providers that can enhance understandings between them. Positive ECX encourages them to express their appreciation and gratitude, which is perceived as a non-monetary reward to service providers. Such positive attitudes are considered an essential component of co-creating pleasant service interactions (de Hooge, 2017; Yi and Gong, 2013).
Figure 3 Identified customer co-creation intention and behaviours affected by ECX
In the cases of expressing needs/problems, service providers have opportunities to provide explanations to customers, to rectify the services promptly and influence customers’ evaluation. For example,

‘The room we were given smelled very strongly of cigarette smoke so my husband went down to speak to reception. They were very apologetic, immediately changed the room and sent someone up to help us with our bags.’

Not surprisingly, service providers sometimes fail to fulfil customers’ needs or rectify service problems (Su et al., 2018). This can be due to a lack of staff training, poor problem recognition, and an inflexible service process. Customers sometimes also have a relatively passive attitude towards service interactions, or the circumstances do not allow them to express their needs. Consistent with previous studies (Su et al., 2018), our findings show that resources available to customers’ also influence their subsequent behaviours. For example,

‘The bed was actually two singles pushed together which I would have been ok with except instead of a king sized duvet we had two single duvets - didn’t notice this until we came back from our evening out and were too tired to bother saying anything.’

Customers ended up ‘talking’ about their experience to others or online. Service providers can not only lose the opportunity to ‘co-create’ positive ECX, but are also potentially affected by the exposure of service weakness to prospective customers. It is crucial for hotels to show their intention to co-create positive ECX (Casaló and Romero, 2019). Customers here are acting as ‘co-creators’ participating in the redefinition of services (Tommasetti et al., 2017). Service providers can take advantage of customers’ active participation in service interactions to establish a trusting relationship with them, which helps to co-create positive ECX (DeWitt et al., 2008).

Providing information on personal preferences and feedback for improvement are characterised as ‘resourceful co-creation behaviours’. Customers tend to share feedback and ideas for service improvement when they experience equivalent positive, negative and ambivalent ECX. For example,

‘The hotel got the hard things right and the easy things wrong. [...] The entire staff was [sic] terrific. [...] The lighting in the room was terrible. [...] Comfortable furnishing and good lighting should be easy.’

In contrast, customers tend to share their personal preferences when they have more positive (62%) than negative (20%) or ambivalent ECX (13%) during their hotel stays. Depending on whether their preferences are met, customers partially experience either positive or coexisting emotions. In some cases, customers recognise that it is not always possible for the hotel to meet all their needs. They indicate that the property attribute might not be their preferred choice, but they still enjoy their stay
thanks to other factors. For example, ‘The mattress was a little hard for my taste but then again that could be a very personal taste. Keep up [reviewed hotel]’. As suggested by Leung et al. (2013), such personal preference information could be helpful for service providers to build individual customer profiles for creating more personalised services in the future. Hence, resourceful co-creation behaviours potentially facilitate ‘resource co-integration’ between customers and service providers (McColl-Kennedy et al., 2012; Wu et al., 2017). As such, service providers can produce guidelines for new service development and engage customers in more attractive service interactions.

5 Discussion and conclusions

5.1 Conclusions

In this paper, an ECX co-creation framework is developed through a combined application of the appraisal theory and thematic analysis of 1,063 TripAdvisor customer reviews. Previous hospitality studies have often been limited to binary emotions affected by service providers and traditional customer behaviours such as loyalty and satisfaction (e.g., Balaji et al., 2017; Ribeiro and Prayag, 2019). Customer related factors and their subsequent co-creation behaviours still remain to be explored.

The results show that a single service interaction can evoke multiple emotions during the interaction process. The findings capture prominent emotions that customers experience and various important emotion triggers and constructors. Three main customer co-creation behaviours, which help facilitate the co-creation of positive customer emotions, are also identified.

