Incorporating humour in the educational journey of young tourists: a systematic multidisciplinary review

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Abstract

Humour for children has received attention from various academic domains. However, the topic is a less explored area in the field of tourism. Addressing this research gap, the present study aims to firstly, identify the main themes of humour which are discussed in the academic literature about children, and secondly to outline how the identified themes can be applied to children's learning experiences in tourism settings. The study employs content analysis to systematically review 190 relevant publications from multidisciplinary fields sourced from ScienceDirect and Scopus. Five overarching themes were identified across studies of various disciplines: social, parents, play, teachers, and characters. The emerging themes were interpreted through the lens of Vygotsky's Socio-Cultural Theory to develop a conceptual framework for children's learning experiences in tourism contexts. The paper enhances our understanding of the children's literature in the context of tourism by providing both theoretical and practical insights. It specifically focuses on how humour can be utilised to enrich children's learning in the realm of tourism.

Keywords: humour, children, education, tourism, children's learning.

1. Introduction

Children understand and use humour differently compared to adults (Del Ré et al., 2020). This is due to various factors, including their cognitive, socio-emotional, physical, and language development stages, as explained by Bergen (2021). Considering this difference, the literature on humour with a focus on children has its own themes, findings, and gaps that deserve scholarly attention. Disciplines such as tourism present ample research opportunities to study humour for children by bridging themes and concepts from other fields of study to enhance our understanding in this area. By conducting a multidisciplinary systematic review, this study aims to, firstly, identify the main themes of humour which are discussed in the academic literature for children and, secondly, discuss how the identified themes can be applied to children's learning experiences in tourism settings.

Children are considered an important market segment in tourism (Séraphin & Gowreesunkar, 2020), as they are little tourists in the present who will eventually become adult tourists in the future (Mohammadi & Pearce, 2020). The tourism literature has increasingly recognised the influence of children, evident in a notable surge in publications specifically targeting children over the past two decades (Li et al., 2023). One of the main reasons for the scarcity of studies on children within the tourism literature is the lack of theories explaining children's behaviour (Poria & Timothy, 2014). This study enhances the existing body of knowledge on the intersection of tourism and children by building upon knowledge in existing interdisciplinary studies.

Humour can positively influence onsite tourism experiences by increasing visitors' comfort, enhancing their concentration, and helping them build connections (Pabel & Pearce, 2016). However, onsite tourism experiences are not solely focused on entertainment; they also encompass educational aspects (Ballantyne et al., 2011). According to Pearce and Pabel (2015) the presence of humour during these experiences can contribute to positive interpretive outcomes. These positive outcomes range from emotional experiences and gaining knowledge (Davidson & Black, 2007) to enjoying the attractions and activities they have come to see during their travels (Kim et al., 2014). Recognising the potential impact of humour during onsite visits and acknowledging it as a universally appreciated element by children in entertainment programs (Valkenburg & Janssen, 1999), humour can be viewed as an intangible resource affecting their overall tourism experience (Rhoden et al., 2016). Incorporating humour into onsite entertainment and educational programs via appropriate tourism interpretation can enrich children's experiences. Although this study does not directly address tourism interpretation, it lays the groundwork for future researchers to investigate the topic.

To the best of our knowledge, the present study is the first systematic review on humour for children. It takes a novel approach of applying the knowledge gathered in previous multidisciplinary articles on children and humour to add to the body of knowledge on children and tourism. More specifically, it contributes by identifying the main themes of humour within the academic literature for children and delineating how these themes can be applied to enhance children's learning experiences in tourism settings. In doing so, it offers both theoretical insights and practical applications for tourism operations.

2. Literature review

2.1. The importance of humour for children

Research on humour for children spans across various fields (Martin & Ford, 2018). The cognitive development of humour in children has been thoroughly researched, with age being a

crucial factor. The earliest form of humour production is typically seen in pretend play, which typically begins at the age of two (Goldstein & Ruch, 2018). There are four main sequential stages in the development of humour appreciation in children (McGhee, 1971). These stages include laughter without humour, misuse of objects (incongruous action), misnaming of objects and wordplay (incongruous language), and telling jokes and riddles (incongruity based on concepts and wordplay with multiple meanings). Younger children may not fully comprehend jokes based on incongruity-resolution and may instead prefer humour that involves exaggeration and visualisation, e.g., clowning, mimicry, and nonsense humour (Tallant, 2015). By age six, children can usually produce funny stories, jokes, and riddles, and by age ten, children can explain presented humour in their own words or actions (Loizou, 2011). By the age of 12, children can perceive and explain jokes with complex wordplay and cognitive incongruity (Bergen, 2021).

