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## **Title Page**

### **Conceptualising trust as a mediator of pro-environmental tacit knowledge transfer in small and medium sized tourism enterprises**

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## **Conceptualising trust as a mediator of pro-environmental tacit knowledge transfer in small and medium sized tourism enterprises**

### **Abstract**

This conceptual paper adds to the theoretical exploration of inter-organisational pro-environmental knowledge transfer in small and medium sized tourism enterprises (SMTEs). It does so by focusing on the role of trust, a concept which has received only scant attention in this context. Drawing on theoretical and empirical research, we argue that the willingness of SMTE managers to engage in the transference of pro-environmental tacit knowledge is based on their intrinsic and extrinsic motivations, coupled with the perceived trustworthiness of both the message and social actors involved. It remains a challenge for SMTE managers to receive, absorb and respond to appropriate pro-environmental knowledge, based on organisational needs.

The paper makes an important contribution to the work on pro-environmental knowledge transfer in tourism by proposing a model of four key antecedents of trust in the knowledge transfer process – self-efficacy, social norms, credibility of knowledge source and social capital between actors. We identify a future research agenda including the need to assess the weighted impact of each antecedent of trust; establish the influence of tourism networks on trust formation and development; and explore if peer perception intervenes in tacit knowledge transfer between pro-active and reactive SMTE managers.

**Key words:** Pro-environmental knowledge transfer, trust, trust-based decisions, sustainability, small and medium sized tourism enterprises.

**Word Count:** 9783

## Introduction

This conceptual paper considers the under-researched, focal theme of trust as a mediator of pro-environmental tacit knowledge transfer in small and medium sized tourism enterprises (SMTEs) (Jaakkola, 2020). While trust is an emerging feature of debate in sustainable tourism, it has rarely been the subject of systematic research and it remains a diluted concept in studies on the importance of social capital in tourism development (Nunkoo, 2017). Equally, while it is encouraging to note the increasing research attention to trust in tourism, there are few attempts to link it explicitly to knowledge transfer, good governance of networks, and business relationships (Czernek and Czakon, 2016). Indeed, trust in these contexts seems to have been taken for granted by tourism researchers compared to other fields such as sociology and political science (Nunkoo, 2017).

This paper provides a theoretical contribution by conceptualising how trust informs SMTE managers' decisions to engage in the transfer of pro-environmental tacit knowledge. Drawing on Mayer et al.'s (1995) definition of trust, specifically the willingness to be vulnerable, this research presents a conceptual model of four key antecedents of trust-based decisions set within tourism networks (Cooper, 2015). We underline the crucial role that trust plays within these groupings, the importance of personal relationships and the social embedding of SMTEs within them to facilitate pro-environmental knowledge transfer partnerships. Researchers concur that while difficult, the effective transfer of pro-environmental tacit knowledge among individuals and organisations is crucial for competitiveness (Del Chiappa and Baggio, 2015), enhancing stakeholders' perceptions of the organisation (Teng et al., 2018), and satisfying the personal goals of pro-environmental orientated SMTE managers (Kornilaki et al., 2019).

We build on relevant research in tourism-specific contexts such as trust in sustainable tourism practice, implementation, policy formation and governance (Nunkoo and Gursoy, 2017), which influences SMTE managers' perceptions of, and behaviours toward, pro-environmental knowledge. The research also contributes to further understanding the process of trust development between tourism collaborators (Sun et al., 2020) and acknowledges the corresponding impact of uncertainty and vulnerability in such trust formation (Williams and Baláž, 2020). These insights highlight contextual challenges to the acceptance and adoption of pro-environmental knowledge at the SMTE level. Specifically, there remains concern that while sustainable development ideals are espoused by SMTE managers (Garay et al., 2019), there is a need to be *willing* to trust and accept new knowledge (Van der Werff et al., 2019) to implement pro-environmental knowledge and practices to achieve sustainability within the tourism sector.

We postulate that trust of both the knowledge and the knowledge source are key mediators in knowledge transfer in tourism (Higuchi and Yamanaka, 2017) and cumulatively these inform a manager's pro-environmental intentions and behaviours. This requires SMTE managers to discriminate not only between sustainable knowledge sources, they must also assess and trust the credibility of these sources (Buys et al., 2014). This research also considers the mediating influence of inter-personal and inter-organisational social capital on the knowledge transfer process (Liu, 2018). Specifically, the model contends that successful knowledge transfer in tourism necessitates both rational and relational trust of the knowledge source (Zach and Hill, 2017). Within SMTEs however, limited expertise and resources place stress on the success of knowledge transfer. Moreover, actors may lack prior

experience and absorptive capacity in knowledge transfer and use (Cohen and Levinthal, 1990; Thomas and Wood, 2014). Equally, smaller organisational scale may enhance SMTE practitioners' willingness to trust, based on the degree of social capital a collaborating partner can exercise (Nahapiet and Ghoshal, 1998).

This paper begins by analysing challenges to knowledge management in tourism. It continues by exploring SMTE managers' willingness to trust pro-environmental knowledge before proposing a model which identifies four key antecedent conditions of said trust. We acknowledge different perspectives on this decision-making process and the challenge of uncertainty when embracing and integrating pro-environmental knowledge in SMTEs. The paper concludes by introducing potential themes for further research.

### **Challenges to the transfer of pro-environmental tacit knowledge in tourism**

The efficacy of knowledge management (KM) is predicated upon an organisation's capability to create, curate, transfer and leverage information assets. This equates to the absorptive capacity of organisations to process and action new knowledge (Cohen and Levinthal, 1990). In tourism, this process often occurs in networks of organisations which can be based either on destinations or functions (such as value chains). Such networks support inbound open innovation where SMTEs build upon existing internal knowledge stocks through exploration and adoption of pro-environmental tacit knowledge residing in external yet knowledgeable peers (Singh et al., 2021). Here, the effectiveness and strength of a network is determined by social cohesion and the extent to which organisations are embedded within the network (Reagans and McEvily, 2003). In turn, the successful transfer of knowledge both within and between networks requires antecedents of trust and cooperation amongst network members (Czakon and Czernek, 2016; Williams and Baláž, 2020).

Within these networks, the transfer of pro-environmental knowledge in SMTEs faces two key sets of barriers. The first relates to the nature of the tourism sector itself, whilst the second relates to the nature of knowledge transfer within and between SMTEs. Taking the tourism sector first, it can be argued that the characteristics of the sector militate against the successful application of KM, and in particular knowledge transfer (Cooper, 2018; Czernek, 2017). For example, a transient and seasonal workforce limits organisational learning whilst the de-skilling of the workforce diminishes the aspiration to be innovative. In addition, not only is the tourism product fragmented across myriad providers, but also its varied contextualisation reduces the ability to transfer knowledge between contexts. The literature also suggests a widening gap between knowledge assets and the tourism sector's ability to use knowledge innovatively (Garay et al., 2017). For instance, in the private sector, de-centralised ownership structures reduce the sense of shared commitment across the sector, whilst for government, fragmented tourism policies limit transfer of information between destinations.

Tacit knowledge is often more common in SMTEs than explicit knowledge, and this creates the second barrier to the transfer of pro-environmental knowledge in tourism. There is evidence to suggest that tourism organisations, particularly SMTEs, leverage collective knowledge through their tacit knowledge stocks with limited use of explicit knowledge sources (Hjalager, 2010; Nonaka and Takeuchi, 1995). Yet, explicit knowledge transfer between known collaborators is easier than tacit knowledge transfer, as explicit knowledge

is codified and made relevant to the recipient (Becerra et al., 2008; Cavusgil et al., 2003). In contrast, tacit knowledge transfer is more complex and can be likened to the transfer of knowledge between master and apprentice - the knowledge is not codified; rather it is highly personal. Identifying and transferring appropriate tacit knowledge is therefore increasingly recognised as an essential part of the successful management of sustainable practices in SMTEs for two reasons (Font et al., 2016; Garay et al., 2017). Firstly, the technical narrative in explicit pro-environmental knowledge limits the reach, acceptance and impact for SMTEs and secondly, SMTEs have limited resources and capabilities to create and codify new pro-environmental knowledge.

Pro-environmental knowledge constitutes two inter-linking elements: knowledge about environmental impacts and their causes and secondly knowledge pertaining to actions that minimise negative environmental impacts (Juvan and Dolnicar, 2017). A key consideration for SMTE managers when absorbing pro-environmental knowledge is the nature and credibility of the knowledge source (Kim and Stepchenkova, 2020). This is exacerbated by the technical complexity of the environmental issues themselves (Cainelli et al., 2015; Czernek, 2017) – take for example the complex science of climate change. The lack of immediacy and indirect experiences of these issues lead many SMTE owners to dismiss global environmental disputes as narrow scientific concerns (Buys et al., 2014). The authors also suggest an over-reliance on scientific models and expert judgment to explain particular phenomena. Buys et al. (2014) further suggest the use of experts engenders a deficit of understanding, proliferated by a misplaced assumption of knowledge in the audience. This chasm of knowledge between experts and intended audience evolves into antagonism, whereby lay knowledge sources are considered inferior. Thus, inertia follows and the management of sustainability in SMTEs stays bounded to the familiar rather than the unfamiliar (Sampaio et al., 2012).