5.2 Theoretical contributions

The present study contributes to the literature in three ways by developing a holistic ECX co-creation framework. First, the ECX typology identifies primary discrete emotions at hotel service interactions and groups them into five ECX categories, namely positive, negative, ambivalent, mixed, and neutral. The finding that a particular service interaction can evoke multiple emotions has expanded our current knowledge, which is generally limited to binary ECX. Second, the identification of prominent ECX sources advances our current understanding of why both service and customer related factors should be considered equally during service interactions. Finally, three main co-creation behaviours have been identified, all of which could facilitate positive ECX co-creation. These findings echo suggestions by other scholars that both ECX and customers’ situation-related factors such as time, money and capabilities can contribute to their co-creation behaviours (Su et al., 2018; Surachartkumtonkun et al., 2015).
5.3 Managerial implications

Online reviews are critical and direct sources of understanding customer experience for hospitality service providers (Yu et al., 2017). Although customer reviews bring lively customer experience stories to hotel managers, studying and making sense of them can be a very time-consuming exercise for managers. The findings in this study illustrate important emotion triggers and constructors that offer guidance to managers in the analysis and interpretation of customer feedback. Accordingly, hotel managers can prioritise and more efficiently allocate their resources to improve current service interactions. The lessons learned from this study can help hotels to improve existing services and guide service innovations.

The study also highlights that a better understanding of customer co-creation intentions and behaviours can help hotels co-create positive ECX and establish a co-creative relationship with their customers. For example, customers actively demonstrating their gratitude can help encourage service staff to maintain their professional performance and passion for work. Furthermore, staff’s attention to detail, professional capability, and personal charm could also effectively improve the ambience and promote positive ECX co-creation in hotels (Delpechitre et al., 2018; Lo et al., 2015). Thus, it is vital to reinforce staff training and empower staff to initiate personal interactions with customers. For example, well-trained and empowered staff can sense customers’ needs in advance and act spontaneously to take initiatives that capitalise on opportunities for co-creating positive ECX with customers. Insights gained from this study can help hotels to embrace various customer co-creation behaviours during service interactions, including co-creating services and co-integrating resources.

5.4 Limitations and future research directions

The study has some limitations, which also provides opportunities for future research. Customers’ personality and social roles were not fully explored due to the nature and limitations of the review data. Emotions such as love, optimism, and guilt do not feature prominently in the data. This may be explained by the fact that while writing reviews, customers tend to demonstrate emotional experience, which are evoked through evaluating service interactions and neglect those self-agency driven emotions. Building on the ECX co-creation framework developed in this study, future research can advance the current understanding of ECX by taking a quantitative approach. For instance, future studies can further refine and validate the relevant constructs using quantitative data to investigate the causal relationship between ECX sources, various degrees of ECX and customer co-creation behaviours. In particular, ambivalent and mixed ECX are emerging research domains, and their impacts on co-creation behaviours could present great potential for future studies. While the analysis of customer review primarily focuses on customers’ perspectives, it is crucial to understand ECX co-creation from
both perspectives of customers and service providers, in order to provide an integrated evaluation. In
sum, ECX in the hospitality context is still a barren research field, which warrants continuous cultivation.

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## Appendix 1: An integrated hospitality emotion set based on previous studies

### An integrated hospitality emotion set

| Positive/Pleasant Emotion | Emotions Classification/Phrases | Context/Industry |
|---------------------------|--------------------------------|------------------|
| Romantic love/sexy, romantic, passionate; Love/loving, sentimental, warm-hearted; Peacefulness/calm, peaceful, relaxed; Contentment/contented, fulfilled, satisfied; Optimism/optimistic, encouraged, hopeful, anticipated, eager; Gratitude/grateful, appreciated; Joy/ proud, happy, pleased, joyful; delighted, cheerful, Excitement/excited, thrilled, enthusiastic; Pleasant Surprise/surprised, amazed, astonished | | |
| Negative/Unpleasant Emotion | Anger/frustrated, angry, irritated, annoyed, contempt; Discontent/unfulfilled, discontented, dissatisfied; Worry/nervous, worried, tense; Sadness/depressed, sad, miserable, distressed, upset; Fear/scared, afraid, panicky; Shame/embarrassed, ashamed, humiliated; Guilty; Disappointment/disappointed, Displease/displeased, unhappy, disgusted | | |

