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Article

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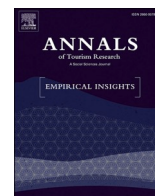
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When flow meets business: A study of mountain biking

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ABSTRACT

Flow, a state of mind that occurs when persons are deeply immersed in an activity, plays an important role in enhancing the tourist experience through a variety of activities. Historically, flow is explored from the perspective of how tourists' experience the state, while little attention has been given to how tourism businesses can facilitate flow states to improve their product offerings. This preliminary study explores a tourism business in Tasmania, Australia, whose ethos is centred around a desire to facilitate a flow state for their guests, including the design of infrastructure, guide training and the design of itineraries. The impact of these mechanisms upon guests' experiences is assessed to understand whether and how these design elements influence the attainment of flow.

1. Introduction

In recent years, there has been a shift in focus regarding the tourism experience and methods through which optimal visitor experiences can be facilitated. A sense of well-being, transformation and the phenomenon of optimal psychological states are now commonly used concepts through which researchers explore the visitor experience (da Silva DeMatos, de Sá, & de Oliveira Duarte, 2021; Huang, Wei, & Leung, 2020). One such concept that is gaining traction within the tourism literature is the concept of flow. Defined as a state of mind that occurs when individuals are deeply immersed in an activity, such that they lose track of self and time (Novak, Hoffman, & Yung, 2000), flow has been found to be a motivational factor for continuing to take part in tourism activities and a state that may facilitate a deep sense of satisfaction with tourism experiences (Ewert, Zwart, & Davidson, 2020; Zhou, Chlebosz, Tower, & Morris, 2019). Research has centred around tourists' experiences with the phenomena (da Silva DeMatos et al., 2021) and to a lesser extent, the role of the guide in facilitating flow (Chang, 2014; Hansen & Mossberg, 2017). (See Table 1.)

Researchers have suggested that optimal states, or flow, may provide a concrete means for enhancing psychological well-being (Løvøll, 2019). According to Lynch and Troy (2021), both a short-term reduction in negative emotions and an increase in positive emotions are experienced following optimal psychological states. Furthermore, Tse, Nakamura,

and Csikszentmihalyi (2021) found that people who experienced optimal psychological states on a regular basis were more likely to report higher overall well-being. In addition, flow states have been found to be a motivational factor for continuing to take part in tourism (Ewert et al., 2020; Zhou et al., 2019). Far less attention has been given to the mechanisms through which tourism businesses can facilitate a flow state. da Silva DeMatos et al., 2021, p.9) argue that "...the mechanisms and triggers of Flow in those domains are not yet fully understood, in particular, within the specific context of tourism and leisure".

Given the reported importance of flow states in tourism and the need for further research into mechanisms that induce it, the purpose of this study was to better understand the dynamics of an attempt to facilitate this optimal psychological state. Ultimately this study sought to identify factors that can help enhance the quality of a commercialised guided tour experience. Consequently, this paper seeks to highlight how tourism businesses can apply theoretical knowledge on flow states through the design and delivery of commercialised guided tour experiences that focus on flow.

2. Literature review

2.1. Defining flow

Flow is a highly enjoyable and effortless psychological state that

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Table 1
Profiles of study participants.

Pseudonym	Gender	Mountain Biking Experience	First or repeat visitor	Country of residence	Role
Interviewee CA	F	Experienced	First	UK	Ride Guest
Interviewee CO	F	Little experience	First	Australia	Ride Guest
Interviewee CR	M	Experienced	First	Hong Kong	Ride Guest
Interviewee GG	M	Moderate experience	First	Australia	Ride Guest
Interviewee IM	M	Experienced	Repeat	UK	Ride Guest
Interviewee JI	M	Moderate experience	First	Australia	Ride Guest
Interviewee KA	F	Very experienced	Repeat	Australia	Ride Guest
Interviewee LI	M	Very experienced	Repeat	Australia	Ride Guest
Interviewee MA	M	Very experienced	First	Australia	Ride Guest
Interviewee MG	M	Little experience	First	Australia	Ride Guest
Interviewee B1	M	Very experienced	N/A	Australia	Business Owner
Interviewee B2	F	Very experienced	N/A	Australia	Business Owner

occurs when individuals are deeply absorbed in an activity (Novak et al., 2000; Nusair & Parsa, 2011). The involvement that occurs during a flow state is often so deep that individuals will experience a sense of being free from self and time (Csikszentmihalyi, 1975, 2014). A nine-dimensional framework describes flows states by amalgamating both precursors and characteristics of flow: (1) *A challenge and skill balance* (i.e., flow occurs when there is a perceived balance between the demands of a task and one's abilities), (2) *The merging of action and awareness* (i.e., actions feel like they are happening automatically, and a feeling of oneness with the activity develops during flow), (3) *Clear goals*, (4) *Unambiguous feedback* (i.e., the activity provides the participant with clear and immediate criteria for a successful outcome), (5) *Concentration on the activity* (i.e., individuals experience complete concentration on the activity at hand), (6) *A sense of control over one's actions* (i.e., the activity is perceived to be entirely under an individual's control), (7) *Loss of self-consciousness* (i.e., thoughts about the 'self' disappear), (8) *Perceived transformation of time* (i.e., time is perceived as passing more slowly or faster than usual), (9) *Autotelic experience* (i.e., doing an activity for its own sake and not for the expectation of an external award) (Csikszentmihalyi, 2014).

