

A STATE-OF-THE-ART REVIEW OF TOURIST DECISION-MAKING LITERATURE

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Abstract

Decision-making theories in tourism can be classified into three groups based on their underlined assumptions: rational choice, affect-driven and dual-process theories. Rational choice theories are the dominant framework in many fields including economics, political science, finance, marketing and tourism. Consumers are considered as “rational-decision-makers” who evaluate available options by rational thinking. In contrast, the affect-driven theories assume that tourists are hedonic decision-makers and their choice is influenced and guided by affective factors (i.e., emotions, feelings). Dual-process theories reconcile these two opposite approaches by proposing a dual-system of decision-making: System 1 related to automatic, emotional, non-conscious process, and System 2 involving rational thinking. This review paper provides a general picture of how tourism decision-making literature has been developed with a focus on the latest advancement, dual-system theories. Tourism marketers may find this paper beneficial in understanding tourist behaviours, in particular, tourists’ destination choice. Traditional marketing focusing only on rational factors (comparative messages) can be a dead-end approach, experiential marketing has become the new trends. By advancing our knowledge of tourist decision-making, this paper provides useful guidelines for tourism marketers in designing tourist experiences and promoting tourism destinations.

Keywords: Tourist behaviour, decision-making, dual-system, destination choice, marketing

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1. Introduction

How tourists choose a destination for their future vacation is one of the key questions in tourism research. Over the past six decades, tourism has experienced continued expansion and diversification, to become one of the largest and fastest-growing economic sectors in the world. The intense competition between

traditional and emerging tourism destinations requires tourism marketers to improve their knowledge about the tourist decision-making process. Understanding how tourists decide and plan their trips results in important implications for future product development and promotional schemes (Chen, 2003) as well as marketing strategies (Sirakaya & Woodside, 2005). There is a growing research

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base of theoretical and empirical studies on tourist destination choice and tourist decision-making over the last five decades (Smallman & Moore, 2010).

Tourism research remains dominated by the assumption of rational decision-making (Cohen, Prayag, & Moital, 2014; McCabe & Chen, 2015). The rational theories used in tourism decision-making research adopt one of three major approaches: the normative approach (utility theory), the prescriptive cognitive approach (the theory of reasoned action & the theory of planned behaviour) and the structured process approach (the choice-set model). However, rational decision-making models seem to be problematic in explaining how choices of experiential products such as vacations are made because they ignore affective factors (Jun & Vogt, 2013; Kwortnik & Ross, 2007; Lerner, Li, Valdesolo, & Kassam, 2015; Loewenstein & Lerner, 2003; McCabe & Chen, 2015).

In the 1980s, researchers started to explore how affective factors are involved in tourist decision-making (Holbrook, 1986; Holbrook & Hirschman, 1982; Litvin, 2008). People rely on their emotions when choosing hedonic products such as a pleasure vacation (Bechara, 2004; Mellers, Schwartz, & Ritov, 1999; Pham, 1998; Prayag, Khoo-Lattimore, & Sitruk, 2015; Schwarz, 2011; Zeelenberg, Nelissen, Breugelmans, & Pieters, 2008). The affect-driven theories clarify different mechanisms that affect influence consumer behaviours. The impact of emotions on consumer decision-making is explained by four influential theories including the feelings-as-information (Schwarz, 2011), the affect-priming (Forgas, 1995), the appraisal-tendencies (Lerner & Keltner, 2000) and the

feeling-as-doing (Zeelenberg et al., 2008). In addition, anticipated emotions are supposed to guide consumer behaviour. Decisions are made to pursue positive anticipated emotions or avoid anticipated emotions such as regret or disappointment (Baumeister, Vohs, DeWall, & Zhang, 2007; Mellers & McGraw, 2001).

Recently the recognition of affective influence in the consumer decision-making process leads to the call of reappraising traditional tourist decision-making models (Jun & Vogt, 2013; McCabe & Chen, 2015). Dual-system theories which incorporate both affective and rational factors may provide a better explanatory framework to explain consumer decision and choice. Dual-system theorists agree that the consumer decision-making process involves two systems. System 1 is experiential, automatic, intuitive and related to affective factors. System 2 is rational, analytic, reflective and related to rational thinking (Chaiken, 1980; Epstein & Pacini, 1999; Evans, 2006; Kahneman & Frederick, 2002; Lieberman, 2003; Strack & Deutsch, 2006). The final decision is made based on satisficing principle between two systems (Evans, 2006). The dual-system theories reflect how people make decisions by incorporating both fast and slow thinking (Kahneman, 2011). Neuroscience research support dual-system theories by providing evidence of two neural systems involved in decision-making: an impulsive, amygdala-dependent system for signalling the pain or pleasure of immediate prospects (i.e., system 1) and a reflective, orbitofrontal-dependent system for signalling the prospects of the future (i.e., system 2) (Bechara, Noel, & Crone, 2006).

Against this background, this paper aims to provide a comprehensive summary of what has been found regarding tourist decision-making research. In order to achieve the research objective, a state-of-the-art approach is employed to review imagery tourism literature (Grant & Booth, 2009). As state-of-the-art reviews tend to address more current matters and to offer new perspectives on the topic studied, the papers are then selected based on the authors' assessment of their relevance and significance to advance imagery-related knowledge in tourism (Cohen et al., 2014). The remainder of this paper is hence organised into two sections. Section 1 is to summarise the research findings related to tourist decision-making. Section 2 focuses on discussing the research gaps with purposes of suggesting an agenda for future research.

2. Findings

2.1. *Rational theories in tourism*

The rational choice theories are based on the assumption that consumers are rational decision makers and utility maximisers. This view of "consumer-as-rational-decision-maker" has been investigated from two perspectives: the macro-perspective (i.e. general models) used to study the social-psychological context and the inputs that influence individual decisions; and the micro-perspective (i.e. operational models) for better explaining actual decision-making outcomes (McCabe & Chen, 2015). From the macro-perspective, the earliest and most influential models of consumer behaviour sought to provide a systematic understanding of the consumer buying decision for tangible, manufactured products (Engel, Kollat, & Blackwell, 1968; Howard & Sheth, 1969). According to these early studies, the

decision-making process includes a series of well-defined stages: (1) recognition of need, (2) search for information, (3) evaluation of alternatives, (4) choice and (5) post-purchase (Engel et al., 1968). The entire tourist decision-making process has been similarly conceptualised as a multi-phased process: anticipation (planning and thinking about the trip), travel to the site, on-site behaviour, return travel and recollections of experiences (reflection and memory of trip) (Clawson & Knetsch, 1966). However, these macro-perspective models do not describe how consumers evaluate alternatives to make their decision. The complexity and difficulty of their operationalization have resulted in a lack of empirical support for these models (McCabe & Chen, 2015). Other criticisms of such macro-perspective models include their failure to incorporate emotional, social and symbolic influencers on consumer decision-making (Holbrook & Hirschman, 1982), as well as the social characteristics of consumer behaviour and decision-making contexts (Decrop & Kozak, 2009).