| Studies | Theoretical Model | Emotions Classification/Phrases | Context/Industry |
|---------|-------------------|--------------------------------|------------------|
| (Richins, 1997) | Categorical theory | Anger/frustrated, angry, irritated; Discontent/unfulfilled, discontented; Worry/nervous, worried, tense; Sadness/depressed, sad, miserable; Fear/scared, afraid, panicky; Shame/embarrassed, ashamed, humiliated; Envy*/envious, jealous; Loneliness*/lonely, homesick; Romantic love/sexy, romantic, passionate; Love/loving, sentimental, warm-hearted; Peacefulness/calm, peaceful; Contentment/contented, fulfilled; Optimism/optimistic, encouraged, hopeful; Joy/happy, pleased, joyful; Excitement/excited, thrilled, enthusiastic; Surprise/surprised, amazed, astonished; Guilty; Proud; Eager; Relieved | consumption context (mainly product consumption) |
| (Edwardson, 1998) | Categorical theory | Pleasant emotions: Anticipation; Content; Excited; Happy; Relaxed; Warm*; Welcome* Unpleasant emotions: Angry; Annoyed; Disappointed; Embarrassed; Frustrated; Impatient* | hospitality sector |
| (Barsky and Nash, 2002) | Not specified | Comfortable*; Content; Elegant*; Entertained*; Excited; Extravagant*; Hip or cool*; Important*; Inspired*; Pampered*; Practical*; Relaxed; Respected*; Secure; Sophisticated*; Welcome* | hotel |
| (Laros and Steenkamp, 2005) | Categorical theory | Positive Emotions: Contentment/contented, fulfilled, peaceful; Happiness/optimistic, encouraged, hopeful, happy, pleased, joyful, relieved, thrilled, enthusiastic Negative Emotions: Anger/anger, frustrated, irritated, hostility, unfulfilled, discontented; Fear/scared, afraid, panicky, nervous, worried, tense; Sadness/depressed, sad, miserable, helpless, nostalgia, guilty; Shame/embarrassed, ashamed, humiliated | daily grocery shopping |
| (Desmet et al., 2009) | S-O-R model | Pleasant Emotion: Satisfaction; Joy; Pride; Admiration*; Attraction*; Fascination*; Hope unpleasant Emotion: Dissatisfaction; Aversion*; Boredom*; Sadness; Fear; Shame; Contempt | hotel |
| Source                                   | Emotion Model/Approach                         | Positive Emotions                                                                 | Negative Emotions                                                                 | Location                        |
|-----------------------------------------|-----------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------|
| Jang and Namkung, 2009                  | S-O-R model adopting Differential Emotion Scale | **Positive Emotions:** Joy/joyful, pleased, romantic, welcoming*; Excitement/excited, thrilled, enthusiastic; Peacefulness/comfortable*, relaxed, at rest*; Refreshment*/refreshed*, cool*; **Negative Emotions:** Anger/angry, irritated; Distress/frustrated, disappointed, upset, downheartedness*; Disgust/disgusted, displeased, bad; Fear/scared, panicky, unsafe*, tension*; Shame/embarrassed, ashamed, humiliated |                                                                                  | Restaurant                      |
| Liu and Jang, 2009                      | S-O-R model                                   | **Positive Emotions:** Pleasure; Excitement; Contentment; Refreshment*; Interest*; Relaxation |                                                                                  | Restaurant                      |
| Han et al., 2010                        | Categorical theory                            | **Excitement:** Sophisticated*, Interested*, Hopeful, Thrilled, Grateful, Passionate*, Entertained*, Enthusiastic, Aroused, Pampered*  **Comfort:** Comfortable, Contented, Friendly*, Relaxed, Pleased, Respected*, Happy, Fulfilled, Warm*, Secure*  **Annoyance:** Irritated, Frustrated, Disappointed, Anger, Sceptical  **Romance:** Romantic, Love, Sentimental |                                                                                  | Restaurant                      |
| Lo, 2010                                | Combined bipolar dimension and appraisal theory | **Pleasant Emotion:** Cheerful; Delighted; Happy; Pleasantly surprised; Pleased; Relieved; Warm-heartily;  **Unpleasant Emotions:** Angry, Annoyed, Bored*, Disappointed, Discontented, Fearful, Frustrated, Irritated |                                                                                  | Hotel                           |
| Han and Jeong, 2013                      | Categorical theory                            | **Comfort:** Warm; Respected; Secure*; Comfortable*; Happy; Relaxed; Contented  **Annoyance:** Frustrated; Irritated; Disappointed; Sceptical*  **Stimulation:** Surprised; Curious*; Excited; Passionate*; Grateful; Entertained*;  **Sentimentality:** Loving; Romantic; Sentimental |                                                                                  | Upscale Restaurant              |
| Jani and Han, 2015                      | S-O-R model                                   | **Positive emotions:** Happy; Proud; Pleased; Contented; Peaceful; Romantic; Excited; surprised;  **Negative emotions:** Angry; Ashamed; Upset; Worried |                                                                                  | Five-star Hotel                 |