Since its definition by Csikszentmihalyi (1975), traditional views of flow have been questioned by researchers who have found evidence for the existence of multiple types of optimal states (e.g., Houge Mackenzie, 2013). For example, flow may be different from another optimal state referred to as clutch state (Jackman, Crust, & Swann, 2020; Schweickle, Vella, & Swann, 2021; Swann, Jackman, Schweickle, & Vella, 2019). Researchers studying the integrated model of flow and clutch states have posited that while flow is an enjoyable optimal experience involving effortless attention, clutch states are reported as effortful and enjoyable only *after* an activity (Swann et al., 2019). However, while other optimal states such as clutch states may be more relevant in contexts where performance is crucial or when participants experience increased psychological pressure (such as those occurring during races), explorations of flow states appears more relevant to the recreational tourism sector.

2.2. Flow, recreation and tourism

A growing amount of research has been conducted on the existence of flow in a recreational and tourism context. For example, sport

psychology and leisure scholars have made numerous attempts at defining flow (e.g., Jackson, 1995; Sinnamon, Moran, & O'Connell, 2012), and several recent systematic reviews have been conducted on flow states in sport (Goddard, Stevens, Jackman, & Swann, 2021; Harris, Allen, Vine, & Wilson, 2021; Jackman, Dargue, Johnston, & Hawkins, 2021; Norsworthy, Thelwell, Weston, & Jackson, 2018; Stamatelopoulou, Pezirkianidis, Karakasidou, Lakioti, & Stalikas, 2018), exercise (Jackman, Hawkins, Crust, & Swann, 2019), and adventure recreation (Boudreau, Mackenzie, & Hodge, 2020). Flow states have been commonly explored in relation to mountain biking and mountain bike tourism (Amatulli, Peluso, Sestino, Petruzzellis, & Guido, 2021; Taylor, 2011; Taylor & Carr, 2021). This is an increasingly popular segment of the adventure tourism industry that enables communities with attractive terrain, amongst other critical success factors, to develop community-based sustainable tourism (Freeman & Thomlinson, 2014). As mountain bike tourism is well suited for smaller and rural communities, attempts to quantify the size and value of the market globally have been difficult (Buning & Lamont, 2020). Still, various reports have argued mountain biking growth surges in recent years (e.g., Sloss, 2021); in Australia the mountain bike market is estimated to be valued at more than \$600 million annually (AusCycling, 2021). The mountain bike tourism industry is a heterogeneous and lucrative market with individuals seeking widespread interests from high end competition to active family vacations (Buning, Cole, & Lamont, 2019) leading to above average tourism spending (Buning, Cole, & McNamee, 2016). Research indicates that flow states are likely to occur during novel or exploratory contexts such as mountain biking (Boudreau et al., 2020; Swann et al., 2019) when skill and experience match trail conditions, the nature of the trail, and their bike (Taylor & Carr, 2021).

Beyond mountain biking and within tourism, the flow state has been articulated as particularly important given its ability to incite positive emotional responses and contribute to positive tourism experiences (da Silva deMatos et al., 2021; Duerden et al., 2015; Huang et al., 2020; Pine & Gilmore, 2011; Ritchie & Hudson, 2009). Csikszentmihalyi (1975) argued that flow can facilitate an ongoing sense of enthusiasm for activities. From a business design perspective this offers great potential for tourism. Specifically, businesses that facilitate flow states are more likely to not only enhance guests' experiences and satisfaction, but also increase the likelihood that guests want to return to the activity (Boudreau, 2022), or act as ambassadors for the business (Chang, 2014).

Despite this research, tourism literature on flow states remains limited (da Silva DeMatos et al., 2021; Huang et al., 2020). Of the research that exists, the majority tends to assess individuals' experiences of flow (Alexiou, 2018; Amatulli et al., 2021; Giddy, 2020) or the role of the guide in building trust and facilitating a flow experience, particularly in the context of adventure recreation (Chang, 2014) and tourism (Hansen & Mossberg, 2017). Beyond this, there is a dearth of literature that addresses how tourism business owners may assist their guests in experiencing flow states to enrich and expand their product offerings to guests. This is surprising as its potential to assist tourism operators in providing a more satisfactory visitor experience and enhance place loyalty, particularly in nature-based tourism contexts, has been recognised (Kim & Thapa, 2018). For example, Clapp, McCauley, Karwowski, and Hancock (2021) determined how different ergonomic support may enhance office workers' ability to experience flow. There are also studies in information technology that explore the implementation of flow in games and computational skills (e.g., Basawapatna, Repenning, & Nickersen, 2013), plus work and educational contexts (Pui-Wah, 2010). The gap in understanding how tourism businesses can successfully facilitate flow provided the impetus for this study.