The deteriorating transfer of knowledge between scientific institutions and the tourism sector also limits sustainable action in SMTEs (Campbell, 2011) and is compounded by SMTEs' limited resources and ability to create new sustainable knowledge, absorb and apply it (Garay et al., 2019; Russo and Perrini, 2010). Here, triadic constraints of time, finance and understanding are cited as barriers; indeed, Roux et al. (2006) emphasise this as *the* challenge of sustainable knowledge management.

Attempts have been made to explore these issues in SMTEs. For example, Garay et al. (2017) examined how SMTEs acquire sustainability information. Whilst the findings indicate a process, they fail to explore the mediating nature of tacit knowledge in absorptive capacity and environmental action. Building on Garay et al. (2017), Martínez-Martínez et al. (2018) asseverate knowledge agents as the conduit to updated environmental knowledge for competitive gain. Yet their study limits investigation into the level of sustainable understanding, acceptance and dissemination of environmental knowledge within other agents (employees). Theoretical insights to the barriers to pro-environmental knowledge transfer have also been explored by, for example Kornilaki et al. (2019), who applied aspects of Social Identity Theory to explain environmental behaviours in SMTEs. They found that environmental behaviours of SMTE owners are mediated by perceptions of efficacy and social acceptance. These findings confirm that effective tacit knowledge transfer is highly personal and takes place within social contexts (Boiral, 2002) such as “green committees” (Roux et al., 2006). Russo and Perrini (2010) refer to these committees as inter-stakeholder relationships;

working across and between hierarchies, exploring environmental strategies and evaluating practices where knowledge transfer is less about process and more about social relationships.

Clearly then, the nexus between sustainability and knowledge is deeply rooted in personal experience, ideals, values and beliefs (Russo and Perrini, 2010). Arguably, levels of acceptance and understanding of pro-environmental knowledge are also mediated by these characteristics. In support, Holste and Fields (2010) argue that any future use of tacit knowledge depends upon the individual's affiliation and extent of positive relations with the organisation and its members.

### **Methodological approach**

To ensure this conceptual paper adheres to academic rigour, we used Jaakkola's (2020) model-based research framework. First, this analytical approach required inspection of the contributory associations and mechanisms at play (Delbridge and Fiss, 2013). Secondly, we explored the literature to identify the novel connections between existing constructs (De Brentani and Reid, 2012; Fiss, 2011), in this case trust-based knowledge transfer. Thirdly, we developed a conceptual model based on theoretical propositions to explain the relationships between constructs (MacInnis, 2011). Finally we debated the model to further understand the sequence of events that lead to an outcome (Jaakkola, 2020). Our position is derived from an examination and exploration of the relationship between pro-environmental knowledge, trust and tacit knowledge transfer set within the tourism context (Garay et al., 2019; Higuchi and Yamanaka, 2017; Yamagishi, 1986). However, we strongly support the contention that the advancement of further research in trust within the tourism sector necessitates firstly, returning to the theoretical conceptualisations of trust before situating them within a tourism specific context (Saunders et al., 2015). Secondly, we acknowledge cross-disciplinary insights are required to facilitate deductive reasoning (MacInnis, 2011).

To explicate the relationships between these existing constructs our conceptual model (Figure 1) offers a new theoretical lens based upon the fundamental position that tacit knowledge transfer in tourism networks necessitates interaction between two or more actors and that the outcome of such interaction is informed by the strength of relations between parties (Cooper, 2018; Shaw, 2015). This focus complements the shift in scholarly research in the role of trust in tourism from a transactional to a relational perspective (Isaeva et al., 2020).

Fundamentally, trust is a psychological perception (Nunkoo and Gursoy, 2016) and the absence or presence of trust between SMTE actors has a direct influence on knowledge transfer behaviours (McTiernan et al., 2019). By emphasising the importance of the willingness to trust, our theoretical adaption builds on Van der Werff et al.'s (2019) position that trust is a self-regulatory process requiring active participation in pro-environmental behaviours. We also draw upon the psychological uncertainty of engaging in pro-environmental decision making (Roux et al., 2006; Russo and Perrini, 2010). In particular we consider Williams and Baláž's (2020) assertion that both cognitive and affective trust informs the behaviours of SMTE managers. Finally, we consider the socio-cognitive processes and social norms that lead SMTE managers to seek out, absorb and transform an organisation's pro-environmental tacit knowledge (Garay et al., 2017).

In summary, our model delineates the relationships, causal linkages and moderating conditions that impact the decision-making process and proposes an explanatory roadmap (Figure 1). The next section presents the context and integrates the aforementioned calls for further research.

## **Theoretical perspectives**

### **Trust based decisions – Exploring the knowledge transfer gap**

As this paper focuses on the willingness of SMTE managers to make a trust-based decision, psychological and behavioural perspectives are considered. Specifically, we propose that the motivations and actions of individuals and organisations are based on their own beliefs, social norms, trust of knowledge sources and the strength of existing relationships impact the willingness to collaborate in pro-environmental knowledge transfer (Kornilaki et al., 2019; Nunkoo, 2017; Rousseau et al., 1998). Drawing on recommendations of Maak (2007), we place SMTE managers central to the advancement of a tacit knowledge transfer as studies note that SMTE managers' pro-environmental values have a direct influence on environmental sustainability in the sector (El Dief and Font, 2010; Han, 2015; Kornilaki and Font, 2019). Such trust facilitates the engagement with both internal and external stakeholders (Jang et al., 2017). Trusting relationships with external stakeholders allow responsible SMTE managers to consider the impact of their environmental actions on the broader community and consider these needs when formulating pro-environmental strategies (Epstein and Buhovac, 2014). Such relationships can be strengthened between partners who share integrity-based social norms promoting adherence to pro-environmental behaviours (Miller et al., 2010).

We prescribe that SMTE managers follow trust-based decisions that are conscious of external perceptions of their business's ethical values, and by extension, their trust in the organisation. These psychosocial conditions can directly influence external stakeholder's opinions of business behaviours and attitudes (Carroll and Buchholtz, 2008). Additionally, trust between responsible SMTE managers and internal stakeholders strengthens SMTE managers' ability to convince and motivate employees to recognise the importance of pro-environmental behaviours and adopt daily practices to achieve social and environmental goals (Alonso and Ogle, 2010). Cumulatively, these trust-based actions with internal and external stakeholders demonstrate altruistic, pro-environmental values which are pivotal to the perceptions of trustworthiness of the SMTE manager. Therefore, we suggest that the presence of such trusting relationships increases the willingness of SMTE managers to engage in pro-environmental knowledge transfer.

The nature of trust is contested by a variety of disciplines (Kelliher et al., 2018) and though many have attempted to develop a universal definition, no consensus is agreed (Molina-Morales et al., 2011; Nunkoo, 2017; Rousseau et al., 1998). Nevertheless, common phrases such as "willingness to be vulnerable" (Mayer et al., 1995) and "willingness to rely on another" (Doney et al., 1998) are often cited. At its core, trust is an expectation concerning the intentions and behaviours of others (Becerra et al., 2008). We purport that SMTE managers' willingness to trust others must be considered a lubricant to co-operation for mutual exchange. This resonates with the contention of Mayer et al. (1995) that trust is the willingness to be vulnerable to the behaviours and decisions of others. This willingness is a



volitional act requiring the parties to be motivated, based on their cognitive processes, to risk exposing their vulnerabilities (Van der Werff et al., 2019). Importantly, this does not suggest that trust is a risk-taking behaviour, rather trust is the willingness to take a risk and such willingness to risk informs a SMTE manager's motivation to trust others in pro-environmental tacit knowledge transfer (McTiernan et al., 2019). Supporting this, Holste and Fields (2010) submit that a willingness to trust should be interpreted as a continuum; reflecting nuances naturally found in inter- and intra-personal relations. With this in mind, Van der Werff et al.'s (2019) study is noteworthy as it asserts that both the willingness and motivation to trust is a function of two variables of propensity to trust; 'trust goal setting' and 'trust regulation'. Based on intrinsic and extrinsic needs, the contextual decision to trust an actor is influenced by the motivations to expose vulnerabilities to the actor and their perceptions and experiences of the relationship in question: 'trust goal setting'. Once an actor achieves such trust motivation, the relationship will evolve based on 'trust regulation', the motivation and effort required to build and maintain such trust (Van der Werff et al., 2019). This suggests that the willingness and decision of SMTE managers to trust an actor in pro-environmental tacit knowledge transfer is both complicated and contextual as motivations are influenced by their personal values.