From a micro-perspective, there are three different approaches (Table 1): a normative utility approach, the prescriptive cognitive approach (theory of reasoned action and theory of planned behaviour) and the choice-set models (McCabe & Chen, 2015). The first two analyses the decision-making process as an input-output process: the normative approach considers product attributes as input and a decision as output; while the prescriptive cognitive approach uses psychological concepts (e.g. attitude, subjective norms, and behavioural control) as input and intention to purchase as the output. The third type, choice-set models, explain decisions as the result of a filtering

process (Smallman & Moore, 2010). The normative and prescriptive models focus on how optimal decisions should be made while a descriptive model (e.g. choice-set) describes how consumers make decisions in a series of steps (Tamura, 2008).

Table 1: Different rational approaches in decision-making literature

	Normative utility	Prescriptive cognitive	Choice-set
<i>Basic assumption</i>	Consumer follows a utility-maximisation principle.	Consumer behaviour is planned. The intention is the antecedent of behaviour.	Consumer follows a funnel-like process to narrow choices until the final decision is made
<i>Influential theories</i>	Expected Utility Theory (Von Neumann & Morgenstern, 1947) Characteristic Utility Theory (Lancaster, 1966)	Theory of Reasoned Action (TRA) (Fishbein & Ajzen, 1977) Theory of Planned Behaviour (TPB) (Ajzen, 1991)	Choice-set theory (Howard, 1963) Choi-set model (Woodside & Sherrell, 1977) Choice-set model (Spiggle & Sewall, 1987)
<i>Contribution</i>	Explain how consumers should make decisions based on the evaluation of product attributes or characteristics	Consumer behaviour intention is influenced by their beliefs and past behaviour.	- Describe how consumer decisions are actually made - Help marketers to define their main competitors
<i>Limitations</i>	Poorly explain consumer decisions under risk or uncertainty (Kahneman & Tversky, 1979)	- Neglect affective factors (Godin & Kok, 1996; Perugini & Bagozzi, 2001) - Do not explain unplanned behaviours (i.e., impulsive purchase)	- Simplifying consumer choices by a binary logic of selecting or rejecting a destination (Decrop, 2010). - Reasons for selecting a destination can differ considerably from reasons for rejecting a destination to the extent that actual choices may be based on a process of elimination rather than of selection (Perdue & Meng, 2006)
<i>Application in tourism</i>	Papatheodorou (2001) Seddighi and Theocharous (2002) Tussyadiah, Kono, and Morisugi (2006)	March and Woodside (2005) Lam and Hsu (2006) H. Han, Hsu, and Sheu (2010)	Crompton (1992) Decrop (2010)

Sources: Summarised by the authors

As the tourist decision-making process is unlikely to fit neatly into a single decision theory, recent research tends to apply more than a decision-making theory (Sirakaya & Woodside, 2005). For example, a number of tourism studies explain tourists' destination choice based on both the TPB and the Lancaster's Characteristic Utility theory. Tourist attitude toward a destination is calculated by the sum of the attitudes toward experiencing the destination's perceived attributes (e.g. the likelihood of experiencing each attribute) (Crompton, 1992; Yoo & Chon, 2008). Some aspects of Prospect Theory (Kahneman & Tversky, 1979) such as perceived risk and perceived uncertainty have been integrated into the TPB model to explain the formation of attitudes and behavioural control (Quintal, Lee, & Soutar, 2010).

Rational theories have been strongly criticised for neglecting affective factors (Gnoth, 1997; Loewenstein & Lerner, 2003; McCabe & Chen, 2015; Sirakaya & Woodside, 2005). There is neuroscience evident of the affective involvement in decision-making. Patients with orbitofrontal brain damage who cannot process emotional information, have severe impairment in judgment and decision-making in real-life (Bechara, Damasio, & Damasio, 2000; Damasio, 1994). The affect-driven theories in decision-making theories are discussed in the next section.

2.2. Affect-driven theories in tourism

In opposition to the view of "consumer-as-rational-decision-maker", the perspective of "consumer-as-hedonic-person" highlights the important role of affective factors in the decision-making process (Hyde et al., 1999).

Two main approaches have been identified (Table 2): the affect-as-direct-cause and the affect-as-feedback (DeWall, Baumeister, Chester, & Bushman, 2015). The affect-as-direct-cause focus on explaining different influencing mechanisms of experienced emotions at the decision moment including feeling-as-information theory (Loewenstein, Weber, Hsee, & Welch, 2001; Schwarz, 1990) affect priming theory (Forgas, 1995), appraisal tendency theory (Lerner & Keltner, 2000) and the feeling-is-for-doing theory (Zeelenberg et al., 2008). The second approach (affect-as-feedback) argues that people make decisions based on the anticipation of the decision's affective consequences (Wilson, Lisle, Kraft, & Wetzel, 1989). Important affect-as-feedback theories include regret theory (Bell, 1982; Loomes & Sugden, 1982), disappointment theory (Bell, 1985; Loomes & Sugden, 1986), subjective expected pleasure (Mellers & McGraw, 2001), and emotion-as-feedback theory (Baumeister et al., 2007).

Both the affect-as-direct-causation and the affect-as-feedback approached has provided important findings on how emotions are involved in the consumer decision-making process (Achar, So, Agrawal, & Duhachek, 2016; Lerner et al., 2015). A meta-analysis of research from these two theoretical perspectives shows that anticipated emotions may have more reliable impacts on consumer behaviour than experienced emotions (DeWall et al., 2015). The recognition of both affective and rational factors in the consumer decision-making process leads to the development of dual-system theories. This latest trend of research in decision-making literature will be reviewed in the next section.