2.3. Recollecting flow

In addition to gaps in understanding how businesses can facilitate flow, there are also research gaps regarding methodological approaches for understanding individuals' recollection of flow. While quantitative

measurements for understanding flow have been developed such as the Flow-Short-Scale (Rheinberg, Vollmeyer, & Engeser, 2003) and the Flow State Scale-2 (Jackson & Eklund, 2002), researchers have encountered a variety of challenges when attempting to investigate flow states (e.g., Jackson & Kimiecik, 2008; Harris et al., 2021). First, absorption in one's current activity is a key characteristic of optimal psychological states (Schweickel, Groves, Vella, & Swann, 2017). Therefore, being asked about one's state of mind during an activity is thought to distract participants from the optimal psychological states that they are potentially experiencing (Harris et al., 2021). Second, optimal psychological states are relatively elusive and difficult to successfully control, even during interventions specifically designed to facilitate optimal psychological states (e.g., Norsworthy et al., 2018).

Concerns have also been raised about studies that ask participants to recall memories (Yarrow et al., 1970), particularly those related to flow, due to poor recall (Kimiecik & Stein, 1992) and recall biases (Brewer, Van Raalte, Linder, & Van Raalte, 1991) and the fleeting nature of the flow state. Previous research has demonstrated that the phrasing of interviewer questions can have a significant impact on how accurately information is recalled (Loftus, 1975, 1977; Loftus & Palmer, 1974) and that the performance of the individual may also alter recall; with more favourable characteristics recalled following successful performances (Brewer et al., 1991). In the tourism-specific context, scholars have also assessed recollections of flow: Chen, Htaik, McBush, and Chen (2017) conducted quantitative research using ten questions modified from Novak et al. (2000) which assessed the flow state when people were ending their vacation, or once they had returned home. Other researchers have asked questions related to flow using real time methods including beepers that remind participants to answer questions numerous times per day (Kimiecik & Stein, 1992). However, this method is time consuming and not necessarily conducive to leisure tourists who have paid for their tourism experiences.

In this study, rather than attempting to directly measure flow states in situ, we sought to understand fill this gap by exploring how a business had attempted to create flow experiences for guests and then to understand whether participants perceived that they had experienced a flow state. A qualitative approach was taken to elicit rich insights and subjective experiences and consequently, the following research questions guided the inquiry:

- RQ1: What strategies can tourism businesses use to facilitate flow experiences?
- RQ2: What aspects of a guided tour experience do tourists perceive to be facilitators of flow?

3. Methods

3.1. Study context: The blue Derby pods ride

The Blue Derby Pods Ride is a high-end mountain bike tourism experience that offers three-or four-day fully supported luxury guided mountain bike rides in the Derby region of Tasmania, Australia. Launched in 2017, the business utilizes the Blue Derby Trail system in North-eastern Tasmania, which is regarded as one of the world's best mountain bike destinations (Barber, 2022). Guests meet in the major town of northern Tasmania, Launceston, and then are transported to a car park at the trail head of the Blue Derby trails complex. They then ride via the trail network to the Blue Derby Pods Ride hub and 4 sleeping pods. The central hub includes a large kitchen, lounge area, bike storage and washing facility and an indoor/outdoor bathroom. The pods and hub, plus the parking area are not visible from the trail network thus a sense of privacy, immersion in the forest and surprise occurs when the pods finally reveal themselves to guests.

The entire business, including its brand slogan ("Experience the Flow"), architectural design of the pods and hub, and the itinerary of the experience was designed to facilitate flow states. Each day, guests are

guided through a segment of the 200 km Blue Derby Trail system. Each group consists of no more than 8 guests and at least two guides (called "Experience Leaders" by the business) who travel with each group to provide hands-on guiding experience. A copy of the original book on flow states by Csikszentmihalyi (1975) is also located in each of the sleeping pods.

3.2. Sampling

This project utilised an interpretivist paradigm as it was based upon the assumption that realities are subjective and socially constructed (Hansen, 2006). To ensure that this study was trustworthy, we paid attention to the four criteria set out by Lincoln and Guba (1985). To ensure *credibility* and internal validity we undertook in-depth interviews and then a participant observation approach to observe how the business ran (Decrop, 2004). To ensure *dependability* the chief researcher took notes throughout the research process such as who was interviewed and what activities were observed (Connelly, 2016). To facilitate *confirmability* the chief researcher had their field notes reviewed by the team and conducted peer-debriefing with them to prevent a singular perspective from emerging. And finally, to achieve *transferability* we have included rich contextual notes on the timing, context and location of the study (Connelly, 2016).

The study was initiated during the early months of the COVID-19 pandemic, while Australia was in lockdown. Border restrictions prevented any intrastate, interstate, and international travel from occurring, and as a result the researchers were unable to interview guests during their mountain biking experience. Consequently, Zoom was used to interview guests, guides and the business owners over video call (Scheyvens, Movono, & Auckram, 2021). To recruit guests, a convenience sampling method was utilised. The entire client database was sent emails by Blue Derby Pods Ride and asked if they were interested in taking part in a study that explored flow experiences. Guests were asked to contact the chief investigator via email if they were interested in the research, and asked to complete a consent form prior to taking part in the interviews.