While understanding humour is certainly a complex cognitive process, it can be a powerful tool for children in terms of socialisation and social power (McGhee, 1989). The cognitive development associated with children's use of humour hold great significance for education and learning. Appreciating humour requires sophisticated cognitive processes, but it is also influenced by social and cultural factors which depend on language skills and social interaction (Tholander & Aronsson, 2003). Having a good sense of humour can facilitate social acceptance, and children who can make others laugh are often more popular among their peers (McGhee, 1989). Being humorous also carries social influence, as it is an effective way to make friends and influence others (Gilgun & Sharma, 2012). Since humour is rooted in cultural values and norms (Del Ré et al., 2020), previous studies have explored its social function in children's development (e.g., Yunus & Dalli, 2019).

Humour has been found to increase the chance of learning as it can attract children's attention to the content being taught (Lyon, 2006). Research also shows that humour can increase student retention and participation (Sultana et al., 2019), stimulate emotional engagement (Miller et al., 2017), improve classroom interaction (Kosiczky & Mullen, 2013), and foster positive teacher-student relationships (Abraham et al., 2014). Hence, using humour in the classroom is linked to greater enjoyment and less boredom and anxiety (Bieg et al., 2017), making it a powerful pedagogical tool that activates cognitive processes and boosts student engagement (Pekrun & Linnenbrink-Garcia, 2014).

Research on the use of humour to enhance children's learning in the field of tourism is scarce. Yet, we know that children often vividly remember their field trips during school days as they perceive these experiences as more enjoyable compared to the traditional classroom setting (Haverly et al., 2020). Tourism experiences also provide great opportunities for play and experiential learning (Breen & Jones, 2015). To meet the distinct needs of children, who differ from adults in their needs and preferences (Zhong & Peng, 2021), tourism industry professionals should consider integrating playful elements, including humour and enjoyable activities that can enhance the learning experiences of young tourists.

2.2.   Humour in tourism contexts

Humour is a culturally specific phenomenon (Pearce & Pabel, 2015). However, previous studies suggest that laughter and play are universal aspects of humour (Addyman et al., 2018; Bergen, 2019). Although there is not much academic research on humour for children in tourism, Bergen (2019) emphasises the importance of the play frame concept in early humour expression. Toddlers laugh with others in a "play frame" without knowing the reason. Hence, creating a play frame is the best way to capture their reactions and expressions to humour. Bergen also notes that children recognise a play frame from a serious one and learn to respond in a funny way when in a jesting or clowning context. In a tourism setting, the tour guide can signal *this is*

play and create a play frame where tourists including children can engage and respond in the same manner.

Tourism and hospitality businesses, including restaurants like TGI Fridays (Pabel & Pearce, 2016), and airlines such as Air New Zealand and Southwest Airlines, have begun to acknowledge the importance of humour. Notably, they incorporate humour into various aspects, such as TGI Fridays in their overall ambience and Air New Zealand and Southwest Airlines in their safety messages (Shaw et al., 2010). In these incidences, humour adds to the enjoyment and playfulness of the experience (Pearce & Pabel, 2015). Certain museums and heritage attractions are also making use of humour to enhance the tourists' attentiveness and mindfulness (Turnsek et al., 2019). Depending on the nature of the tourism service, using positive humour can benefit both the service provider and the tourists (Piirman et al., 2019). However, much of the existing research on humour in tourism has focused primarily on adults, leaving ample opportunity to study children's experiences with humour in tourism settings. Conducting a systematic review of the literature on this subject is intended to expand the current body of knowledge with a focus of children's learning experiences in tourism settings.