* are phrases describing a person's feeling, affect, perception or attitude rather than an emotion phrase.
## Appendix 2 Summary of emotion sources, emotional customer experience and the associated service outcomes in hospitality research

| Studies | Physical Environment | Human Interaction | Other Management or Contextual Factors | Emotional Customer Experience | Service Outcomes | Research context |
|---------|----------------------|-------------------|----------------------------------------|-------------------------------|------------------|------------------|
| (Ryu and Jang, 2007) | **Facility aesthetics:** attractive paintings/pictures, appealing wall décor, warm colours, high-quality furniture **Lighting:** warm lighting, welcoming lighting, comfortable lighting **Ambience:** relaxing music, pleasing music, comfortable temperature, enticing aroma **Layout:** enough seating space, crowded seating arrangement, easy-to-move layout **Dining equipment:** high-quality tableware, attractive linens, attractive table setting | attractive employees, neat and well-dressed employees | N/A | **Pleasure:** Unhappy—happy; Annoyed—pleased; Bored—entertained; Disappointed—delighted **Arousal:** Depressed—cheerful; Calm—excited; Indifferent—surprised; | Behaviour intention: patronage, recommendation, staying longer, spending more | Upscale restaurant |
| (Ladhari, 2009) | N/A | Service quality: tangibles, reliability, responsiveness, confidence, communication | N/A | Emotional satisfaction: happy, pleasant, joyful | Behavioural intention: recommendation, willingness to pay a premium price, loyalty | Cross-sectional Hotel |
| (Brunner-Sperdin and Peters, 2009) | interior design, lighting effects, colour effects, scent effects, sound effects | employees' empathy, expertise, responsiveness, ability to take part in the service delivery process | composition of guests, hotel image/reputation, price/performance ratio, customer involvement, degree of intuition, situational factors, demographic factors | Emotional state: being in good hands, lose track of time, time passes, enjoy, immerse oneself in something, under control, being happy | N/A | Upscale restaurant |
| (Liu and Jang, 2009) | **Dining atmospherics** **Interior design:** overall interior design, Chinese-style furnishing, Chinese painting, Chinese-style table setting **Ambience:** lighting, music, Chinese music, scent, room temperature **Spatial layout:** comfortable seat space, easy to move around, dining privacy | well-dressed employees, professional employees, adequate employees | N/A | **Positive emotion:** pleasure, excitement, contentment, refreshment, interest, relaxation **Negative emotion:** anger, disgust, boredom, regret, distress, contempt | Perceived value: good service for the price, appropriate price, meeting specific needs, good value for money | Chinese restaurant |
| (Jang and Namkung, 2009) | **Restaurant-specific stimuli** **Product quality:** attractive food presentation, healthy options, tasty food, fresh food **Atmospherics:** facility layout, interior design, | Service quality: accuracy, willingness to help, reliable staff behaviour, best interest at heart | N/A | **Restaurant-specific measures of emotion:** positive emotion (joy, excitement, peacefulness, | Behavioural intention: revisit, good | Restaurants |
| Design | Attentiveness/caring: customers' interest, understanding of customers' specific need, showing their care, attention on the individual customer, perform the service right at the first time | Attentiveness/caring: customers' interest, understanding of customers' specific need, showing their care, attention on the individual customer, perform the service right at the first time | N/A | N/A | Cross-sectional hotels |