Following the guest interviews and the cessation of the lockdown, two trips were made to the Blue Derby Pods Ride accommodation so that the chief investigator could visit the site and experience the tour in its entirety. This ethnographic approach allowed for proximity; the way in which the buildings, the experience and the guiding influenced the guest experience could be sensitively and intimately explored as the researcher was embedded within the tour (Willis & Trondman, 2000). Finally, following the field trips, semi structured interviews were conducted with the two business owners. This interview focused on the rationale for the design of the business, including its philosophy, architectural components, itinerary design, and guide training.

3.3. Data collection

Ten former guests were interviewed for the study. Respondents were from several locations including Scotland, Hong Kong, and Australia. In addition, the business owners who work as tour guides were interviewed for a total sample of $N = 12$. Semi-structured in-depth interviews were conducted by the first author during the month of October 2020. They lasted around 45 min and were transcribed upon completion. The interview was designed around a defined set of open-ended questions, but also adjusted, if necessary, with probing questions. This conversational style interview encouraged participants to be at ease and to talk freely about their experiences and for emergent themes to be discussed (Creswell, 2009).

Two principles underpinned the choice and style of methods employed in this study. First, interviews were chosen because they are an effective way of gaining in-depth information about how an individual felt, thought, and behaved during and following flow state. For example, participants could provide information about potential

antecedents and consequences of optimal states during interviews. Interviews are particularly valued during exploratory phases of knowledge development (Willig, 2019). Second, the interviews were carefully designed as this has been raised as a method which can influence interviewee recall (Loftus & Palmer, 1974). Two techniques were used: first guests were asked to talk about themselves and their mountain biking experience to ensure they were relaxed and comfortable and to establish rapport. This acted as an appropriate segue into asking them to describe their memories of their time at Blue Derby Pods Ride. During this time, they were invited to share photographs of their time there- a method demonstrated to assist with recall of travel experiences (Sun et al., 2014). This technique aided the interviewer in ascertaining whether the former guests' experiences were favourable or not; as with post hoc recall more favourable psychological characteristics tend to be recalled after successful performance, irrespective of the psychological state that the individuals experienced (Brewer et al., 1991). Consequently, by building up a rich understanding of former guests' experiences, the interviewee could add context to the subsequent questions on flow.

To prompt recall and assess whether guests felt that they experienced flow, guests were then asked to describe flow in their own words. They were then read a quote by Kim and Thapa (2018, p. 377) that defined flow and asked to reflect upon it. This technique encourages focussed reflection on aspects of phenomena (Kim and Thapa, 2018) and importantly, has not been found to influence retrospective reporting of experiences (Brewer et al., 1991). The operational definition that was used is as follows:

The word 'flow' is used to describe a state of mind sometimes experienced by people who are deeply involved in some activity. One example of flow is the case where a professional athlete is playing exceptionally well, and achieves a state of mind when nothing else matters, but the game, he or she is completely and totally immersed in it. This experience is not exclusive to athletes, as individuals can achieve this state of mind during travel engagement, hobbies and during work. In general, activities that lead to flow completely captivates a person for a certain duration of time. Also, when an individual is in a flow mode, time tends to stand still, and nothing else seems to matter. However, flow may not last for a long period on any particular occasion, but it may come and go over time. Essentially, flow has been described as an intrinsically enjoyable experience (Kim & Thapa, 2018: 377).

This definition was useful for those who were unaware of the terms as it allowed them to self-assess if they did experience flow. For those who were aware of the term, the technique acted as a catalyst for encouraging them to focus on the core aspects of the phenomena.

3.4. Data analysis

Following the transcription and cleaning of the data for transcription errors, reflexive thematic analysis of the interviews was conducted (Braun & Clarke, 2019). The qualitative nature of this project meant that the focus was on uncovering and giving voice to the varying opinions, attitudes and perceptions that were evident amongst participants (Leurs & Hardy, 2019). In the first tranche of analysis, the range of responses to each of the interview questions was explored. Following this, themes that emerged from the interviews, rather than responses to individual questions, were assessed. For the participant (henceforth referred to as guest) interviews, and considering observations that "no single measurement approach will be able to provide trouble-free assessments of the flow experience" (Jackson & Kimiecik, 2008, p. 395), a variety of steps were taken to alleviate methodological concerns related to recall of flow state experiences. As interviews were conducted with both guests and the owners (who also worked as guides), a comparative analysis allowed for an appraisal to be made between the design elements of the business and whether these translated into facilitating flow states for guests.

4. Findings

Following the interviews by the business owners and guests, a thematic analysis was conducted to uncover the strategies that were firstly used by the business owners to facilitate flow and, secondly to assess whether these resulted in flow experiences, as perceived by the guests.