Notwithstanding, Gifford (2011) argues that trust is fragile and pro-environmental tacit knowledge transfer can be easily damaged if, for example, scientists exaggerate, or underestimate say, the impact of climate change. Supporting this perspective, Williams and Baláž (2020) contend that trust can act as a remedy to risk and uncertainty. Building on (McKnight and Chervany, 2001) model of trust development in tourism, Williams and Baláž (2020) suggest that uncertainty directly informs SMTE managers' trust in institutions and indirectly counsels their beliefs and attitudes which cumulatively impact intentions and behaviours. The purpose of presenting these alternative perspectives is not to favour one over another. Rather, by doing so we consider the willingness of SMTE managers to make trust-based decisions from several outlooks. Collectively, the above perspectives emphasise the importance of personal values, motivations, attitudes and behaviours to pro-environmental measures and these, based on intrinsic and extrinsic motivations, are key influences in the decision to engage in pro-environmental knowledge transfer.

Thus, we return to positioning trust as both a psychological and behavioural phenomenon. This results in a two-fold challenge for SMTE managers engaging in pro-environmental tacit knowledge transfer. First, maintaining an equilibrium between these constructs, and second, applying this equilibrium to the complexities of sustainability knowledge and trust-based decisions. It is our proposition that trust intervenes in the decision to engage in pro-environmental tacit knowledge transfer in SMTEs. These decisions are made in conjunction with antecedents of trust – self-efficacy; social norms; credibility of knowledge source and social capital (see Figure 1). We see these as a combination of psycho-social elements, that is both context dependent and asynchronous. Arguably, maintaining and fostering these antecedents will minimise resistance to the transfer of pro-environmental knowledge. In extending the determinants of inter-organisational knowledge transfer to the management of psycho-social conditions of trust-based decisions, we argue that it is possible to better understand how SMTE managers receive, absorb and apply pro-environmental tacit knowledge. In the following section, each antecedent is examined and applied to the specific tourism context where nuanced barriers and enablers to tacit knowledge transfer in tourism are evident.

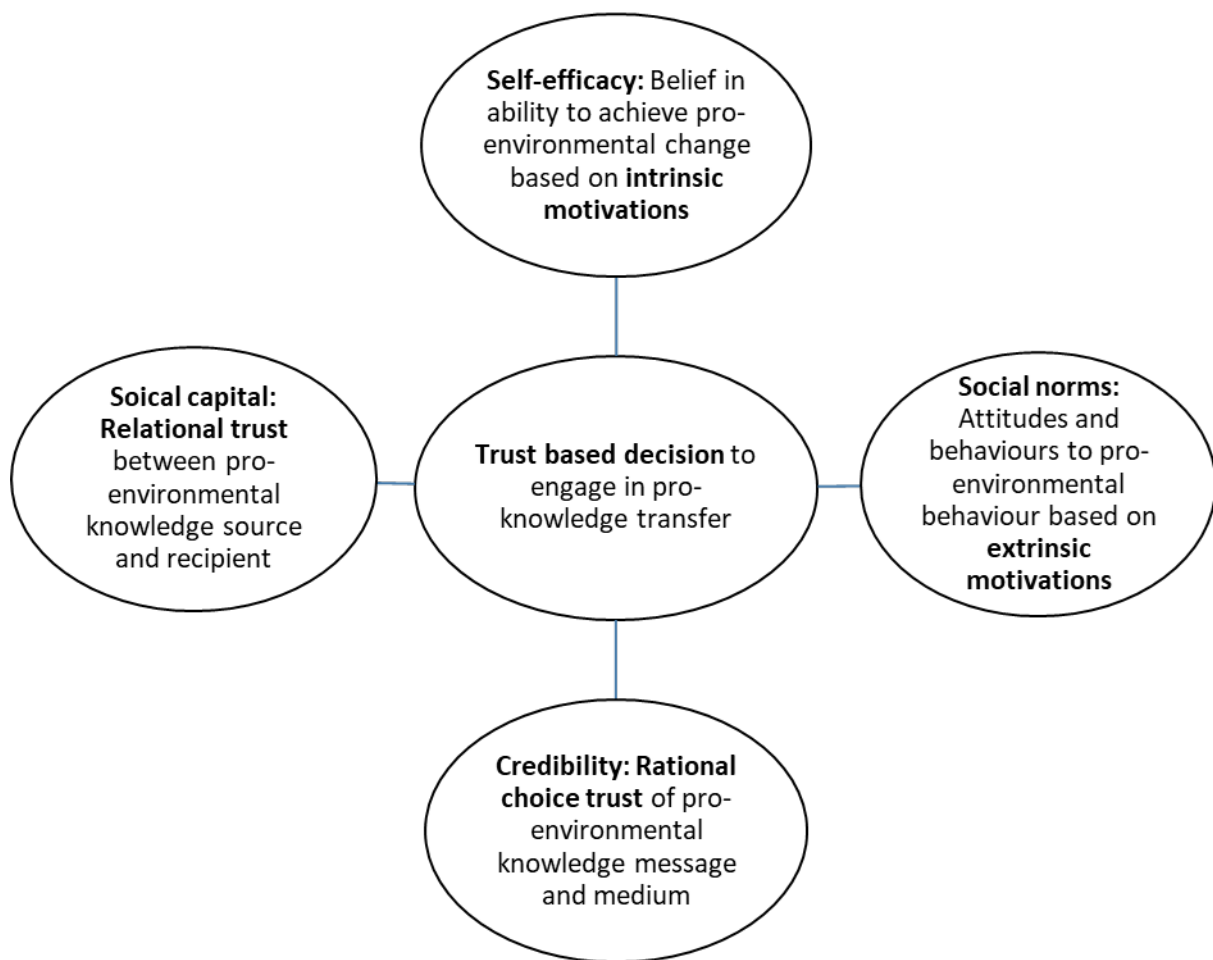


Figure 1 A model of antecedent conditions for trust-based decisions to adopt pro-environmental tacit knowledge

### Antecedents of trust

**Self-efficacy:** Belief in ability to achieve pro-environmental change based on intrinsic motivations

The model (Figure 1) highlights the blurring of personal and work values where SMTE managers not only desire to engage in pro-environmental behaviours but actively seek opportunities to access knowledge (Kim, 2020). To this end, self-efficacy is an important determinant in the adoption of pro-environmental behaviours (Kornilaki et al., 2019; Teng et al., 2018). In their study of pro-environmental behaviours in museums, Han (2015) suggests that self-efficacy is one of four cognitive factors that inform pro-environmental intentions, the other factors being environmental concern, environmental awareness and, importantly, pro-environmental knowledge. The literature also contends that self-efficacy, or the individual's belief that they can produce specific achievements (Chan et al., 2007) such as tacit knowledge transfer, acts as an enabler of a pro-environmental agenda (De Groot and Steg, 2009). Self-efficacy as a cognitive variable, coupled with a positive anticipated effect as an

affective factor, not only increases the willingness of the SMTE manager to embrace pro-environmental knowledge, but we argue such an intrinsic motivation stimulates affect-based trust between potential knowledge transfer actors. Furthermore, as an antecedent of trust, we suggest self-efficacy inadvertently invokes genuine care and concern between partners and a belief in the intrinsic value of the relationship, reducing issues of trust in a transient workforce (Kelliher et al., 2018).

Bringing this back to pro-environmental policies, Steg et al. (2005) and Steg and Vlek (2009) suggest that actors' attitudes toward sustainable knowledge are determined by three factors. First, they must perceive the knowledge as acceptable to the group, reflecting conformity with personal norms. Second, sustainable knowledge must be deemed effective in achieving their remit (Eriksson et al., 2008), thus reinforcing collective efficacy in the network. Third, the individual's desire to reflect an environmental or sustainable social norm must be present (De Groot and Schuitema, 2012).

Building on these points, tourism research suggests that an individual's normative beliefs, motivations and attitudes toward pro-environmental behaviours can be deemed the decisive influence on their environmental behaviours, intentions and actions (Han, 2015). Jang et al. (2017) posit that SMTE managers with robust pro-environmental values are most likely to address internal environmental concerns, consider stakeholders' environmental interests and form ethically based relationships with similarly minded pro-environmental SMTE managers. Such desires and relationships can achieve the formulation of pro-environmental strategies (Black and Hartel, 2004). Though the creation of such strategies may seem aspirational for critics, researchers suggest that the sector is increasingly embracing the New Environmental Paradigm (NEP) (Dunlap et al., 2000). For example, Jang et al. (2017) suggest an emergence of SMTE managers committed to ensuring the sector engages in responsible environmental leadership practices. Studies also suggest that the adoption of such practices are based on two key antecedents: Firstly, the manager's personal, altruistic and eco-centric values (El Dief and Font, 2010); and secondly, the Value-Belief-Norm (VBN) theory of environmentalism. Here, (Stern et al., 1999) contend that SMTE managers are increasingly developing their own pro-environmental values, often based on public opinions and social movements, which culminate in the development of a moral obligation to engage in pro-environmental actions.