|---------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------|---------|---------------------|
| outside architectural, interior architectural, interior decoration and personal artefact, natural resources surrounding | | N/A | N/A | emotive value, cognitive value, social/self-concept | Cross-sectional hotels |
| Property upkeep: facility maintenance, furnishing condition, furnishing layout, high-quality materials | Property upkeep: facility maintenance, furnishing condition, furnishing layout, high-quality materials | N/A | N/A | | |
| Ambience: noise, enjoyable music, comfortable indoor temperature | Ambience: noise, enjoyable music, comfortable indoor temperature | N/A | N/A | | |
| N/A | N/A | N/A | N/A | | |
| N/A | N/A | N/A | N/A | | |
| N/A | N/A | N/A | N/A | | |
| N/A | N/A | N/A | N/A | | |
| (Torres and Kline, 2013) | (Torres and Kline, 2013) | (Torres and Kline, 2013) | (Torres and Kline, 2013) | (Torres and Kline, 2013) | (Torres and Kline, 2013) |
| Ambience: appropriate air quality, comfortable temperature, dry atmosphere, pleasant odour, enjoyable background music, high level of sound | Ambience: appropriate air quality, comfortable temperature, dry atmosphere, pleasant odour, enjoyable background music, high level of sound | N/A | N/A | | |
| Personality: neuroticism, extraversion, openness, agreeableness, conscientiousness | Personality: neuroticism, extraversion, openness, agreeableness, conscientiousness | N/A | N/A | | |
| Positive emotion: happy, proud, pleased, contented, peaceful, romantic, excited, surprised | Positive emotion: happy, proud, pleased, contented, peaceful, romantic, excited, surprised | N/A | N/A | | |
| (Jani and Han, 2015) | (Jani and Han, 2015) | (Jani and Han, 2015) | (Jani and Han, 2015) | (Jani and Han, 2015) | (Jani and Han, 2015) |
| N/A | N/A | N/A | N/A | | |
| N/A | N/A | N/A | N/A | | |
| N/A | N/A | N/A | N/A | | |
| N/A | N/A | N/A | N/A | | |
| (Walls, 2013) | (Walls, 2013) | (Walls, 2013) | (Walls, 2013) | (Walls, 2013) | (Walls, 2013) |
| (Lo et al., 2015) | N/A | Service quality: tangible, reliability, responsiveness, assurance and empathy | N/A | Positive emotion: peaceful, relieved, happy, romantic and average | N/A | Hotel |
| (Ali et al., 2016) | Physical environment: Comfortable temperature, clean environment, impressive architecture, contemporary and coordinating colour | Interaction with service staff: Reliable, professional and providing a thorough and satisfactory service | Interaction with customers: other guests are not too loud, other guests behave well | N/A | Elated, peppy, relaxed and excited | N/A | Customer satisfaction: satisfying decision, a wise choice, enjoyable experience, the right thing to do | Hotel |
| (Balaji et al., 2017) | N/A | N/A | Perceived injustice: treated unfairly, treated wrongly, fairly dealt with | Positive emotion: Enjoyed, joy, pleasure, happiness | N/A | Positive emotion: Enraged, Incensed, furious, distressed | Satisfaction, negative WOM, repurchase intention | Hotel |
| (Ribeiro and Prayag, 2019) | Food quality: authenticity, presentation, taste freshness, temperature, availability of healthy alternatives | Restaurant Atmospherics: authentic atmosphere, aroma and scents, music quality and volume, comfortable dining area, clean environment, pleasant décor | Service quality: Staff friendliness and helpfulness, Staff knowledge of the menu, staff competency, dependability and consistency, level of personalised service, feeling special, general service level, the safety of the location | N/A | Positive emotion: excitement, positively surprise, peacefulness, joy | N/A | Customer service experience: confident, easy, flexible, preferable | Restaurant |
Appendix 3 Summary of the number of customer reviews by rating month, travelling type, and hotel