4.1. Owner views on flow-facilitators

4.1.1. Business strategies for facilitating flow

Our semi-structured interviews with the two business owners revealed a surprising philosophy: not to mention flow to guests: "*Flow is like fight club: we never talk about flow*". Rather, elements such as business design, the visitor experience, guiding techniques, and the architecture of the pods were used to facilitate a flow state. As mentioned earlier, guests stay in pods that are connected to each other and a central kitchen and living space by elevated outdoor walkways. The design of this architecture flow was undertaken specifically to try and induce a flow state. There are no straight walls in any of the buildings and curved shapes predominate. The curved walls design sought to challenge guests and encourage different thinking. A further design feature is a large window at the back of the pods behind the bed. This was designed to give guests a sense of being immersed in nature. A further intentional design is that the bathrooms- toilets and showers can only be accessed if guests walk outside and along a curved pathway, thus encouraging guests to feel immersed in nature and to view the stars and night skies when in the shower. All these design elements were a deliberate attempt by the owners to encourage flow states:

"We never mention it, but we look for it as guides. For example, when people lose track of time, we know that they are likely to be in that state. It is like secret underground campaign to get our guests in the state." (B1)

4.1.2. Owners' approach to guide training

The owners trained their guides in the concept of flow, including how to recognise it through guests' spoken word (e.g., expressing a sense of loss of time and self) and how to facilitate it, such as finding a balance so that guests are neither bored nor frightened while riding. The owners explained that trainee guides are provided with a manual that outlines what flow is and if they wish to move up in seniority in the business, they are required to read Csikszentmihalyi's book on flow. In addition, there is a great emphasis on intuition, ensuring that guests neither experience too much anxiety nor a sense of boredom. On day 1, guests fill in a pre-trip form where they self-assess their ability. These are reviewed by the guides before the shuttle bus leaves Launceston for Derby. Then, during the bus journey, guides make conversations in the shuttle bus to build on the notes and ascertain where guests' exact abilities lie. These conversations are called "bus conversations" and guides are trained to ask questions to try and gauge what riding they have done, what scares them and what bores them. This allows guides to ascertain whether guests should be broken into two groups or ride in one group and allows for the selection of appropriate bikes. Added to this, the itinerary is flexible to meet the needs of guests, with an emphasis on making sure they feel comfortable but at the same time improve their abilities. On the final day of the itinerary, 95% of guests complete an intermediate dark blue trail. This trail is graded as dark blue and many guest would lack the skills to do this trail on the first day of their experience. However, the owners believed that due to the trust guests put in their guides, and their achievement of a flow state, most guests can complete it.

4.1.3. Owners perception of the indicators of flow

The owner and lead guide B2 was asked to describe what flow looks and feels like. His responses revealed that intuition and non-verbal cues, along with verbal cues, are all significant indicators of flow. Examples included: "*...someone behind me in flow will often make involuntary noises, while smiling.*" And: "*quiet people will high five you! They might not be very touchy feely and they get off their bike and they grab you.*" And a further

example included: “laying flat on the picnic blanket, not caring... can't even talk because mentally and physically it is such a release.”

Flow states were also described as transitory:

“Flow is like a wave, there are little peaks and troughs. At some points they might have concentration faces... they could be there for a 30 minutes section of the trail. You need a bit of anxiety... So much for me for me is retrospective in that you may not even realise it at the time.” (B2).

B2 described a situation where he felt a guest had not experienced this through picking up on his non-verbal communication and the steps he took to facilitate in response which produced a flow state:

“Had a father and son as part of a group of six and I was guiding. The son is 16 and has built up over the 3 days to build his skills up and he was starting to build up and get this smile on his face. And I know that the dad has got his level up- he was saying things like ‘I will remember this forever’ and the kid was quiet and smiling, so I know that this kid needs a bit more so rather than diverting to the pods I said to the kid I have got something else, lets keeps cruising. We cruised down and we don't normally do this, but we jumped on a public shuttle to take them to the top of the hill and try this new trail that I knew this kid was ready for, because I wasn't prepared to take this kid back [to the pods] until he was uncontrollably smiling. He was so close but he just needed a little push up to test his skills and get the flow experience.” (B2).

The owners described flow as existing at the intersection between boredom and excitement. They detailed that fear and uncertainty were major inhibitors of a flow experience and that one of their strategies to reduce fear was to allow guests to follow guides, so that they could mimic their skills. The owners also spoke of instances where they took guests on the same trail to increase their confidence levels and help induce a flow state.

The owners explained that judging fear and facilitating fear is not always easy: *“there is no way we can be 100 percent accurate and that mistakes can occur: “You can derail flow if you get it wrong... A crash can be a flow-killer - sometimes you can build it back up and it might take the rest of the ride. They then detailed the opposite as being a factor that can prevent flow: “if we have not been able to give an advanced rider enough buzz time”. Furthermore, they also described that factors outside riding could derail a sense of flow- for example some guests were unable to cope with the off- grid accommodation and lack of electricity and the owners felt that this could contribute to their overall sense of a flow state.*

4.1.4. Putting flow into business: An owners' perspective

The owners were asked to reflect on how they guide now, compared to how they have guided in the past when they worked for businesses that did not have flow as a core philosophy of their business. This is how they described the difference:

“It was guiding from A to B. Delivering the set experience, deliver the menu, delivering the options, delivery of the mountain climb. It was all exceptional because the landscape was exceptional, the food is exceptional, delivered in the operations folder. And that was the flow killer. ...” (B1).