Table 2: Affect-driven approaches in decision-making

	Affect as direct causation	Affect as feedback
<i>Assumption</i>	Experienced affect (e.g., emotions, feelings) influences consumer judgment and decision-making.	Consumer decisions are made based on the anticipation of affective consequences (i.e., anticipated emotions).
<i>Influential theories</i>	Feelings-as-information theory (Schwarz, 1990; Schwarz & Clore, 1996) Affect infusion model – AIM (Forgas, 1995) Appraisal tendency theory (Lerner & Keltner, 2000) Risk-as-feelings theory (Loewenstein et al., 2001) Feeling-is-for-doing theory (Zeelenberg et al., 2008)	Regret theory (Bell, 1982; Loomes & Sugden, 1982) Disappointment theory (Bell, 1985; Loomes & Sugden, 1986), Subjective expected pleasure (Mellers & McGraw, 2001) Emotion-as-feedback theory (Baumeister et al., 2007).
<i>Contribution</i>	Explaining different mechanisms that experienced affect can influence consumer behaviour	Consumer behaviour can be guided or shaped by anticipated emotions
<i>Limitations</i>	If the consumer has formed an appraisal-based impression of the product, the affect that they experience subsequently has a limited impact (Yeung & Wyer, 2004). Emotions do not necessarily lead directly to behavior (e.g., mood-freezing) (Baumeister et al., 2007)	Anticipated emotions are not the only determinants of participants' decisions. Consumer perception of risk and others' decisions have direct influences on individual choices independently of their mediating impact on anticipated emotions (Fong & Wyer Jr, 2003)
<i>Application in marketing & tourism</i>	Pham (1998) Chang and Pham (2013) Han, Lerner, and Keltner (2007) Prentice (2006)	Fong and Wyer Jr (2003) Hunter (2006) Chun, Patrick, and MacInnis (2007) Carrera, Caballero, and Munoz (2012) Kim, Njite, and Hancer (2013) Bagozzi, Belanche, Casaló, and Flavián (2016)

Sources: Summarised by the authors

2.3. Dual-system theories in tourism

According to dual-system theories, consumers make decisions based two distinct cognitive systems: system 1 is unconscious (preconscious), automatic, rapid, effortless and holistic while system 2 is conscious (rational), controlled, slow, effortful and analytic (Evans, 2008). A number of

influential dual-system theories include experiential and rational systems (Epstein & Pacini, 1999), the theory of intuitive and reflective judgment (Kahneman & Frederick, 2002), heuristic and analytic systems (Evans, 2006), reflexive and reflective systems (Lieberman, 2003), reflective and impulsive systems (Strack & Deutsch, 2006), heuristic-systematic model (Chaiken & Ledgerwood,

2011). The dual-system approach is supported by neuroscience evidence of two neural systems described as an impulsive, amygdala-dependent system for signalling the pain or pleasure of immediate prospects and a reflective, orbitofrontal-dependent system for signalling the prospects of the future (Bechara et al., 2006).

Table 3: Overview of some influential dual-system theories

Name of theory	System 1	System 2	Relationship between two systems
Elaboration likelihood model (Petty & Wegener, 1999)	Peripheral route related to low-effort mechanism	Central route based on relatively extensive and effortful information processing	Default-interventionist
Experiential and rational systems (Epstein & Pacini, 1999)	Experiential system related to preconscious, rapid thinking	Rational system related to logical thinking	Parallel-competitive
Intuitive and reflective judgment (Kahneman & Frederick, 2002)	Intuitive system related to affective content	Reflective system related to abstract content based on effortful thinking	Default-interventionist
Reflexive and reflective systems (Lieberman, 2003)	X-system (reflexive) related to affect and social meaning	C-system (reflective) related to further reasoning	Default-interventionist
Heuristic and analytic systems (Evans, 2006)	Heuristic process generating representations of problem content,	Analytic process deriving judgments from these representations	Default-interventionist
Reflective and impulsive systems (Strack & Deutsch, 2006)	Impulsive system operating as a fast and automatic information processing network	Impulsive system related to rule-based reasoning	Parallel-competitive
Heuristic-systematic model (Chaiken & Ledgerwood, 2011)	Heuristic system focusing on salient and easily comprehended cues derived from well-learned judgmental shortcuts	Systematic system involving careful attention, deep thinking and intensive reasoning	Parallel-competitive

Sources: Summarised by the authors

Dual-system theories differ on the role of affect and the interactions between two processes described (Evans, 2008). Firstly, affective factors are explicitly (Epstein & Pacini, 1999; Evans, 2006; Kahneman & Frederick, 2002) or implicitly (Chaiken & Ledgerwood, 2011; Lieberman, 2003; Strack & Deutsch, 2006) linked to System

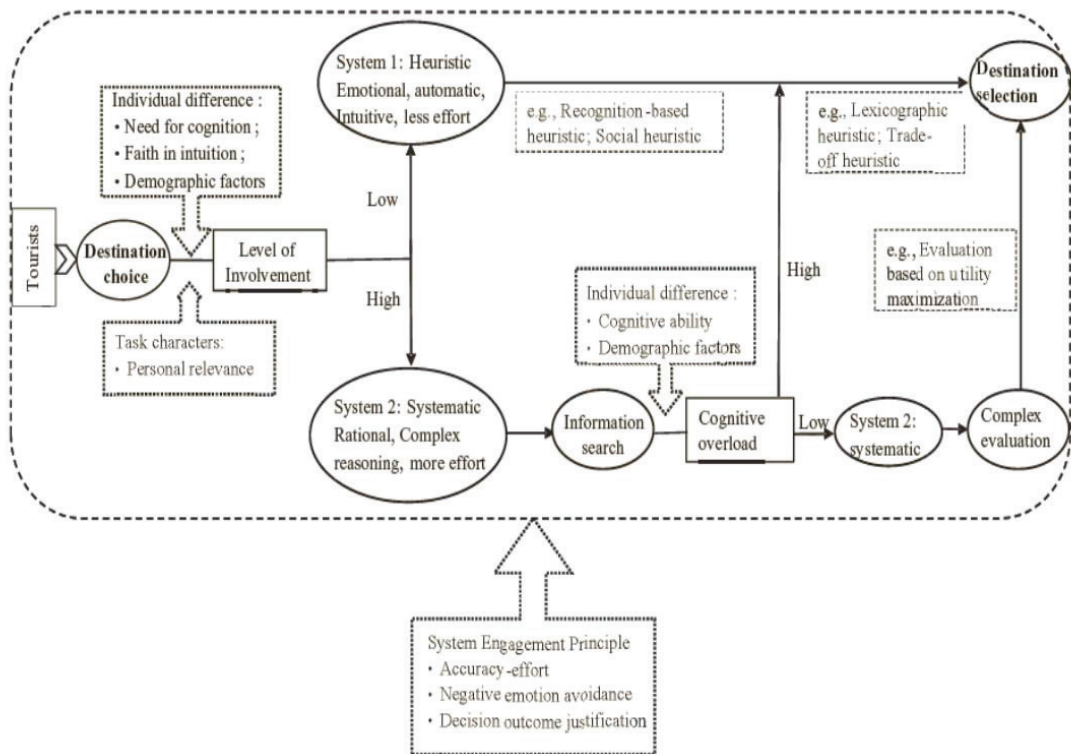
1. Secondly, dual-system theories can be distinguished based on their “default-interventionist” (Evans, 2006; Kahneman & Frederick, 2002; Lieberman, 2003) versus “parallel-competitive” (Chaiken, 1980; Epstein & Pacini, 1999) assumptions. The dual-system approach has received two main types of criticism: (1) there are multiple kinds