Note: the profiling presented here is based on the customer reviews included in this study and does not necessarily represent the full number of guests or the profiles of the hotels studied.
### Appendix 4 Discrete hotel emotion classifications with examples and percentage of total emotion count

| Emotion Classification | Examples                                                                                                                                         | Percentage |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| **Positive ECX**       |                                                                                                                                                    |            |
| Proud/Happy            | ‘Stayed here a couple of years ago and although there were small niggles it didn’t put me off returning again and I’m glad I did.’                          | 0.3%       |
| Joy                    | ‘This was a treat for my wife as we were celebrating our first wedding anniversary. What a choice!!’                                               | 2.0%       |
| Gratitude              | ‘…special thanks to [staff name] on the front desk for sorting me out with a taxi when my Hailo app wasn’t giving me any joy.’                           | 1.2%       |
| Contentment            | ‘We always feel very well taken care of while at [reviewed hotel name] and the staff is [sic] attentive, professional and seems to have a way of making things happen almost before you realize you need something.’ | 43.1%      |
| Delight                | ‘staff are super friendly too which adds to its aroma.’                                                                                          | 20.4%      |
| Excitement             | ‘Swimming pool is lovely and very clean perfect for a [sic] early morning swim!!!’                                                               | 0.5%       |
| Pleasant Surprise      | ‘They upgraded me, and the room was fantastic!!!’                                                                                               | 5.1%       |
| **Negative ECX**       |                                                                                                                                                    |            |
| Anger                  | ‘Breakfast ordered toast and the waiter looked at me as if i [sic] two heads.’                                                                      | 1.1%       |
| Discontentment         | ‘Parking is an issue which would be the only down side.’                                                                                         | 6.4%       |
| Disappointed/Sad       | ‘I was attracted to it through a blogger that posted beautiful photos in a room that must have been an exclusive luxury suite, nothing like what we stayed in.’ | 5.5%       |
| Frustration            | ‘Discovered a leak at base of the toilet - bit of a shock when you step into water in the middle of the night as one pays a visit - certainly awakes you from your slumber.’ | 1.2%       |
| **Ambivalent ECX**     |                                                                                                                                                    |            |
| Positive and negative coexist emotions | ‘Then we headed into the large busy bar at the front of the hotel, we were enjoying the service and the atmosphere and then this awful dance music came on - I felt like I was in some tacky bar in the mediterranean [sic] or Copper Face Jacks. Why would a busy beautiful bar in one of the most beautiful locations in Dublin need such head wrecking music.’ | 7.2%       |
| Relief                 | ‘Unfortunately work is on going [sic] but in a discrete way.’                                                                                      | 1.7%       |
| Pleasurable regret     | ‘Loved our stay but was too short!’                                                                                                               | 0.3%       |
| **Mixed ECX**          |                                                                                                                                                    |            |
| Mixed positive ECX     | ‘As we were checking out we met the Guest Relations Manager Danny, whom we met two years ago in the [reviewed hotel name] in Dubai.... who was extremely helpful then and also on this occasion. It was lovely meeting up with him again.’ | 0.6%       |
| Mixed negative ECX     | ‘Our room was chilly when we arrived and the heater (a flush-mounted ceiling fan) was noisy, slow and inefficient. We couldn’t sleep with it on, even at the low setting, and the room was cold without it. That is simply not good enough for a hotel in this price range.’ | 1.2%       |
| Neutral ECX            | ‘Breakfast was fine, nothing special.’                                                                                                            | 2.2%       |