2.3. Vygotskian Socio-Cultural Theory and children's learning

Vygotsky's Socio-Cultural Theory (SCT) asserts that learning occurs through social interactions with people, objects/tools, and events in the environment (Lantolf & Thorne, 2006). According to Vygotsky's SCT, the Zone of Proximal Development (ZPD) is crucial in a child's learning process (Vygotsky, 1997). This theory emphasises the importance of social interactions and cultural situations in a child's development. Children can develop their knowledge by interacting with someone who is more knowledgeable than themselves, such as peers, parents, and teachers (Lim & Renshaw, 2001). Scaffolding is also necessary to support children who are trying to learn something new in the ZPD (Margolis, 2020).

The use of physical and symbolic tools is essential to mediate a child's relation to the world (Aimin, 2013). The use of tools is a broad concept in SCT, ranging from simple physical objects like a spoon to more complex tools like language and traditions. The importance of knowledgeable partners, such as teachers or parents, in a child's development through collaboration is recognised to achieve higher mental functions (Vygotsky, 1997; Daneshfar & Moharami, 2018). Vygotsky also believed that play is a crucial source of development and can facilitate the building of the ZPD via sociodramatic or make-believe play (Bodrova & Leong, 2015). The findings of this current study are interpreted under the lens of Vygotsky's (1978a) SCT, and their significance and application to tourism studies and operations are discussed in later sections.

3. Method

This study uses a systematic review to search and synthesise the existing literature (Aromataris & Pearson, 2014). Systematic reviews provide a greater generalisation about the studied phenomenon and differing perspectives from other fields of study that may not be provided through individual studies (Hulland & Houston, 2020). The initial step employed keyword searches and filtering processes to source relevant articles in the Scopus and ScienceDirect databases. Scopus is the largest database of peer-reviewed literature covering 34,346 journals and ScienceDirect publishes 4,800 journals for different fields of study. When combined, these databases provide an extensive coverage of interdisciplinary research. Keyword combinations included "children and humour", "children and travel and humour", "children and tourism and humour", "children and humour and learning", "early childhood education and humour", "education and humour and children", and "early childhood education and funny". Based on

these keyword searches, 1311 articles were identified in the two databases. The inclusion criteria included peer-reviewed journal articles published in English from 1990 to 2022. The identified
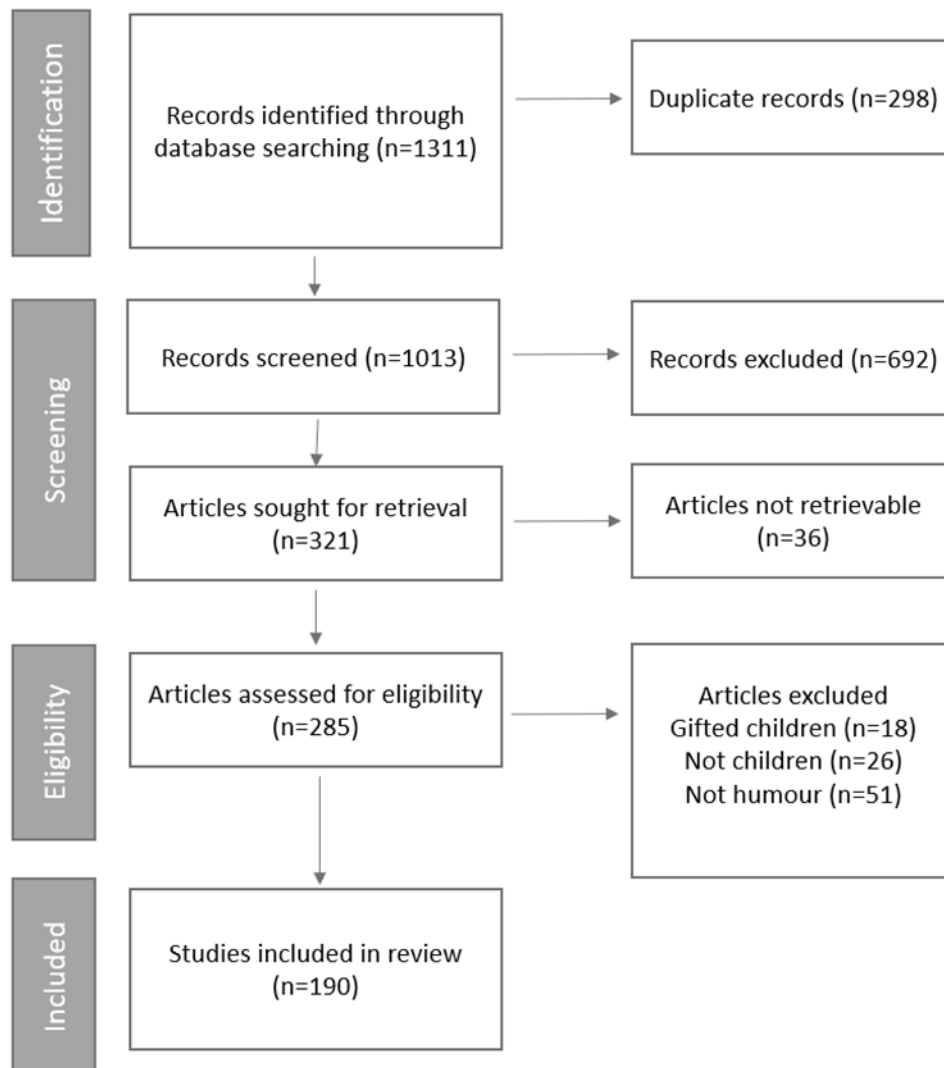