Further, they elaborated that their former approaches to guiding did not allow for flexibility in delivering idealised experiences for different guests: *“It is a totally different mindset for and approach to a role. It has so much more purpose, we are not just delivering an A to B.”*

4.2. Guests' view of flow-facilitators

4.2.1. Guests' reaction to architectural design

Our interviews revealed that the architecture and aesthetic did in part achieve what the owners set out to achieve, by playing an important role in connecting guests to nature. It did not appear to be a critical flow facilitator, but rather an element that contributed towards guests experience of feeling highly connected to the environment:

I think you know that the fact that the pods are up in such a great location and you're immersed in nature. So, there's this idea of, you know, going out riding for the day having, having really good fun pushing yourself being tired coming back to a beautiful natural setting, being relax and unwind. One of the best things for me about the pods is the showers... Yeah, I think there's

another little flow moment right there. So yeah, you know, it's pretty good having a shower after you have ridden. You have a shower and you are looking at a big tree (Guest LI).

4.2.2. Role of the guide

The training provided to guides by the business owners appeared to have an impact; the interviews revealed guides were described as very significant ‘flow facilitators’. Nearly all respondents recounted actions by the guides that elicited feelings of flow. These actions included:

- guides verbally describing to guests what lay ahead on the trail that they were about to undertake;
- guides alerting guests to potential dangers as they moved along the trail;
- having a front and end guide with the guests placed in between; and
- guides allowing guests to ride behind the guide and ‘mimic’ their moves.

In particular, the co-creation of the tour, where guides would gauge guests' experience and instil confidence in them through their instruction and briefing on what lay ahead on the trail, was recalled by many guests. Interestingly, while many guests struggled to remember details on whether flow was discussed, the support and encouragement that they received from guides was vividly remembered: *“You know, again, the two riders that went with us.... were excellent riders. Yeah. Excellent. Teachers and people managers. They were full of giving confidence and encouraging. I don't know whether we talked about flow”* (Guest MA)."

Further examples included:

“They absolutely play a role. But I think for the mountain biking side of it, I think it just took me to a place where I didn't need to think about what I was doing, I knew that there was someone there that knew the trails, as in when I'm talking about the guide, because my travel partner didn't know the trails any more than I did. So, I think by having [B2] as the guide was absolutely important to being able to experience that flow. He wouldn't say don't stress about it, but just, well, maybe he did. But you know, you've got nothing to worry about. Because I've been watching you and you'll be doing really well. So, you know, you kind of have that faith in someone. is you that encouragement without forcing you”(Guest, CO).

It was also the unexpected actions of the guides that were recognised as contributing to a positive atmosphere:

“So, it was just the guide who was who was looking after us. And we'd all sort of got up and we have a bit of breakfast. And, and then the guide decided just before we were going to go, he decides to get on the guitar and sing us a song... it's a nice, nice little sort of positive way to start the day” (Guest, CO).

4.2.3. A manageable sense of fear

The existence of flow being located at the intersection between boredom and excitement was also mentioned by guests. They recalled that while fear could stop flow, it could also enhance flow: *“Yeah, you're on the edge. But and you know, sometimes when you're pushing it, it helps .. you're shooting past rocks and trees quickly, and, everything kind of goes away from a conscious thought process”*(Guest, LI).

Guests also described that a positive, confident mindset that is free from the distractions of home, was a major flow ‘facilitator’.

4.2.4. Mimicry and familiarity as flow facilitators for guests

Mimicry played an important role in facilitating flow:

“...you would naturally hook up with someone that was the same competence as you like, or and you try and chase them a bit. And you'd see where they were going. You'd see them in front of you. And you'd see there's no danger, you'd watch their lines and look at either choose the same line or avoid the same or avoid the obstacle that they encountered” (Guest, JI).

Familiarity with trails was a factor that was perceived by guests as helping them feel flow:

“That's another one that probably felt like riding it the second time, because there were some big jumps and things on it, but actually felt a lot more

flow on that because I knew, you know, having ridden it once before I was comfortable with it" (Guest, IM).

4.2.5. The activity of mountain biking and trail design

A theme that emerged from the interview was that guests felt the activity of mountain biking was highly conducive to a feeling of flow. This finding aligns with the work of Taylor and Carr (2021). Guests noted that the track design at Derby, particularly its long flowing tracks and berms, assisted their sense of flow. One guest explained: "The traction, the type of dirt you get, where you just get these beautifully textured berms and corners. They contribute to it." Another guest explained:

"It's a unique combination of you know, the natural settings, just so beautiful. And the trails are just exceptionally good quality. They've been designed very well, and they're maintained exceptionally well. That's unique. I think. I think that that helps" (Guest, CA).

The natural environment was also recognised as a significant factor that enhanced a feeling of flow:

"Flow is all about just manoeuvring the bike back and forth. ... You know, you switch back and forth on the slope around Rotorua and Derby and Tasmania in general, and much, much easier to get into that flow state of mind because the surfaces are nicer. ... it's a rain forest environment, which is exhilarating to most Australians because we're used to the bush. So that rain forest, feeling, the coolness, the call is exhilarating. The traction, the type of dirt you get, where you just get these beautifully textured berms and corners. They contribute to it" (Guest, JI).

