Exploring a Neuroscientific Perspective of Travel Benefits and Decision-Making

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Summary
The present commentary offers some guidance to the future direction of neuroscientific research in travel benefits and decision to travel. Travel benefits refer to the desirable outcomes from taking a vacation or pleasure trip [1]. Examples of travel benefits are health, socialization and involvement [2]. Involvement, which is a motivational variable toward travel, involves decision-making with respect to travel [3]. Decision-making is a process that involves many sub-decisions, occurring continuously from intention to deciding “where to go” and beyond [4]. Most of the time, when individuals decide to travel a particular destination, they base on contextual facts or description. Others may decide on perceptions or evaluative judgements of their prior travel experiences. Hence, decision-making process is complex and behavioural or self-report measures may not be sufficient. Although there are empirical evidence in travel benefits, there is still a lack of decision-making research in the field of tourism. Furthermore, the nexus between neuroscience and travel remains relatively under-researched.

Neuroscience methods such as Electroencephalography (EEG) and functional Magnetic Resonance Imaging (fMRI) could complement the existing behavioural methods of travel benefits. For instance, dopamine is considered a key substrate of intrinsic motivation [5] and it has immediate effects on behaviour [6]. Midbrain dopamine neurons transmit signals in response to rewarding and non-rewarding salient experiences [7]. As such, dopamine can be used as an indicator of travel experiences and behaviour. An enhanced activity within the dopaminergic value system will indicate intrinsic motivation when an individual engages in travel activities (i.e. involvement). Furthermore, increased dopamine level in striatum and prefrontal cortex is associated with positive affect and volitional action control [8].

Besides providing scientific evidence of travel benefits, neuroscience research also contributes to the decision-making process of travel. Decision-making process is an important area of investigation at the confluence of tourism, psychology and neuroscience. During the process of decision-making, an individual has to balance the costs and benefits of travel after careful deliberation. It is important to note that the choice to travel can differ in decision-making from description compared with decision-making from experience. In addition, involvement is a significant predictor of some aspects of the decision to travel, suggesting that individuals with high levels of involvement are more likely to travel abroad than those with low involvement [3].

One possible direction for future research is to examine the role of dopamine in decision-making to travel. Based on existing knowledge, there is no research that examines the role of dopamine in influencing emotions of pleasure or happiness when performing a travel decision-making task. Hence, it may be a potential research to investigate the activity of dopamine neurons in both decision-making in travel choice and behaviour, as well as subjective feelings of happiness relating to the receipt of travel benefits.

In summary, there is potential in neuroscience research to investigate the travel benefits and decision-making process. Nevertheless, self-report or behavioural measures are still needed to complement the neuroscientific data. Together, behavioural and neuroscientific data will build a complete and evidence-based travel tourism research, as well as provide a contemporary support for the health benefits and decision-making process.

References
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