of implicit processes described by different theorists and (2) not all of the proposed attributes of the two kinds of processing can be sensibly mapped into two systems as currently conceived (Evans, 2008).

There is also an increasing number of marketing & tourism studies in accordance with dual-system theories. Consumer behaviour is explained by two intervening response systems in parallel: information-processing system related to conventional Cognition-Affect-Behaviour (CAB) paradigm and experiential system related to fantasies and feelings (Holbrook & Hirschman, 1982). The Consciousness-Emotion-Value (CEV) differs from the CAB paradigm by involving three phases of consumption experience: consciousness, emotions and value (Holbrook,

1986). According to the CEV model, emotions shape value in the consumption experience. The influence of both affective and rational factors in consumer decision-making process has been studied in numerous studies by Bagozzi and collaborators (Bagozzi, Baumgartner, Pieters, & Zeelenberg, 2000; Bagozzi, Dholakia, & Basuroy, 2003; Bagozzi, Gopinath, & Nyer, 1999; Bagozzi & Pieters, 1998). The Model of Goal-Directed Behaviour (Perugini & Bagozzi, 2001) and the Model of Effortful Decisions (Bagozzi et al., 2003) incorporate anticipated emotions into the theory of planned behaviours to better explain consumer behaviour. In order to better explain tourist choices, a general model of tourist decision-making has been proposed by (McCabe, Li, & Chen, 2016) (Figure 1).

Figure 1: General model of tourist decision-making



Source: Adapted from McCabe et al. (2016)

3. Discussion

The development of dual-system theories consists of the latest advancement in understanding tourist decision-making. Even though a general model of dual-system theories has been developed in tourism literature, many questions remained related to tourist involvement and the contextual factors that influence how tourists engage in one or both decision-making system as well as the role of emotions.

3.1. Tourist involvement in decision-making

The general model presented in this paper visualizes how both systems are involved in the dynamic decision-making process of tourists. It is suggested by McCabe et al. (2016) that tourist involvement play an important role in differentiate tourist engagement in System 1 or System 2. Tourists may engage System 1 which is affect-driven if their involvement is low. In contrast, if they are more likely to engage in System 2 if their involvement is high. This is because in low-involvement situation, tourists may lack of commitment to apply logic and statistics to make decisions. The level of involvement can be determined by the level of personal relevance (Jun & Vogt, 2013). However, individual differences such as the need for cognition (Cacioppo & Petty, 1982) or faith in intuition (Epstein, Pacini, Denes-Raj, & Heier, 1996) may influence tourist level of involvement in making decisions. Much further research is needed to explore how these factors influence tourist involvement which in turn determines the system employed for decision-making process. The application of experimental research can help to advance our knowledge in this area.

3.2. The role of emotions in tourist decision-making

Dual-system theories provide more support for the recognition of affective factors in tourist decision-making. There is an increasing number of studies recognising the important impact of emotions on consumer decision (Cohen, Pham, & Andrade, 2008; Hirschman & Holbrook, 1982; Holbrook, 1986; Holbrook & Hirschman, 1982). In the case of experiential products such as vacation, the connection between emotions and behaviour may be stronger and more direct than the connection between attitude and behaviour (Bagozzi, Gurhan-Canli, & Priester, 2002). emotions can impact consumer decisions directly and indirectly (Kwortnik & Ross, 2007). When emotional responses to consumer imagery are consciously experiences, they can be used as information for consumer decision-making (Greifeneder, Bless, & Pham, 2010; Loewenstein et al., 2001; Pham, 1998; Schwarz, 1990). The effects of emotions on consumer decision are more pronounced for experiential products such as vacation than utilitarian products (M. Pham, Geuens, & De Pelsmacker, 2013). In addition, emotional responses to the imagery provide a proxy to determine anticipated emotions (Gilbert & Wilson, 2007; Wilson & Gilbert, 2003, 2005). Anticipated emotions refer to affective predictions or belief (i.e. cognition) (Bagozzi, Belanche, Casaló, & Flavián, 2016; Chun et al., 2007; Hunter, 2006; Mellers et al., 1999) that guide and shape consumer decisions (Baumeister et al., 2007; Mellers & McGraw, 2001). Less conscious-experienced emotions can also engender indirect effects on consumer behaviours by mobilising analytical thinkings (Kwortnik & Ross, 2007). The appraisal

tendencies theory (Han et al., 2007) and the affect-priming theory (Forgas, 1995) provide theoretical support for the indirect route of emotional influence in the model.

Even though the role of emotions and feelings have been investigated by a number of studies, more questions remained unanswered. One of the biggest questions is related to the psychological process of emotion elicitation, future research on emotions in the decision-making process is needed to fill the gap (Lerner et al., 2015). Appraisal theories have been tested and validated in psychology and marketing literature to study the phenomenon of emotions (Ellsworth, 2013; Hosany, 2011; Johnson & Stewart, 2005; Ma, Gao, Scott, & Ding, 2013; Moors, Ellsworth, Scherer, & Frijda, 2013). However, no previous research has explored appraisal variables to explain the elicitation of emotions (Zeelenberg et al., 2008) except the study of Hung and Mukhopadhyay (2012) related to agency. Hence, appraisal theories are introduced in the next section as an explanatory approach of the complex nature and process of emotions (Ellsworth & Scherer, 2003; Frijda, 1986; Lazarus, 1991; Scherer, 1984). The second question related to the interaction between integrated emotions (emotions elicited by the decision-related factors) and incidental emotions (emotions caused by contextual factors) (Lerner et al., 2015). One sunny day may put decision-makers in a good mood which in turn influence favourably their decisions.