Our view is that this sense of moral obligation develops and maintains attitudes and values that allow for the selective filtering of pro-environmental information and assists motivated, yet resource constrained, SMTE managers to select knowledge that appears consistent with their values. In doing so, we bring together findings from Kim (2020) whereby personal value constructs of SMTE managers inform the decision-making processes and that of Stern and Dietz (1994) whereby three value bases influence environmental based decisions: (i) Egoistic values predispose SMTE managers to protect those elements of the environment that positively affect them; (ii) Altruistic values suggest SMTE managers will engage with pro-environmental knowledge on the basis that they are both aware of the consequences of not acting and that they perceive a responsibility to act; and (iii) SMTE managers may make decisions based on biospheric values, often based on the NEP (Stern and Dietz, 1994). Cumulatively, such personal values are not only desirable to make SMTE managers predisposed to pro-environmental behaviours and knowledge, they can cognitively create abstract goals within the individual which ultimately can impact SMTE managers' actions

(Roccas et al., 2002). We suggest engaging in pro-environmental knowledge transfer is one such action.

Empirical evidence to support this position includes the study by Upchurch and Ruhland (1996) which found that hotel managers who work, and are personally motivated to work, in ethical environments are inclined to seek appropriate knowledge to make pro-environmental decisions. This is furthered by Wenger et al. (2002) and Roux et al. (2006) who propose that the formation of independent groups founded on mutual self-interest facilitates tacit knowledge transfer via face-to-face interaction (socialisation). In support, self-categorisation theorists such as Brewer (1979) and Turner et al. (1987) argue social similarity, objectified by group conformity, can help institute personal norms. In turn, personal norms develop 'self-identification' and 'description of self by others' within a shared network. The reinforcing fashion of one's self, cultivates self-efficacy, and can strengthen a sense of trust towards the group. This utility can diminish the prevailing challenges associated with trust in the transient tourism workforce and enable such groups to quickly adapt to pro-environmental knowledge.

Based on the above we suggest that those SMTE managers who hold pro-social values and attitudes and who are infused by a moral obligation to pro-actively mitigate against the negative impacts of the sector, are intrinsically motivated to adopt pro-environmental knowledge. Therefore, we build on Van der Werff et al. (2013) who highlight that intrinsic motivations to adopt pro-environmental behaviours are based not on external incentives but on the individual's environmental self-identity. This environmental self-identity, typically influenced by an internal desire to engage in environmentally friendly behaviours, creates an obligation-based intrinsic motivation.

**Social norms:** Attitudes and behaviour to environmental behaviour based on extrinsic motivations

While intrinsic motivations may enhance SMTE managers' willingness to engage in pro-environmental knowledge transfer, the model contends that extrinsic motivations are also influential. Extrinsic motivations differ from intrinsic motivations in that they refer to behaviours driven by external rewards.

We have applied Iorio et al.'s (2017) work to exemplify how extrinsic motivators promote a willingness to engage in pro-environmental tacit knowledge transfer. Based on their suggestion that extrinsic motivations to engage in pro-social behaviours can be monetary, learning and reputational (Iorio et al., 2017), it could be argued that SMTE managers with a desire to learn and develop a positive reputation within their professional network are motivated to engage in pro-environmental tacit knowledge transfer. Equally, we acknowledge that the model fails to ascertain if these are the only extrinsic motivations nor does it speculate on the weighted influence they exert on an SMTE's manager's motivations which can be predicated by pro-environmental social norms.

In this context, social norms create a social pressure to comply with pro-environmental policies (Cialdini et al., 2006) and this, in turn, increases the acceptability of the environmental policies (De Groot and Schuitema, 2012). We posit that conditions of social norms are determined by (i) mutual interest in and action to support sustainability (McAllister, 1995), 1995), and (ii) evidence of altruistic behaviour and good organisational citizenship as a

prerequisite to engage in sustainable knowledge transfer (Zaheer et al., 1998). This proposition underlines the suggestion that relationships formed by individuals who are free to act independently are more likely to be deeper and more satisfying than those forced to partake in relationships by persons of authority, such as scientific experts or government agencies (Patrick et al., 2007). Equally relational-based affective trust and a freedom and willingness to act can only assist pro-environmental tacit knowledge transfer when the individual actors are intrinsically motivated and perceive social pressure to engage with SMTE network peers.

The potency of this social pressure is further influenced by people's expectations and perceptions of the effectiveness of the pro-environmental policies and ultimately these inform their acceptability (Eriksson et al., 2008). This is reinforced by Kornilaki and Font (2019) who maintain that sustainable (in)action is regulated by both a behavioural and moral framework that is determined by either social or industry comparisons. Equally, we acknowledge that pro-environmental social norms in tourism are difficult to determine as the sector is comprised of a wide population with multiple, often conflicting values. Noting this, Gifford (2011) reminds us that the challenge in achieving a trust-based pro-environmental collective remit within a self-interest group, occurs when one looks to adopt behaviours cognisant of the individual's needs, and sustainability values. This link between extrinsic motivations, social norms and the decision to engage in trust-based knowledge transfer was highlighted by Yamagishi (1986).

Yamagishi's (1986) research on goal acceptance suggests that strong pro-social norms can increase the likelihood that others will trust the pro-environmental policies and enhance the willingness of SMTE managers to participate in pro-environmental tacit knowledge transfer collaborations. Though extrinsic motivations can encourage adoption of acceptable pro-environmental behaviours, De Groot and Schuitema (2012) remind us that the 'pull' of intrinsic motivations to achieve environmental benefits is more coercive than the social 'push' to accept them. This suggests that where affect-based trust strengthens knowledge transfer collaborations between actors with similar intrinsic motivations (McAllister, 1995), extrinsic motivations trigger different indicators of inter-personal trust. In terms of the reputational benefits of engaging in pro-environmental tacit knowledge transfer, inter-personal trust can develop between parties when the trustor, or knowledge recipient, feels their work identity and reputation is somewhat defined by their ability to collaborate with peers (Weber et al., 2004). Yet to develop strong trust-based collaborative relationships with peers, SMTE managers must deem them to be credible sources of tacit knowledge.

**Credibility:** Rational choice trust of pro-environmental knowledge, message and medium

We contend that SMTE managers are best served by trusting knowledge sources based on rational choice. From their study of trust building in tourism networks, Kelliher et al. (2018) and Czernek and Czakon (2016) show that such a propensity to trust creates emotional bonds between individuals both at a cognitive and affective level. Cognitive trust is rooted in reasoning and logic (Heidari et al., 2014). Therefore SMTE managers should firstly choose credible sources of pro-environmental knowledge, and secondly, based on affective trust, the knowledge transfer partners develop a belief that emotional bonds between the parties will be enhanced through collaboration (McAllister, 1995). Such unity of practice is supported by Sharratt and Usoro (2003) and Bakker et al. (2006) who view trust as moderating the

motivation to participate in knowledge transfer between trusted members of a network. Indeed, Du Plessis (2008) argues integrity-based trust formed through a network over time can fortify relational trust in social capital. We purport that credibility-based trust can be used in the absence of certainty (in this case pro-environmental knowledge) and where individuals need to make a 'leap of faith' (Nikolova et al., 2015) to engage in tacit pro-environmental knowledge transfer. As with all our antecedents, credibility behaves differently within different contexts. Importantly, we recognise that tacit knowledge transfer in tourism is further complicated by the fact that it constitutes the vast majority of desirable general knowledge resources (Scott et al., 2008), often induced by a transient and de-skilled workforce.

Drawing from notions of credibility, SMTE managers face two distinct barriers to pro-environmental tacit knowledge transfer. Firstly, environmental knowledge can often represent a technical narrative (Cainelli et al., 2015). For instance, sustainable and pro-environmental knowledge generally require organisations to master new knowledge, often linked to alternative production processes and systems which can require different inputs and technological solutions (Horbach et al., 2013). Acquiring such knowledge may emphasise technical ambiguity within SMTEs (De Marchi, 2012) and reinforce a lack of affective trust in such knowledge acquisition. Roux et al. (2006) suggests the credibility of scientists in the transfer of sustainable knowledge is dependent on the integrity of their message and the actor. Campbell (2011) found high trust of scientists in the transfer of sustainable messages was associated with perceptions of their competence, their reliability, their openness and perceptions that they cared. Conversely Buys et al. (2014) reports the perceived lack of integrity in government bodies is a key driver in responding to issues of climate change.