Figure 1. Modified PRISMA flowchart for the context of this study adapted from Moher et al. (2009)

articles included an age range that varied from infancy to 17 years old, which offers a different perspective compared to the types of humour liked by adults.

The identified journal articles were processed and screened using EndNote in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) flowchart (Figure 1). The PRISMA is an evidence-driven resource and comprises a checklist and flowchart aiding authors in the creation of systematic literature reviews (Pati & Lorusso, 2018). The screening process removed any duplicates, which resulted in 1013 articles. With further screening of titles and abstracts, 692 irrelevant articles were excluded. Despite the inclusion of the designated keywords, these articles were found to lack relevance to the specified topic under investigation. So, only 321 were retrieved for review. Out of these, 36 were unretrievable, and 95 others were excluded for three main reasons: a) they were either related to gifted children or specific conditions such as autism and down syndrome; b) they were not related to children; and c) they were not related to humour (for instance, an article was about

fun learning but not humour). The researchers finally identified 190 studies as eligible for the current study.

This study's multidisciplinary approach is reflected in Table 1, which outlines the various disciplines of articles included in this analysis that have explored humour for children as a topic over the past three decades (1990-2022). Table 1 also highlights the absence of tourism research, representing a research opportunity for this discipline.

A content analysis was performed on the 190 articles using Leximancer to gain better insights on the topic. All articles were converted to text format using MS Word and uploaded to Leximancer, a computer-assisted text analysis software (Smith & Humphreys, 2006). Leximancer was designed to analyse large volumes of text and to extract meaningful insights from the data via visual representations of concepts and their relationships (Wu et al., 2014). By using Leximancer to conduct the content analysis, researchers acquire an objective, in-depth conceptual understanding by shifting the analysis from the author to the actual content found within the analysed texts (Randhawa et al., 2016).

Table 1. Disciplines and number of journal articles on humour for children

Disciplines	No. of articles
Marketing	2
Education	31
Health	5
Humour	23
Linguistics	12
Literature	6
Neuroscience	3
Psychology	46
Child psychology	3
Developmental psychology	22
Educational psychology	7
Social psychology	13
Social science	17
Articles included in this study	190

During the Leximancer analysis, the researchers consolidated singular and plural forms of auto-generated concepts such as action/actions, activity/activities, child/children and joke/jokes among others, based on the recommendations of tourism researchers (e.g. Pearce & Wu, 2018). Further, the researchers identified and removed low-semantic and common words in three stages to avoid producing ambiguous results. This step was taken because certain concepts had no relevance to the current study and some concepts initially appeared meaningful but turned out to refer to a different concept upon further investigation (e.g., "development" referring to children's development vs. development of a model, concept, or theory).

4. Findings

4.1. Identification of main themes

The first research objective explores the main themes of humour discussed in the analysed articles across different disciplines. The concept map in Figure 2 indicates the five dominant themes evident in the research articles as revealed through the Leximancer analysis: social,

parents, play, teacher, and characters. The following section discusses each theme and its associated concepts, as suggested by Leximancer based on co-occurrence likelihood labels. This serves to illustrate the foundational ideas embedded in the literature.