3.3. Contextual factors that influence tourist decision-making

The application of dual-system theories in tourist behaviour research results in the necessity of investigating the factors that

influence tourist engagement in different systems. Tourism researchers should focus on identifying the influencing factors in marketing and psychology literatures to test them in tourism context. Moreover, the relationship between these factors such as cognitive load, time constraints remained subjects to be investigated in future research. Another interesting research topic is how these two systems operate together.

3.4. Marketing applications of dual-system theories

Tourism is moving to become the experience-selling industry where experiential benefits such as fantasy, feelings and fun play important roles on tourist decision-making processing (Holbrook & Hirschman, 1982). In the experience economy (Pine & Gilmore, 1998), the job of tourism marketers is to deliver and manage tourist experiences instead of traditional job of promoting tourism products/services (Kim, 2017). Figure 2 shows that how tourist experiences offer more added value to tourism business than traditional product/service. In order to design and deliver tourist experiences, rational decision-making theories seem to be inadequate to explain tourist behaviours and decisions (Kwortnik & Ross, 2007; McCabe et al., 2016). The application of dual-system theories which include both rational factors and affective factors provides a better framework.

Tourism marketing has been also adapted to these new research findings. Traditional marketing that is designed based on rational theories try to convince potential tourists based on rational factors of tourist decision-making. However, experiential marketing which focuses on creating fantasy, enhance tourist emotions is now considered as an

Figure 2: Example of the experiences spectrum of wine

THE EXPERIENCES SPECTRUM

This diagram illustrates the process of moving from offering individual commodities, products and services to delivering compelling and engaging experiences.



Source: *Tourism and Events Queensland, 2017*

effective way to promote a destination and persuade potential tourists (Petrova & Cialdini, 2008). Emotions can be used as a criteria of market segmentation (Bigne & Andreu, 2004). Some DMOs have led the way of applying experiential marketing. For example, Tourism and Event Queensland have recently developed a number of “hero experience” programs which highlights different types of experiences that tourists can have during their pleasure vacations in Queensland. (Source: Teq website, 2017). These new marketing initiatives are developed based on the recognition of both rational and affective factors that can influence tourist decisions. The use of both comparative messages (rational factors) and experiential messages (affective factors) in tourism marketing can enhance the effectiveness of tourism marketing campaigns.

4. Conclusion

The explanatory power of rational decision-making models has been questioned

in case of purchasing experiential products such as vacations (Jun & Vogt, 2013; McCabe & Chen, 2015; Pham, 1998; Prentice, 2006; Walls, Okumus, & Wang, 2011). Tourists seek fantasy, feelings and fun in their holidays (Hirschman & Holbrook, 1982; Holbrook, 1986; Holbrook & Hirschman, 1982; Litvin, 2008). These experiential aspects, in turn, have a role to play in tourist decision-making process (Decrop & Snelders, 2004; Goossens, 2000; Kwortnik & Ross, 2007; Prentice, 2006). The development of dual-system theories offers a bigger picture of how both rational and affective factors are involved in tourist decision-making. The application of dual-system theories in tourism research consists of a significant advancement in understanding tourist behaviours and results in beneficial application for DMOs. More research is still needed to better explore how these two systems interact as well as other contextual antecedents of tourist dual-system decisions.

References

1. Achar, C., So, J., Agrawal, N., & Duhachek, A. (2016). What we feel and why we buy: the influence of emotions on consumer decision-making. *Current Opinion in Psychology*, 10, 166-170. doi:http://dx.doi.org/10.1016/j.copsyc.2016.01.009
2. Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211.
3. Bagozzi, R., Baumgartner, H., Pieters, R., & Zeelenberg, M. (2000). The role of emotions in goal-directed behavior. In S. Ratneshwar, D. Mick, & H. Cynthia (Eds.), *The why of consumption: Contemporary perspectives on consumer motives, goals, and desires* (pp. 36-58). USA: Routledge.
4. Bagozzi, R., Belanche, D., Casaló, L., & Flavián, C. (2016). The Role of Anticipated Emotions in Purchase Intentions. *Psychology & Marketing*, 33(8), 629-645.
5. Bagozzi, R., Belanche, D., Casaló, L. V., & Flavián, C. (2016). The Role of Anticipated Emotions in Purchase Intentions. *Psychology & Marketing*, 33(8), 629-645.
6. Bagozzi, R., Dholakia, U., & Basuroy, S. (2003). How effortful decisions get enacted: The motivating role of decision processes, desires, and anticipated emotions. *Journal of Behavioral Decision Making*, 16(4), 273-295.
7. Bagozzi, R., Gopinath, M., & Nyer, P. (1999). The role of emotions in marketing. *Journal of the academy of marketing science*, 27(2), 184-206.
8. Bagozzi, R., Gurhan-Canli, Z., & Priester, J. (2002). *The social psychology of consumer behaviour*. UK: McGraw-Hill Education.
9. Bagozzi, R., & Pieters, R. (1998). Goal-directed emotions. *Cognition & Emotion*, 12(1), 1-26.
10. Baumeister, R., Vohs, K., DeWall, N., & Zhang, L. (2007). How emotion shapes behavior: Feedback, anticipation, and reflection, rather than direct causation. *Personality and Social Psychology Review*, 11(2), 167-203.
11. Bechara, A. (2004). The role of emotion in decision-making: evidence from neurological patients with orbitofrontal damage. *Brain and cognition*, 55(1), 30-40.
12. Bechara, A., Damasio, H., & Damasio, A. R. (2000). Emotion, Decision Making and the Orbitofrontal Cortex. *Cerebral Cortex*, 10(3), 295-307. doi:10.1093/cercor/10.3.295
13. Bechara, A., Noel, X., & Crone, E. (2006). Loss of willpower: abnormal neural mechanisms of impulse control and decision making in addiction. In W. Reinout & S. Alan (Eds.), *Handbook of implicit cognition and addiction* (pp. 215-232). USA: SAGE publications.