4.2.6. Guests' perception of the indicators of flow

Following introduction and icebreaker questions, guests were asked to describe what flow meant to them. To many, it represented both mental and physical phenomenon- where a sense of immersion, mental challenge and control of the bike converged. Their definitions were very similar to those of the owners:

"To me, flow is a state of mind. It's a state of mind that you get into when you're connected to your, your machine, the terrain. There's exhilaration and G forces, and you feel in control. You're you receive enjoyment because of either the effort the buzz you get from exercise. ... You can get that feeling of flow, riding uphill, even... you're, you're in control, you're overcoming obstacles, that the majority of it is that wonderful feeling of that you get You feel balanced. You feel exhilarated because there's speed, you feel a little bit afraid" (Guest, JI).

"...so I know that that's just been you totally immersed in what you're doing. A little bit of a challenge, but not too much of a challenge at the stress and anxiety levels and stuff like that" (Guest, CO).

"I guess flow is, is your ability to not to connect with your kind of subconscious.... So it's like, an ability to kind of dispel conscious thought and get and be in the moment" (Guest, LI).

For a small group of guests, often those who were less experienced or not aware of the concept prior to their trip, flow was described in terms of it being primarily a physical sensation, "This the smooth, sort of effortless flow down the trail as you are on the bike (Guest, MG)." And, another client explained, "feeling like you're not fighting against it, if you like you're actually making use of it. I think that's the big thing for me is just kind of feeling like the trail works. And you're actually kind of almost not concentrating ... (Guest, IM).

4.2.7. Guests reaction to the definition: Did you feel flow on the trip at blue Derby pods ride?

Following the question that asked guests to describe flow in their own words, guests were read the aforementioned definition of flow from the work of Kim and Thapa (2018, p. 377). Once this definition was read, guests were asked whether they felt they experienced flow during their trip. All but one guests responded they felt flow while on the ride. It was often described as a transient feeling that came and went:

"Sometimes, but like you say, not consistently, not all the time, and I definitely had a few points where I just switched off, and I would lose confidence or whatever. But yeah, yeah, there were definitely points where it just,

you know, everything sort of felt right" (Guest, CA).

After hearing the definition and responding to it, guests were asked whether they had heard of the concept of flow prior to their trip. Some were regular 'flow seekers' who sought out the state in a regular basis in their lives: 'I think for us like, it's so integrated with how we live our lives' (Guest, MG). Other guests had not heard of the concept: 'I guess, flow is something that I haven't really heard that much of' (Guest, MA).

4.2.8. Frequency of a sense of flow while on the trip

Guests were asked to describe how often and when they felt they experienced a flow state. To less experienced riders, a sense of flow was often described as coming less frequently and later in the trip, after they had become more confident with their riding ability and familiarity with the natural environment.

"Because we weren't necessarily experienced mountain bike riders, we were sort of listening to all their tips about my position, body weight, and, you know, that sort of thing. And trying to use that. So, you know, when you were sort of practicing something, you probably didn't have that feeling of flow because you were concentrating on practicing what you've been told. Whereas when you get the flow feeling, I think that you feel that one and you're in control. Not trying to be in control... For me, I think it was probably on that long run at the end. When I feel comfortable with the bike I understood, you know, the, the gears and all the rest and the suspension because I'd never ridden a bike like that before" (Guest, MG).

In contrast, with the more experienced riders a sense of flow came on multiple occasions and to some, they recalled being in a flow state on day one.

4.2.9. When flow does not happen

One former guest who defined themselves as a nervous rider felt they did not experience flow at all when mountain biking; this was largely due to fear:

"That's, that's why I don't think I would, I wouldn't be capable of feeling that way. Unless I was very experienced and very familiar with the course..., I think it was the fear of a crash Yeah. I didn't want to injure myself. I don't I don't think I could experience that mindfulness or that out of body experience. I probably could never do that actually on a on a downhill mountain bike" (Guest, GG).

This guests' description of why flow may not have occurred aligned with the owners' sense of the factors that may prevent flow states from occurring.

Mistakes could also contribute to a sense of a loss of flow. One guest (IM) explained, "And I what I quite often do is if so, if there's a trail, it's a is five kilometres long and you make some mistake somewhere that interrupts that flow." Guests described situations where they 'over-thought' trails that may have been at the edge of their competence levels, which suddenly became overwhelming for them:

"I think there's competence. And I think it's sometimes it's just getting distracted by sometimes. For me quite a lot of it is overthinking it. Yep. So I'm really bad. This is quite common to some people, but I'm really bad at talking myself out of something" (Guest, CA).

Interruptions such as a loss in concentration when thinking about work, or a break in riding, were also viewed as factors that could interrupt flow.

"And then those negative thoughts, actually, bizarrely enough might have been work related for me... You know, I'm sort of thinking about something. And as soon as you've got that, then you're gonna ride like an absolute idiot and you're gonna hurt yourself. Probably because you're not concentrating" (Guest, CR).