Returning to professional networks, (Hansen et al., 2011) conclude that any negative perceptions of sustainable sources can dilute trust in organisational networks and elucidate negative attitudes towards the organisation at large. Conversely, transparent and consistent social responsibility reinforces trust in all stakeholders. Given such change, SMTE managers may be required to firstly embrace new, and reconfigure existing, tacit knowledge stocks, and secondly introduce new, non-routine skills within their workforce (Barbieri et al., 2020).

The second contextual barrier, based on Czernek's (2017) study of collaborative knowledge transfer in the Polish tourism sector, is that SMTE managers can perceive such scientific knowledge as unnecessarily complicated and excessively sophisticated. This can result in managers choosing easily adopted solutions to pro-environmental challenges, yet such swift solutions may not address the core dilemma (Stamboulis and Skayannis, 2003). Given these contextual issues, SMTE managers are often required to engage in difficult knowledge sourcing efforts which may require new external knowledge providers (Ghisetti et al., 2015). Faced with such challenges, tourism practitioners could be advised to limit cooperation to credible knowledge sources only and Xiao and Smith (2007) suggest that credibility relates both to the quality of the knowledge available and the credibility of the knowledge source.

**Social capital:** Relational trust between pro-environmental knowledge source and recipient

The model considers SMTE managers' willingness to engage in pro-environmental tacit knowledge transfer based on levels of relational trust, which is directly influenced by the

strength of social capital between potential partners. As pro-environmental tacit knowledge transfer requires two or more actors there is, naturally, a degree of social relationship in play.

There has been a marked increase in studies exploring the role of social capital and trust in knowledge transfer in the tourism literature (Liu, 2018). Tourism research suggests that trust is a facilitator of social capital development and acts as both an antecedent to, and outcome of, fruitful collaborations (Czernek and Czakon, 2016). Relational trust applies to specific partners where, within the dyad, trust follows a Bayesian-like process (Zaheer et al., 1998). Nunkoo (2017) affirms this, suggesting relational perspectives in SMTEs stimulate 'knowledge-based trust' over time. For example, through regular network interactions, tourism knowledge transfer partners' inter-personal and inter-organisational trust develops (Shaw, 2015). The resulting social capital facilitates the development of relational trust, a stronger bond between collaborators than calculus-based trust (Rousseau et al., 1998). Tourism researchers equally note that inter-organisational trust does not necessarily eliminate conflict, rather it facilitates the negotiation of conflict between partners and facilitates the return to conducive collaboration based on social capital between parties (Heidari et al., 2014; Williams and Baláž, 2020).

Applying the work of Rousseau et al. (1998) and Kramer (2009) we suggest these personal interactions utilise a range of psychological states, namely expectations and belief. These trust-based relations are assumed to be the magnet that attracts and binds networks together but equally, can be the repellent force. For Campbell (2011) and Supanti et al., (2014), misplaced trust can proliferate acceptance of (mis)information on issues of sustainability. The likelihood of misinformation in SMTEs is also highlighted by Russo and Perrini (2010), arguing that sustainable practices in SMTEs do not follow a typical Bayesian-like process, preferring personalised and localised perspectives.

Yet Kelliher et al.'s (2018) study of trust development in rural tourism networks notes that it is naïve to think that positive interactions alone build trust between individuals and organisations. Specifically, and of significance to our model, social capital based on relational trust is not as influential on a partner's willingness to trust as their prior experiences of collaboration, emotional standing and cognitive processes (Kelliher et al., 2018). Therefore, we acknowledge that while relational trust based on social capital can enhance pro-environmental tacit knowledge transfer partnership over time, SMTE managers' willingness to trust is based both on their expectations and their inherent propensity to trust. Equally, the model is conscious that SMTE managers' expectations and propensity to trust are not static. Social capital development between tourism partners can, again over time, alter expectations and such changes are typically based on developments in both emotional and cognitive experience (Heidari et al., 2014). Finally, SMTE managers' propensity to trust pro-environmental social partners can be positively and negatively impacted by the fact that trust is an evolving asset. Liu (2018) notes that, over time, trust-based social capital can encourage the creation, development and maturation of a relationship and generate mutually beneficial outcomes for partners based on shared understandings and learned practices. Equally, trust is a fragile resource in that when trust between parties is destroyed, it may never be repaired (Dovey, 2009). This implies that even the longest lasting, positive and mutually beneficial of pro-environmental knowledge exchange partnerships could cease based on a myriad of causes of relationship breakdowns.

Given such opposing perspectives, we suggest that pro-environmental tacit knowledge transfer based on relational trust may necessitate placing trust in specific partners without certainty of reciprocity. This underlines the importance of transparent governance of networks so all parties not only think that trust exists, but feel it too (Beesley, 2005). This underscores the findings of Russo and Perrini (2010), (Cole, 2015) and Font et al. (2016) in that any adoption of future sustainability-led interventions requires a reinforcement of relations to develop high levels of trust. In turn, this trust can exert influence on sustainable knowledge; determine application, evaluation and reporting of sustainable practices and enable pro-environmental behaviour change.

## **Conclusions and further research**

This paper explores the sequence of SMTE managers' decision-making process to engage in pro-environmental tacit knowledge transfer (Delbridge and Fiss, 2013). It achieves this by drawing on literature from such diverse fields as tourism, sustainability, knowledge management, psychology and organisational behaviour to examine how the role of trust intervenes in the transfer of pro-environmental knowledge experienced by SMTE managers. We have drawn on this wide literature because the advancement of further research in trust within the tourism sector necessitates returning to theoretical conceptualisations of trust before situating them within a tourism specific context (Saunders et al., 2015). The paper argues that it is important to consider not only the trust of knowledge sources and the nature of the knowledge itself, but also the degree of trust that exists within SMTE networks and the personal and social relationships involved as they are important in fostering transfer. Of course, there has to be a willingness for SMTE managers to engage in the pro-environmental knowledge transfer process and the model presented considers the degree of risk-taking behaviour involved as this will either limit or foster adoption of pro-environmental behaviours based upon new knowledge received. Here, the analogy with networks is important as they represent purposeful and active groupings of organisations and individuals. Building on the tourism insights into trust-based co-operation in the sector (Czernek and Czakon, 2016; Kelliher et al., 2018), the conceptual model attempts to unpack SMTE managers' decision-making processes to engage in pro-environmental tacit knowledge transfer by collapsing the theoretical discussion into four sets of antecedents. Although based on a tourism perspective, we speculate that the model could be applicable in other fields.

We acknowledge this contribution to an emerging research agenda also presents avenues for future research. First, we have proposed that each antecedent be placed on a continuum, arguing each has a fluctuating asynchronous effect. In terms of this, there are gaps in our understanding on the extent of influence these antecedents have on trust-based decisions, and indeed, whether all four antecedents are required to enable such decisions. Ascertaining influence will confirm if such relationships exist between these antecedents and tacit knowledge transfer and help determine the underlying construct of the model; thus, supporting the call for theoretical constructs and scales drawn from tourism perspectives rather than allied to tourism setting (Han, 2015; Williams and Baláž, 2020).

Second, we have positioned these antecedents in a social context, reflecting the conditions of the operating constraints of the SMTEs and the nature of networks. Whilst the model takes account of these idiosyncrasies, it does not establish the level of impact these conditions have on the defining constructs of the model; or indeed, whether these antecedents can operate



in isolation of such conditions. As such, determining the relationship between the social/industry conditions and antecedents of trust in SMTE's pro-environmental knowledge transfer will add to existing calls into situational normality (Williams and Baláž, 2020). Such studies would expand our understanding of how internal and external factors affect SMTE managers' willingness to trust at a local and broader social level (Kelliher et al., 2018).

Cumulatively there is considerable scope for evolving the model towards an ecological systems perspective; appreciating interdependent elements that form a holistic perspective (Musgrave and Woodward, 2016). In this sense we return to tacit knowledge transfer taking place within social contexts, reflecting inter-stakeholder relationships (Boiral, 2002; Roux et al., 2006; Russo and Perrini, 2010) and how internal/external factors effect methods of practice in SMTEs.