14. Bell, D. (1982). Regret in decision making under uncertainty. *Operations research*, 30(5), 961-981.
15. Bell, D. (1985). Disappointment in decision making under uncertainty. *Operations research*, 33(1), 1-27.
16. Bigne, J. E., & Andreu, L. (2004). Emotions in segmentation: An empirical study. *Annals of Tourism Research*, 31(3), 682-696.
17. Cacioppo, J. T., & Petty, R. E. (1982). The need for cognition. *Journal of personality and social psychology*, 42(1), 116.
18. Carrera, P., Caballero, A., & Munoz, D. (2012). Future-oriented emotions in the prediction of binge-drinking intention and expectation: the role of anticipated and anticipatory emotions. *Scandinavian journal of psychology*, 53(3), 273-279.
19. Chaiken, S. (1980). Heuristic versus systematic information processing and the use of source versus message cues in persuasion. *Journal of personality and social psychology*, 39(5), 752-766.
20. Chaiken, S., & Ledgerwood, A. (2011). A theory of heuristic and systematic information processing. In P. Van Lange, A. Kruglanski, & T. Higgins (Eds.), *Handbook of theories of social psychology*: Volume one (pp. 246-166). UK: Sage Publications Ltd.
21. Chang, H., & Pham, M. (2013). Affect as a decision-making system of the present. *Journal of Consumer Research*, 40(1), 42-63.
22. Chen, J. (2003). Market segmentation by tourists' sentiments. *Annals of Tourism Research*, 30(1), 178-193. doi:[http://dx.doi.org/10.1016/S0160-7383\(02\)00046-4](http://dx.doi.org/10.1016/S0160-7383(02)00046-4)
23. Chun, H., Patrick, V., & MacInnis, D. (2007). Making prudent vs. impulsive choices: the role of anticipated shame and guilt on consumer self-control. In G. Fitzsimons & V. Duluth (Eds.), *NA-Advances in Consumer Research* (Vol. 34, pp. 715-719): MN : Association for Consumer Research.
24. Clawson, M., & Knetsch, J. (1966). *Economics of outdoor education*: Baltimore MD: John Hopkins Press.
25. Cohen, J., Pham, M., & Andrade, E. (2008). The nature and role of affect in consumer behavior. In C. Haugtvedt, P. Herr, & F. Kardes (Eds.), *Handbook of consumer psychology* (pp. 297-348). New York, London: Taylor & Francis group, LLC.
26. Cohen, S., Prayag, G., & Moital, M. (2014). Consumer behaviour in tourism: Concepts, influences and opportunities. *Current Issues in Tourism*, 17(10), 872-909.
27. Crompton, J. (1992). Structure of vacation destination choice sets. *Annals of Tourism Research*, 19(3), 420-434.

28. Damasio, A. (1994). *Descartes' error: Emotion, rationality and the human brain*. New York: Putnam
29. Decrop, A. (2010). Destination choice sets: An inductive longitudinal approach. *Annals of Tourism Research*, 37(1), 93-115.
30. Decrop, A., & Kozak, M. (2009). Decision strategies in tourism evaluation. In M. Kozak & A. Decrop (Eds.), *Handbook of tourist behavior: Theory & practice* (pp. 69-82). UK: Routledge, Taylor & Francis group.
31. Decrop, A., & Snelders, D. (2004). Planning the summer vacation: An adaptable process. *Annals of Tourism Research*, 31(4), 1008-1030.
32. DeWall, N., Baumeister, R., Chester, D., & Bushman, B. (2015). How often does currently felt emotion predict social behavior and judgment? A meta-analytic test of two theories. *Emotion Review*, 8(2), 136-143. doi:10.1177/1754073915572690
33. Ellsworth, P. (2013). Appraisal theory: Old and new questions. *Emotion Review*, 5(2), 125-131.
34. Ellsworth, P., & Scherer, K. (2003). Appraisal processes in emotion. In R. Davidson, K. Scherer, & H. Goldsmith (Eds.), *Handbook of affective sciences* (pp. 572-595). New York: Oxford University Press.
35. Engel, J., Kollat, D., & Blackwell, R. (1968). *Consumer behavior*. New York: Holt, Rinehart, and Winston.
36. Epstein, S., & Pacini, R. (1999). Some basic issues regarding dual-process theories from the perspective of cognitive-experiential self-theory. In S. Chaiken & Y. Trope (Eds.), *Dual-process theories in social psychology* (pp. 462-482). USA: The Guilford Press.
37. Epstein, S., Pacini, R., Denes-Raj, V., & Heier, H. (1996). Individual differences in intuitive-experiential and analytical-rational thinking styles. *Journal of personality and social psychology*, 71(2), 390.
38. Evans, J. (2006). The heuristic-analytic theory of reasoning: Extension and evaluation. *Psychonomic Bulletin & Review*, 13(3), 378-395.
39. Evans, J. (2008). Dual-processing accounts of reasoning, judgment, and social cognition. *Annu. Rev. Psychol.*, 59, 255-278.
40. Fishbein, M., & Ajzen, I. (1977). Belief, attitude, intention, and behavior: An introduction to theory and research. *Philosophy and Rhetoric*, 10(2), 130-132.
41. Fong, C., & Wyer Jr, R. (2003). Cultural, social, and emotional determinants of decisions under uncertainty. *Organizational Behavior and Human Decision Processes*, 90(2), 304-322. doi:http://dx.doi.org/10.1016/S0749-5978(02)00528-9