5. Discussion

This study sought to understand how tourism businesses can apply theoretical knowledge on flow states through the design and delivery of commercialised guided tour experiences. In doing so, an important knowledge gap between how businesses can strategically use flow and

what tourists perceive as facilitators to flow was bridged (Da Silva deMatos et al., 2021). The study identified the strategies that were employed by a small mountain biking business in Tasmania, Australia and then assessed whether these strategies actually resulted in a sense of flow amongst guests. The findings suggested that actions taken by businesses can result in guests feeling that they have experienced a flow state. For example, we found that the actions by guides often resulted in direct impacts such as a sense by guests that they were experiencing flow. Guides leading the way along the trails, while paying close attention to each guest's skills and risk tolerance, also played a major role in facilitating flow. As described by the business owners, this high level of attention to guests' needs was a skill that they sought to train their new tour guides in. The intuitive nature of guides and their attention to non-verbal cues also appeared to directly result in guests feeling they were experiencing flow states.

A further action that businesses can take is the selection of activities that match the skill level and interests of guests. Our data suggested that mountain bike guides' selection of trails that matched the experience, technical ability and riding preferences of guests (e.g., cross-country, gravity, flow, technical trails) played an important role in facilitating a sense of flow. This adds depth to the work by Freeman and Thomlinson (2014) who argued that trail design is a crucial factor in successful mountain bike tourism development; our study revealed that mountain biking trail design appears to induce a sense of flow amongst guests.

This research demonstrated that actions by business owners also had more subtle, indirect impacts upon guests. For example, the architectural design of the built infrastructure in which guests stayed and the natural environment around them was not as much a flow facilitator, but rather an element that complimented the nature-based tourism experience and kept the guests in a mountain bike mindset. This is a little-researched area and further research is needed to explore the role that both nature and built infrastructure play in assisting the perception of a flow state.

In addition to contributing to the literature on how tourism businesses may facilitate flow states, the findings also contribute to the broader literature on flow. Contrary to the findings of Taylor and Carr (2021), some of the mountain bikers studied here actually sought out flow experiences in their daily lives and who are termed herein as 'flow seekers'. These respondents tended to report getting in a flow state earlier on in the trip. This is possibly because the entire experience was less daunting to these individuals, who had greater prior personal experience in mountain biking. Conversely, the 'flow novices' did not tend to report being in a flow state until later in the trip- after they had become more accustomed to and immersed in the tour experience.

Finally, this was a study that relied on individuals' recollection and self-identified assessment of the existence of a flow state. It differs to many previous studies that are conducted in situ and in a quantitative manner and its approach has allowed for rich insights into the impact that business strategies have upon the experiences of its guests. Further research is needed to quantify the longitudinal impacts of this approach to guiding. A particular focus could be placed on explorations into how this approach affects place attachment, satisfaction, and ambassadorship of destinations, particularly when compared to traditional, educational focused guiding techniques used in tourism.

6. Conclusion

We sought to understand whether measures taken by a business to induce a sense of flow, can transfer into guests' feeling that they experienced the phenomena. The role of the guide, complemented by a distinctive natural environment, and an activity conducive to a sense of flow, all emerged as significant factors that contributed to many guests feeling that they had experienced flow. However, the study was not without its limitations. Data collection was limited as it began during the COVID-19 pandemic, and lockdowns prevented real time in-situ interviews of guests. The study was also limited to one business and

further research is warranted to explore the phenomena in different contexts. Our study sought to overcome limitations related to recall issues, by allowing guests to use photos of their trip to prompt memories, and by asking specific details about the experience. However, further research is needed to understand how guests perceive the actions of tourism businesses as facilitating flow in real time, in situ and in non-mountain biking contexts. It is also worth noting that our participants were largely white, middle-aged people. Further research is needed to explore how the cultural background may influence experiences of flow – this has been previously noted by Karasakal and Albayrak (2022). Future work may also seek to quantify the range of opinions that were identified, using detailed statistical analysis.

Despite limitations, the study revealed a variety of insights which may be of interest to tourism operators. It highlighted how flow may be facilitated, from the design of the itinerary, the training of intuitive and sensitive guides and the management of group dynamics and individual experiences. In particular, the research demonstrated the importance of the role of the guide in understanding guests' background including their experience levels related to the tourism context that they are engaging in, along with any fears they have about it. It demonstrated how, in the context of mountain biking, the opportunity for guests to mimic the riding techniques of the guides can assist in a sense of flow being achieved. It also highlighted the importance of guides paying close attention to verbal and visual cues offered by guests during their experience. Further, it illustrated that the context within which the tourism activity takes place is also significant; trail design and the integration of the product offering with the natural environment can facilitate a sense of flow. Conversely, this study also revealed barriers to flow businesses should consider, including a sense of fear and a loss of concentration. These can be avoided by guides ensuring that the length and level of the experience is not too onerous and length in terms of time. Importantly this study demonstrated the strength of the feeling of flow in terms of eliciting highly memorable experiences for guests. This approach to guiding challenges approaches such as those espoused by Ham and Weiler (2004), as rather than focussing on thematic education, its focus is squarely on the psychological state of the guest. As tourism operators seek to set themselves apart from each other, this approach offers much potential for businesses wishing to achieve a unique selling proposition.

Declaration of Competing Interest

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