At numerous times this paper has alluded to a 'willingness to trust' and social capital evolving over time, implying a longitudinal approach. Whilst there are numerous research agenda that fit into such an approach (Nunkoo, 2017), we propose two: peer perception between tacit knowledge transfer partners and differences in pro-active and reactive SMTE managers. The first theme for future research focuses on the importance of peer perception between tacit knowledge transfer partners and how these evolve over time. Tourism studies have alluded to the importance of a perceived equality between trusted knowledge transfer partners, yet there is a dearth of empirical data to support this position (Hjalager, 2010; McTiernan et al., 2019). The second study could explore if the antecedent factors differ between pro-active and reactive SMTE managers over an extended period of study. Such research could determine if intrinsic motivations to seek opportunities to engage in pro-environmental behaviours differ from managers reacting to external changes such as modifications in customers' expectations of corporate social responsibility and developments in environmental legislation.

## References

- Alonso, A.D., Ogle, A., 2010. Tourism and hospitality small and medium enterprises and environmental sustainability. *Management Research Review* 33, 818–826. <https://doi.org/10.1108/01409171011065626>
- Bakker, M., Leenders, R., Gabbay, S., Kratzer, J., Van Engelen, J., 2006. Is trust really social capital? Knowledge sharing in product development projects. *The Learning Organization* 13, 594–605. <https://doi.org/10.1108/09696470610705479>
- Barbieri, N., Marzucchi, A., Rizzo, U., 2020. Knowledge sources and impacts on subsequent inventions: Do green technologies differ from non-green ones? *Research Policy* 49, 103901. <https://doi.org/10.1016/j.respol.2019.103901>
- Becerra, M., Lunnan, R., Huemer, L., 2008. Trustworthiness, Risk, and the Transfer of Tacit and Explicit Knowledge Between Alliance Partners. *Journal of Management Studies* 45, 691–713. <https://doi.org/10.1111/j.1467-6486.2008.00766.x>
- Beesley, L., 2005. The management of emotion in collaborative tourism research settings. *Tourism Management* 26, 261–275. <https://doi.org/10.1016/j.tourman.2003.11.019>
- Black, L.D., Hartel, C.E.J., 2004. The five capabilities of socially responsible companies. *Journal of Public Affairs* 4, 125–144. <https://doi.org/10.1002/pa.176>
- Boiral, O., 2002. Tacit Knowledge and Environmental Management. *Long Range Planning* 35, 291–317. [https://doi.org/10.1016/S0024-6301\(02\)00047-X](https://doi.org/10.1016/S0024-6301(02)00047-X)
- Brewer, M.B., 1979. In-group bias in the minimal intergroup situation: A cognitive-motivational analysis. *Psychological Bulletin* 86, 307–324. <https://doi.org/10.1037/0033-2909.86.2.307>
- Buys, L., Mengersen, K., Johnson, S., van Buuren, N., Chauvin, A., 2014. Creating a Sustainability Scorecard as a predictive tool for measuring the complex social, economic and environmental impacts of industries, a case study: Assessing the viability and sustainability of the dairy industry. *Journal of Environmental Management* 133, 184–192. <https://doi.org/10.1016/j.jenvman.2013.12.013>
- Cainelli, G., De Marchi, V., Grandinetti, R., 2015. Does the development of environmental innovation require different resources? Evidence from Spanish manufacturing firms. *Journal of Cleaner Production* 94, 211–220. <https://doi.org/10.1016/j.jclepro.2015.02.008>
- Campbell, P., 2011. Understanding the receivers and the reception of science’s uncertain messages. *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences* 369, 4891–4912. <https://doi.org/10.1098/rsta.2011.0068>
- Carroll, A., Buchholtz, A., 2008. *Business & Society: Ethics and Stakeholder Management*, 7th ed. South Western Educational Publishing, Mason, Ohio.
- Cavusgil, S.T., Calantone, R.J., Zhao, Y., 2003. Tacit knowledge transfer and firm innovation capability. *The Journal of Business and Industrial Marketing* 18, 6–21. <https://doi.org/10.1108/08858620310458615>
- Chan, H., Wan, L.C., Sin, L.Y.M., 2007. Hospitality service failures: Who will be more dissatisfied? *International Journal of Hospitality Management* 26, 531–545. <https://doi.org/10.1016/j.ijhm.2006.02.004>
- Cialdini, R.B., Demaine, L.J., Sagarin, B.J., Barrett, D.W., Rhoads, K., Winter, P.L., 2006. Managing social norms for persuasive impact. *Social Influence* 1, 3–15. <https://doi.org/10.1080/15534510500181459>
- Cohen, W.M., Levinthal, D.A., 1990. Absorptive Capacity: A New Perspective on Learning and Innovation. *Administrative Science Quarterly* 35, 128–152. <https://doi.org/10.2307/2393553>
- Cole, D.H., 2015. Advantages of a polycentric approach to climate change policy. *Nature Climate Change* 5, 114–118. <https://doi.org/10.1038/nclimate2490>
- Cooper, C., 2018. Managing tourism knowledge: a review. *Tourism Review* 73, 507–520. <https://doi.org/10.1108/TR-06-2017-0104>
- Cooper, C., 2015. Managing tourism knowledge. *Tourism Recreation Research* 40, 107–119. <https://doi.org/10.1080/02508281.2015.1006418>

- Czakon, W., Czernek, K., 2016. The role of trust-building mechanisms in entering into network coopetition: The case of tourism networks in Poland. *Industrial Marketing Management* 57, 64–74. <https://doi.org/10.1016/j.indmarman.2016.05.010>
- Czernek, K., 2017. Tourism features as determinants of knowledge transfer in the process of tourist cooperation. *Current Issues in Tourism* 20, 204–220. <https://doi.org/10.1080/13683500.2014.944107>
- Czernek, K., Czakon, W., 2016. Trust-building processes in tourist coopetition: The case of a Polish region. *Tourism Management* 52, 380–394.
- De Brentani, U., Reid, S.E., 2012. The Fuzzy Front-End of Discontinuous Innovation: Insights for Research and Management. *Journal of Product Innovation Management* 29, 70–87. <https://doi.org/10.1111/j.1540-5885.2011.00879.x>
- De Groot, J.I.M., Schuitema, G., 2012. How to make the unpopular popular? Policy characteristics, social norms and the acceptability of environmental policies. *Environmental Science & Policy* 19–20, 100–107. <https://doi.org/10.1016/j.envsci.2012.03.004>
- De Groot, J.I.M., Steg, L., 2009. Morality and Prosocial Behavior: The Role of Awareness, Responsibility, and Norms in the Norm Activation Model. *The Journal of Social Psychology* 149, 425–449. <https://doi.org/10.3200/SOCP.149.4.425-449>
- De Marchi, V., 2012. Environmental innovation and R&D cooperation: Empirical evidence from Spanish manufacturing firms. *Research Policy* 41, 614–623. <https://doi.org/10.1016/j.respol.2011.10.002>
- Del Chiappa, G., Baggio, R., 2015. Knowledge transfer in smart tourism destinations: Analyzing the effects of a network structure. *Journal of Destination Marketing & Management, Smart Destinations* 4, 145–150. <https://doi.org/10.1016/j.jdmm.2015.02.001>
- Delbridge, R., Fiss, P.C., 2013. Editors' Comments: Styles of Theorizing and the Social Organization of Knowledge. *AMR* 38, 325–331. <https://doi.org/10.5465/amr.2013.0085>
- Doney, P., Cannon, J., Mullen, M., 1998. Understanding the influence of national culture on the development of trust. *Academy of Management Review* 23, 601–620.
- Dovey, K., 2009. The role of trust in innovation. *The Learning Organisation* 16, 311–325.
- Du Plessis, M., 2008. The strategic drivers and objectives of communities of practice as vehicles for knowledge management in small and medium enterprises. *International Journal of Information Management* 28, 61–67. <https://doi.org/10.1016/j.ijinfomgt.2007.05.002>
- Dunlap, R.E., Liere, K.D.V., Mertig, A.G., Jones, R.E., 2000. New Trends in Measuring Environmental Attitudes: Measuring Endorsement of the New Ecological Paradigm: A Revised NEP Scale. *Journal of Social Issues* 56, 425–442. <https://doi.org/10.1111/0022-4537.00176>
- El Dief, M., Font, X., 2010. The determinants of hotels' marketing managers' green marketing behaviour. *Journal of Sustainable Tourism* 18, 157–174. <https://doi.org/10.1080/09669580903464232>
- Epstein, M.J., Buhovac, A.R., 2014. *Making Sustainability Work: Best Practices in Managing and Measuring Corporate Social, Environmental, and Economic Impacts*. Berrett-Koehler Publishers.
- Eriksson, L., Garvill, J., Nordlund, A.M., 2008. Acceptability of single and combined transport policy measures: The importance of environmental and policy specific beliefs. *Transportation Research Part A: Policy and Practice* 42, 1117–1128. <https://doi.org/10.1016/j.tra.2008.03.006>
- Fiss, P.C., 2011. Building Better Causal Theories: A Fuzzy Set Approach to Typologies in Organization Research. *AMJ* 54, 393–420. <https://doi.org/10.5465/amj.2011.60263120>
- Font, X., Garay, L., Jones, S., 2016. Sustainability motivations and practices in small tourism enterprises in European protected areas. *Journal of Cleaner Production* 137, 1439–1448. <https://doi.org/10.1016/j.jclepro.2014.01.071>