42. Forgas, J. (1995). Mood and judgment: the affect infusion model (AIM). *Psychological bulletin*, 117(1), 39-66.
43. Frijda, N. (1986). *The emotions: Studies in emotion and social interaction*. Paris: Maison de Sciences de l'Homme.
44. Gilbert, D., & Wilson, T. (2007). Propection: Experiencing the future. *Science*, 317(5843), 1351-1354.
45. Gnoth, J. (1997). Tourism motivation and expectation formation. *Annals of Tourism Research*, 24(2), 283-304.
46. Godin, G., & Kok, G. (1996). The theory of planned behavior: a review of its applications to health-related behaviors. *American journal of health promotion*, 11(2), 87-98.
47. Goossens, C. (2000). Tourism information and pleasure motivation. *Annals of Tourism Research*, 27(2), 301-321.
48. Grant, M. J., & Booth, A. (2009). A typology of reviews: an analysis of 14 review types and associated methodologies. *Health Information & Libraries Journal*, 26(2), 91-108.
49. Greifeneder, R., Bless, H., & Pham, M. T. (2010). When do people rely on affective and cognitive feelings in judgment? A review. *Personality and Social Psychology Review*, 15(2), 107-141.
50. Han, H., Hsu, L.-T., & Sheu, C. (2010). Application of the Theory of Planned Behavior to green hotel choice: Testing the effect of environmental friendly activities. *Tourism Management*, 31(3), 325-334. doi:http://dx.doi.org/10.1016/j.tourman.2009.03.013
51. Han, S., Lerner, J., & Keltner, D. (2007). Feelings and Consumer Decision Making: The Appraisal-Tendency Framework. *Journal of Consumer Psychology*, 17(3), 158-168. doi:http://dx.doi.org/10.1016/S1057-7408(07)70023-2
52. Hirschman, E., & Holbrook, M. (1982). Hedonic consumption: emerging concepts, methods and propositions. *The Journal of Marketing*, 46(3), 92-101.
53. Holbrook, M. (1986). Emotion in the consumption experience: toward a new model of the human consumer. *The role of affect in consumer behavior: Emerging theories and applications*, 6(23), 17-52.
54. Holbrook, M., & Hirschman, E. (1982). The experiential aspects of consumption: Consumer fantasies, feelings, and fun. *Journal of Consumer Research*, 9(2), 132-140.
55. Hosany, S. (2011). Appraisal determinants of tourist emotional responses. *Journal of Travel Research*, 51(3), 303-314. doi:10.1177/0047287511410320

56. Howard, J. (1963). *Marketing management: Analysis and planning*. New York: RD Irwin.
57. Howard, J., & Sheth, J. (1969). *The theory of buyer behavior*. New York: John Wiley.
58. Hung, I., & Mukhopadhyay, A. (2012). Lenses of the heart: How actors' and observers' perspectives influence emotional experiences. *Journal of Consumer Research*, 38(6), 1103-1115.
59. Hunter, G. (2006). The role of anticipated emotion, desire, and intention in the relationship between image and shopping center visits. *International Journal of Retail & Distribution Management*, 34(10), 709-721.
60. Hyde, K., Woodside, A., Crouch, G., Mazanec, J., Oppermann, M., & Sakai, M. (1999). A hedonic perspective on independent vacation planning, decision-making and behaviour. *Consumer psychology of tourism, hospitality and leisure.*, 177-209.
61. Johnson, A., & Stewart, D. (2005). A reappraisal of the role of emotion in consumer behavior. *Review of marketing research*, 1, 3-33.
62. Jun, S.-H., & Vogt, C. (2013). Travel information processing applying a dual-process model. *Annals of Tourism Research*, 40, 191-212.
63. Jun, S. H., & Vogt, C. (2013). Travel information processing applying a dual-process model. *Annals of Tourism Research*, 40, 191-212.
64. Kahneman, D. (2011). *Thinking, fast and slow*. New York: Farrar, Straus and Giroux.
65. Kahneman, D., & Frederick, S. (2002). Representativeness revisited: Attribute substitution in intuitive judgment. In T. Gilovich, D. Griffin, & D. Kahneman (Eds.), *Heuristics and biases: The psychology of intuitive judgment*. New York: Cambridge University Press
66. Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica: Journal of the econometric society*, 47(2), 263-292.
67. Kim, J.-H. (2017). The Impact of Memorable Tourism Experiences on Loyalty Behaviors: The Mediating Effects of Destination Image and Satisfaction. *Journal of Travel Research*, 1-15. doi:10.1177/0047287517721369
68. Kim, Y., Njite, D., & Hancer, M. (2013). Anticipated emotion in consumers' intentions to select eco-friendly restaurants: Augmenting the theory of planned behavior. *International Journal of Hospitality Management*, 34, 255-262. doi:http://dx.doi.org/10.1016/j.ijhm.2013.04.004
69. Kwortnik, R., & Ross, W. (2007). The role of positive emotions in experiential decisions. *International Journal of Research in Marketing*, 24(4), 324-335.

70. Lam, T., & Hsu, C. (2006). Predicting behavioral intention of choosing a travel destination. *Tourism Management*, 27(4), 589-599.
71. Lancaster, K. J. (1966). A New Approach to Consumer Theory. *The Journal of Political Economy*, 74(2), 132-157.
72. Lazarus, R. (1991). Progress on a cognitive-motivational-relational theory of emotion. *American psychologist*, 46(8), 819.
73. Lerner, J., & Keltner, D. (2000). Beyond valence: Toward a model of emotion-specific influences on judgement and choice. *Cognition & Emotion*, 14(4), 473-493.
74. Lerner, J., Li, Y., Valdesolo, P., & Kassam, K. (2015). Emotion and decision making. *Annual review of psychology*, 66, 799–823.
75. Lieberman, M. D. (2003). A social cognitive neuroscience approach. In J. Forgas, K. Williams, & W. von Hippel (Eds.), *Social judgments: Implicit and explicit processes* (pp. 44-67). UK: Cambridge University Press.
76. Litvin, S. W. (2008). Sensation seeking and its measurement for tourism research. *Journal of Travel Research*, 46(4), 440-445.
77. Loewenstein, G., & Lerner, J. (2003). The role of affect in decision making. *Handbook of affective science*, 619(642), 3.
78. Loewenstein, G., Weber, E., Hsee, C., & Welch, N. (2001). Risk as feelings. *Psychological bulletin*, 127(2), 267.
79. Loomes, G., & Sugden, R. (1982). Regret theory: An alternative theory of rational choice under uncertainty. *The economic journal*, 92(368), 805-824.
80. Loomes, G., & Sugden, R. (1986). Disappointment and dynamic consistency in choice under uncertainty. *The Review of Economic Studies*, 53(2), 271-282.
81. Ma, J., Gao, J., Scott, N., & Ding, P. (2013). Customer delight from theme park experiences: The antecedents of delight based on cognitive appraisal theory. *Annals of Tourism Research*, 42, 359-381.
82. March, R., & Woodside, A. (2005). Testing theory of planned versus realized tourism behavior. *Annals of Tourism Research*, 32(4), 905-924. doi:<http://dx.doi.org/10.1016/j.annals.2004.07.012>
83. McCabe, S., & Chen, Z. (2015). Time for a Radical Reappraisal of Tourist Decision Making? Toward a New Conceptual Model. *Journal of Travel Research*, 55(1), 3-15.
84. McCabe, S., Li, C., & Chen, Z. (2016). Time for a radical reappraisal of tourist decision making? Toward a new conceptual model. *Journal of Travel Research*, 55(1), 3-15.