- Garay, L., Font, X., Corrons, A., 2019. Sustainability-Oriented Innovation in Tourism: An Analysis Based on the Decomposed Theory of Planned Behavior. *Journal of Travel Research* 58, 622–636. <https://doi.org/10.1177/0047287518771215>
- Garay, L., Font, X., Pereira-Moliner, J., 2017. Understanding sustainability behaviour: The relationship between information acquisition, proactivity and performance. *Tourism Management* 60, 418–429. <https://doi.org/10.1016/j.tourman.2016.12.017>
- Ghisetti, C., Marzucchi, A., Montresor, S., 2015. The open eco-innovation mode. An empirical investigation of eleven European countries. *Research Policy* 44, 1080–1093. <https://doi.org/10.1016/j.respol.2014.12.001>
- Gifford, R., 2011. The dragons of inaction: Psychological barriers that limit climate change mitigation and adaptation. *American Psychologist* 66, 290–302. <https://doi.org/10.1037/a0023566>
- Han, H., 2015. Travelers' pro-environmental behavior in a green lodging context: Converging value-belief-norm theory and the theory of planned behavior. *Tourism Management* 47, 164–177. <https://doi.org/10.1016/j.tourman.2014.09.014>
- Hansen, S.D., Dunford, B.B., Boss, A.D., Boss, R.W., Angermeier, I., 2011. Corporate Social Responsibility and the Benefits of Employee Trust: A Cross-Disciplinary Perspective. *Journal of Business Ethics* 102, 29–45.
- Heidari, M., Najafipour, A., Farzan, S., Pavaresh, S., 2014. The fundamental distinctive applications of networks in the tourism industry: A useful mechanism for trust. *Academic Research in Economics and Management Services* 3, 263–285.
- Higuchi, Y., Yamanaka, Y., 2017. Knowledge sharing between academic researchers and tourism practitioners: a Japanese study of the practical value of embeddedness, trust and co-creation. *Journal of Sustainable Tourism* 25, 1456–1473. <https://doi.org/10.1080/09669582.2017.1288733>
- Hjalager, A.-M., 2010. A review of innovation research in tourism. *Tourism Management* 31, 1–12. <https://doi.org/10.1016/j.tourman.2009.08.012>
- Holste, J.S., Fields, D., 2010. Trust and tacit knowledge sharing and use. *Journal of Knowledge Management* 14, 128–140. <https://doi.org/10.1108/13673271011015615>
- Horbach, J., Oltra, V., Belin, J., 2013. Determinants and Specificities of Eco-Innovations Compared to Other Innovations—An Econometric Analysis for the French and German Industry Based on the Community Innovation Survey. *Industry and Innovation* 20, 523–543. <https://doi.org/10.1080/13662716.2013.833375>
- Iorio, R., Labory, S., Rentocchini, F., 2017. The importance of pro-social behaviour for the breadth and depth of knowledge transfer activities: An analysis of Italian academic scientists. *Research Policy* 46, 497–509. <https://doi.org/10.1016/j.respol.2016.12.003>
- Isaeva, N., Gruenewald, K., Saunders, M.N.K., 2020. Trust theory and customer services research: theoretical review and synthesis. *The Service Industries Journal* 40, 1031–1063. <https://doi.org/10.1080/02642069.2020.1779225>
- Jaakkola, E., 2020. Designing conceptual articles: four approaches. *AMS Rev* 10, 18–26. <https://doi.org/10.1007/s13162-020-00161-0>
- Jang, Y.J., Zheng, T., Bosselman, R., 2017. Top managers' environmental values, leadership, and stakeholder engagement in promoting environmental sustainability in the restaurant industry. *International Journal of Hospitality Management* 63, 101–111. <https://doi.org/10.1016/j.ijhm.2017.03.005>
- Juvan, E., Dolnicar, S., 2017. Drivers of pro-environmental tourist behaviours are not universal. *Journal of Cleaner Production* 166, 879–890. <https://doi.org/10.1016/j.jclepro.2017.08.087>
- Kelliher, F., Reinl, L., Johnson, T.G., Joppe, M., 2018. The role of trust in building rural tourism micro firm network engagement: A multi-case study. *Tourism Management* 68, 1–12. <https://doi.org/10.1016/j.tourman.2018.02.014>

- Kim, M., 2020. A systematic literature review of the personal value orientation construct in hospitality and tourism literature. *International Journal of Hospitality Management* 89, 102572. <https://doi.org/10.1016/j.ijhm.2020.102572>
- Kim, M.-S., Stepchenkova, S., 2020. Altruistic values and environmental knowledge as triggers of pro-environmental behavior among tourists. *Current Issues in Tourism* 23, 1575–1580. <https://doi.org/10.1080/13683500.2019.1628188>
- Kornilaki, M., Font, X., 2019. Normative influences: How socio-cultural and industrial norms influence the adoption of sustainability practices. A grounded theory of Cretan, small tourism firms. *Journal of Environmental Management* 230, 183–189. <https://doi.org/10.1016/j.jenvman.2018.09.064>
- Kornilaki, M., Thomas, R., Font, X., 2019. The sustainability behaviour of small firms in tourism: the role of self-efficacy and contextual constraints. *Journal of Sustainable Tourism* 27, 97–117. <https://doi.org/10.1080/09669582.2018.1561706>
- Kramer, R., 2009. Rethinking trust. *Harvard Business Review* 87, 68–77.
- Liu, C.-H.S., 2018. Examining social capital, organizational learning and knowledge transfer in cultural and creative industries of practice. *Tourism Management* 64, 258–270. <https://doi.org/10.1016/j.tourman.2017.09.001>
- Maak, T., 2007. Responsible Leadership, Stakeholder Engagement, and the Emergence of Social Capital. *Journal of Business Ethics* 74, 329–343. <https://doi.org/10.1007/s10551-007-9510-5>
- MacInnis, D.J., 2011. A Framework for Conceptual Contributions in Marketing. *Journal of Marketing* 75, 136–154. <https://doi.org/10.1509/jmkg.75.4.136>
- Martínez-Martínez, A., Zumel-Jiménez, C., Cegarra-Navarro, J.-G., 2018. A theoretical framework for key processes on environmental knowledge management. *Anatolia: An International Journal of Tourism and Hospitality Research* 29, 605–613. <https://doi.org/10.1080/13032917.2018.1519180>
- Mayer, R.C., Davis, J.H., Schoorman, F.D., 1995. An Integrative Model Of Organizational Trust. *AMR* 20, 709–734. <https://doi.org/10.5465/amr.1995.9508080335>
- McAllister, D., 1995. Affect and cognition trust as foundations for interpersonal cooperation in organisations. *Academy of Management Journal* 38, 24–59.
- McKnight, H.D., Chervany, N.L., 2001. Trust and Distrust Definitions: One Bite at a Time, in: Falcone, R., Singh, M., Tan, Y.-H. (Eds.), *Trust in Cyber-Societies*, Lecture Notes in Computer Science. Springer, Berlin, Heidelberg, pp. 27–54. [https://doi.org/10.1007/3-540-45547-7\\_3](https://doi.org/10.1007/3-540-45547-7_3)
- McTiernan, C., Thomas, R., Jameson, S., 2019. Focusing on Knowledge Exchange: The Role of Trust in Tourism Networks, in: Fayos-Solà, E., Cooper, C. (Eds.), *The Future of Tourism: Innovation and Sustainability*. Springer International Publishing, Cham, pp. 301–314. [https://doi.org/10.1007/978-3-319-89941-1\\_16](https://doi.org/10.1007/978-3-319-89941-1_16)
- Miller, G., Rathouse, K., Scarles, C., Holmes, K., Tribe, J., 2010. Public understanding of sustainable tourism. *Annals of Tourism Research* 37, 627–645. <https://doi.org/10.1016/j.annals.2009.12.002>
- Molina-Morales, F., Martínez-Fernández, M., Torlo, V., 2011. The dark side of Trust: The benefits, costs and optimal levels of trust for innovation performance. *Long Range Planning* 44, 118–133.
- Musgrave, J., Woodward, S., 2016. Ecological Systems Theory Approach to Corporate Social Responsibility: Contextual Perspectives From Meeting Planners. *Event Management* 20, 365–381. <https://doi.org/10.3727/152599516X14682560744712>
- Nahapiet, J., Ghoshal, S., 1998. Social capital, intellectual capital and organisational advantage. *Academy of Management Review* 23, 242–266.
- Nikolova, N., Möllering, G., Reihlen, M., 2015. Trusting as a ‘leap of faith’: Trust-building practices in client–consultant relationships. *Scandinavian Journal of Management* 31, 232–245.
- Nonaka, I., Takeuchi, H., 1995. *The Knowledge Creating Company*, 1st ed. ed. Oxford University Press, NY.