85. Mellers, B., & McGraw, P. (2001). Anticipated emotions as guides to choice. *Current Directions in Psychological Science*, 10(6), 210-214.
86. Mellers, B., Schwartz, A., & Ritov, I. (1999). Emotion-based choice. *Journal of Experimental Psychology: General*, 128(3), 332.
87. Moors, A., Ellsworth, P., Scherer, K., & Frijda, N. (2013). Appraisal theories of emotion: State of the art and future development. *Emotion Review*, 5(2), 119-124.
88. Papatheodorou, A. (2001). Why people travel to different places. *Annals of Tourism Research*, 28(1), 164-179. doi:[http://dx.doi.org/10.1016/S0160-7383\(00\)00014-1](http://dx.doi.org/10.1016/S0160-7383(00)00014-1)
89. Perdue, R., & Meng, F. (2006). Understanding choice and rejection in destination consideration sets. *Tourism Analysis*, 11(6), 337-348.
90. Perugini, M., & Bagozzi, R. (2001). The role of desires and anticipated emotions in goal-directed behaviours: Broadening and deepening the theory of planned behaviour. *British Journal of Social Psychology*, 40(1), 79-98.
91. Petrova, P., & Cialdini, R. (2008). Evoking the imagination as a strategy of influence. *Handbook of consumer psychology*, 505-524.
92. Petty, R., & Wegener, D. (1999). The elaboration likelihood model: Current status and controversies. In S. Chaiken & Y. Trope (Eds.), *Dual-process theories in social psychology*. USA: The Guilford Press.
93. Pham, M., Geuens, M., & De Pelsmacker, P. (2013). The influence of ad-evoked feelings on brand evaluations: Empirical generalizations from consumer responses to more than 1000 TV commercials. *International Journal of Research in Marketing*, 30(4), 383-394.
94. Pham, M. T. (1998). Representativeness, relevance, and the use of feelings in decision making. *Journal of Consumer Research*, 25(2), 144-159.
95. Pine, J., & Gilmore, J. (1998). Welcome to the experience economy. *Harvard business review*, 76, 97-105.
96. Prayag, G., Khoo-Lattimore, C., & Sitruk, J. (2015). Casual Dining on the French Riviera: Examining the Relationship Between Visitors' Perceived Quality, Positive Emotions, and Behavioral Intentions. *Journal of Hospitality Marketing & Management*, 24(1), 24-46.
97. Prentice, R. (2006). Evocation and experiential seduction: Updating choice-sets modelling. *Tourism Management*, 27(6), 1153-1170. doi:10.1016/j.tourman.2005.11.008
98. Quintal, V., Lee, J. A., & Soutar, G. (2010). Risk, uncertainty and the theory of planned behavior: A tourism example. *Tourism Management*, 31(6), 797-805. doi:<http://dx.doi.org/10.1016/j.tourman.2009.08.006>

99. Scherer, K. (1984). On the nature and function of emotion: A component process approach. In Scherer, Klaus R., Ekman, Paul. *Approaches to emotion*, 293-318.
100. Schwarz, N. (1990). *Feelings as information: informational and motivational functions of affective states*: Guilford Press.
101. Schwarz, N. (2011). Feelings-as-information theory. *Handbook of theories of social psychology*, 1, 289-308.
102. Schwarz, N., & Clore, G. (1996). Feelings and phenomenal experiences. *Social psychology: Handbook of basic principles*, 2, 385-407.
103. Seddighi, H., & Theocharous, A. (2002). A model of tourism destination choice: a theoretical and empirical analysis. *Tourism Management*, 23(5), 475-487. doi:http://dx.doi.org/10.1016/S0261-5177(02)00012-2
104. Sirakaya, E., & Woodside, A. G. (2005). Building and testing theories of decision making by travellers. *Tourism Management*, 26(6), 815-832.
105. Smallman, C., & Moore, K. (2010). Process studies of tourists' decision-making. *Annals of Tourism Research*, 37(2), 397-422. doi:http://dx.doi.org/10.1016/j.annals.2009.10.014
106. Spiggle, S., & Sewall, M. (1987). A choice sets model of retail selection. *The Journal of Marketing*, 97-111.
107. Strack, F., & Deutsch, R. (2006). Reflective and impulsive determinants of consumer behavior. *Journal of Consumer Psychology*, 16(3), 205-216.
108. Tamura, H. (2008). Behavioral models of decision making under risk and/or uncertainty with application to public sectors. *Annual Reviews in Control*, 32(1), 99-106. doi:http://dx.doi.org/10.1016/j.arcontrol.2008.03.006
109. Tussyadiah, I., Kono, T., & Morisugi, H. (2006). A model of multideestination travel: implications for marketing strategies. *Journal of Travel Research*, 44(4), 407-417.
110. Von Neumann, J., & Morgenstern, O. (1947). *Theory of games and economic behavior* (2 ed.). USA: Princeton University Press.
111. Walls, A., Okumus, F., & Wang, Y. (2011). Cognition and affect interplay: A framework for the tourist vacation decision-making process. *Journal of Travel & Tourism Marketing*, 28(5), 567-582.
112. Wilson, T., & Gilbert, D. (2003). Affective forecasting. *Advances in experimental social psychology*, 35, 345-411.
113. Wilson, T., & Gilbert, D. (2005). Affective forecasting knowing what to want. *Current Directions in Psychological Science*, 14(3), 131-134.

114. Wilson, T., Lisle, D., Kraft, D., & Wetzel, C. (1989). Preferences as expectation-driven inferences: effects of affective expectations on affective experience. *Journal of personality and social psychology*, 56(4), 519.
115. Woodside, A., & Sherrell, D. (1977). Traveler evoked, inept, and inert sets of vacation destinations. *Journal of Travel Research*, 16(1), 14-18.
116. Yeung, C., & Wyer, R. (2004). Affect, appraisal, and consumer judgment. *Journal of Consumer Research*, 31(2), 412-424.
117. Yoo, J., & Chon, K. (2008). Factors affecting convention participation decision-making: Developing a measurement scale. *Journal of Travel Research*.
118. Zeelenberg, M., Nelissen, R., Breugelmans, S., & Pieters, R. (2008). On emotion specificity in decision-making: Why feeling is for doing. *Judgment and Decision-making*, 3(1), 18-27.

Website

119. Tourism and Event Queensland, 2017, retrieval at <https://teq.queensland.com/experiences/destination-hero-experiences>.