- Nunkoo, R., 2017. Governance and sustainable tourism: What is the role of trust, power and social capital? *Journal of Destination Marketing & Management* 6, 277–285. <https://doi.org/10.1016/j.jdmm.2017.10.003>
- Nunkoo, R., Gursoy, D., 2017. Political trust and residents' support for alternative and mass tourism: an improved structural model. *Tourism Geographies* 19, 318–339.
- Nunkoo, R., Gursoy, D., 2016. Rethinking The Role of Power and Trust in Tourism Planning. *Journal of Hospitality Marketing & Management* 25, 512–522. <https://doi.org/10.1080/19368623.2015.1019170>
- Patrick, H., Knee, C., Canevello, A., Lonsbary, C., 2007. The Role of Need Fulfillment in Relationship Functioning and Well-Being: A Self-Determination Theory Perspective. *Journal of Personality and Social Psychology* 92, 434–457. <https://doi.org/10.1037/0022-3514.92.3.434>
- Reagans, R., McEvily, B., 2003. Network Structure and Knowledge Transfer: The Effects of Cohesion and Range. *Administrative Science Quarterly* 48, 240–267. <https://doi.org/10.2307/3556658>
- Roccas, S., Sagiv, L., Schwartz, S.H., Knafo, A., 2002. The Big Five personality factors and personal values. *Personality and Social Psychology Bulletin* 28, 789–801. <https://doi.org/10.1177/0146167202289008>
- Rousseau, D., Sitkin, S., Burt, R., Camerer, C., 1998. Not so different after all: A cross discipline view of trust. *Academy of Management Review* 23, 393–404.
- Roux, D.J., Rogers, K.H., Biggs, H.C., Ashton, P.J., Sergeant, A., 2006. Bridging the Science–Management Divide: Moving from Unidirectional Knowledge Transfer to Knowledge Interfacing and Sharing. *Ecology and Society* 11, 1–20.
- Russo, A., Perrini, F., 2010. Investigating Stakeholder Theory and Social Capital: CSR in Large Firms and SMEs. *Journal of Business Ethics* 91, 207–221. <https://doi.org/10.1007/s10551-009-0079-z>
- Sampaio, A.R., Thomas, R., Font, X., 2012. Small business management and environmental engagement. *Journal of Sustainable Tourism* 20, 179–193. <https://doi.org/10.1080/09669582.2011.602193>
- Saunders, M., Lyon, F., Mollering, G., 2015. Researching trust in tourism: Methodological issues and associated concerns, in: Nunkoo, R., Smith, L. (Eds.), *Trust, Development and Planning*. Oxon: Routledge. Routledge, Oxon, pp. 168–179.
- Scott, N., Baggio, R., Cooper, P.C., 2008. *Network Analysis and Tourism: From Theory to Practice*. Channel View Publications, Clevedon.
- Sharratt, M., Usoro, A., 2003. Understanding Knowledge-Sharing in Online Communities of Practice. *Electronic Journal of Knowledge Management* 1, 18–27.
- Shaw, G., 2015. Tourism networks, knowledge dynamics and co-creation, in: McLeod, M., Vaughan, R. (Eds.), *Knowledge Networks and Tourism*. Routledge, London, pp. 45–61.
- Singh, S.K., Gupta, S., Busso, D., Kamboj, S., 2021. Top management knowledge value, knowledge sharing practices, open innovation and organizational performance. *Journal of Business Research* 128, 788–798. <https://doi.org/10.1016/j.jbusres.2019.04.040>
- Stamboulis, Y., Skayannis, P., 2003. Innovation strategies and technology for experience-based tourism. *Tourism Management* 24, 35–43. [https://doi.org/10.1016/S0261-5177\(02\)00047-X](https://doi.org/10.1016/S0261-5177(02)00047-X)
- Steg, L., Dreijerink, L., Abrahamse, W., 2005. Factors influencing the acceptability of energy policies: A test of VBN theory. *Journal of Environmental Psychology* 25, 415–425. <https://doi.org/10.1016/j.jenvp.2005.08.003>
- Steg, L., Vlek, C., 2009. Encouraging pro-environmental behaviour: An integrative review and research agenda. *Journal of Environmental Psychology, Environmental Psychology on the Move* 29, 309–317. <https://doi.org/10.1016/j.jenvp.2008.10.004>
- Stern, P.C., Dietz, T., 1994. The Value Basis of Environmental Concern. *Journal of Social Issues* 50, 65–84. <https://doi.org/10.1111/j.1540-4560.1994.tb02420.x>
- Stern, P.C., Dietz, T., Abel, T., Guagnano, G.A., Kalof, L., 1999. A Value-Belief-Norm Theory of Support for Social Movements: The Case of Environmentalism. *Human Ecology Review* 6, 81–97.

- Sun, J., Yang, Y., Jong, A. de, 2020. A geographical approach to trust in tourism. *Tourism Geographies* 22, 768–786. <https://doi.org/10.1080/14616688.2019.1652337>
- Supanti, D., Butcher, K., Fredline, L., 2014. Understanding Managers' Engagement with Corporate Social Responsibility (CSR) in the Thai Hotel Sector [WWW Document]. *Proceedings of the International Association for Business and Society*. <https://doi.org/10.5840/iabsproc20142512>
- Teng, C.-C., Lu, A.C.C., Huang, T.-T., 2018. Drivers of consumers' behavioral intention toward green hotels. *International Journal of Contemporary Hospitality Management* 30, 1134–1151. <https://doi.org/10.1108/IJCHM-04-2017-0203>
- Thomas, R., Wood, E., 2014. Innovation in tourism: Reconceptualising and measuring the absorptive capacity of the hotel sector. *Tourism Management* 48, 39–48.
- Turner, J.C., Hogg, M.A., Oakes, P.J., Reicher, S.D., Wetherell, M.S., 1987. Rediscovering the social group: A self-categorization theory, *Rediscovering the social group: A self-categorization theory*. Basil Blackwell, Cambridge, MA, US.
- Upchurch, R.S., Ruhland, S.K., 1996. The organizational bases of ethical work climates in lodging operations as perceived by general managers. *Journal of Business Ethics* 15, 1083–1093. <https://doi.org/10.1007/BF00412049>
- Van der Werff, E., Steg, L., Keizer, K., 2013. The value of environmental self-identity: The relationship between biospheric values, environmental self-identity and environmental preferences, intentions and behaviour. *Journal of Environmental Psychology* 34, 55–63. <https://doi.org/10.1016/j.jenvp.2012.12.006>
- Van der Werff, L., Legood, A., Buckley, F., Weibel, A., de Cremer, D., 2019. Trust motivation: The self-regulatory processes underlying trust decisions. *Organizational Psychology Review* 9, 99–123. <https://doi.org/10.1177/2041386619873616>
- Weber, J.M., Malhotra, D., Murnighan, J.K., 2004. Normal acts of irrational trust: Motivated attributions and the trust development process. *Research in Organizational Behavior, An Annual Series of Analytical Essays and Critical Reviews* 26, 75–101. [https://doi.org/10.1016/S0191-3085\(04\)26003-8](https://doi.org/10.1016/S0191-3085(04)26003-8)
- Wenger, E., McDermott, R.A., Snyder, W., 2002. *Cultivating Communities of Practice: A Guide to Managing Knowledge*. Harvard Business Press.
- Williams, A.M., Baláž, V., 2020. Tourism and Trust: Theoretical Reflections. *Journal of Travel Research* 1–16. <https://doi.org/10.1177/0047287520961177>
- Xiao, H., Smith, S.L.J., 2007. The use of Tourism knowledge: Research Propositions. *Annals of Tourism Research* 34, 310–331. <https://doi.org/10.1016/j.annals.2006.09.001>
- Yamagishi, T., 1986. The Provision of a Sanctioning System as a Public Good. *Journal of Personality and Social Psychology* 50, 110–116. <https://doi.org/10.1037//0022-3514.51.1.110>
- Zach, F.J., Hill, T.L., 2017. Network, knowledge and relationship impacts on innovation in tourism destinations. *Tourism Management* 62, 196–207. <https://doi.org/10.1016/j.tourman.2017.04.001>
- Zaheer, A., McEvily, B., Perrone, V., 1998. Does trust matter? Exploring the effects of interorganizational and interpersonal trust on performance. *Organization science* 9, 141–159.