Figure 2. Five main themes of humour for children research

4.1.1. Social

The Leximancer analysis revealed that "social" is the most prominent theme, with 9626 hits. This finding indicates that most of the analysed research articles have focused on humour as a socially situated phenomenon and how children experience it in a social context. The theme "social" relates to concepts such as group, age, peer, young, positive, effect, activity, others, and early. The 29% likelihood of co-occurrence between the concepts "social" and "peers" indicates the importance of investigating the use of humour in peer groups. The idea is reflected well by Halfpenny and James (2020, p. 149), who proposed that "specific humour styles could influence children's peer relationships and have important implications for their social competence and adjustment. (…) Children's use of adaptive humour has a cyclical effect on social competence

(…), thus allowing the growth of these humour styles and contributing overall to positive social development."

4.1.2.   *Parents*

"Parents" as a theme generated 9360 hits in the 190 articles. The related concepts include adults, responses, understanding, cognitive, funny, actions, knowledge, context, ability, laughter, and infants. The "parents" theme is well connected to the concepts of "infants", "verbal" and "understanding", showing a 25%, 20%, and 19% likelihood of co-occurrence, respectively. This connection indicates parents' significant role in helping children build verbal knowledge to understand and use humour from a very early age. Hoicka & Butcher (2016, p. 942) acknowledged this by stating the following: "Past research suggests parents give toddlers different input when joking versus pretending. When parents read a humorous versus literal book to their toddlers, they produced more disbelief language".

4.1.3.   *Play*

As the next important theme, "play" is highly associated with the concepts of language, attention, books, form, jokes, words, context, knowledge, and story, with 7952 hits. The concept "play" indicates a 28% likelihood of co-occurrence with "language", 25% with "role", and 18% with "words". The relevant concepts in this theme mainly showcase that different forms of humour and contexts are appreciated by children to have fun. The "play" theme is also meaningfully connected with the concept of language, suggesting the popularity of verbal forms of humour among children through playful use of language. This relationship highlights the linguistic perspective of previous research on humour for children, allowing children to play with words and ideas to make others laugh (e.g. Yuill, 2009). The use of language play has also been elaborated by Burrell and Beard (2018, p. 557): "It was evident that children (…) incorporated numerous features of language play into their story writing. The features ranged across the forms, meanings, and pragmatic aspects of language play." They presented evidence that children aged 9 to 11 years can manipulate forms and functions of language as a source of fun and enjoyment.

4.1.4.   *Teacher*

The role and effects of humour on children in educational settings was a popular topic in the analysed articles, thus "teacher" emerged as an important theme in Leximancer with 5618 hits. The concepts closely associated with the theme of "teacher" include school, gender, boys, time, class, students, group, and learning. Certain concepts were related to the physical context of education that show a higher co-occurrence rate, such as "student" (23%), "class" (22%), and "school" (13%). The concept of "learning" shows an 11% likelihood of co-occurrence with the theme of "teacher" implying that studies have investigated the role of humour with a focus on learning outcomes. Humour also allows teachers to create a safe and reliable environment in the classroom, as Wardman (2021, p. 11) reflected: "This is especially the case if it involves the one person at school that students should be able to depend on to create a safe and supportive environment – their teacher." However, this responsibility does not lie solely with the teacher, whose behaviour and attitudes are informed by broader societal discourses. This study and

similar ones (e.g. Besser et al., 2012) highlight the role of humour in creating social trust from which teachers can benefit.

4.1.5. Characters

"Characters" emerged as another prominent theme gaining 864 hits, which overlaps with the theme of "play". The co-occurrence likelihood between the theme "characters" and concepts such as "content" (20%), "learning" (8%), "literature" (7%), and "fun" (2%) suggests a connection between these concepts. This theme mainly describes the research into funny or significant characters developed for children and studied in the literature, including cartoons, animations, books, or advertisements. Although limited in count and percentage compared to the other four themes, such studies are critical because they shed light on the types of humorous content and characters that appeal to children. Chen et al. (2005, p. 554) stated that "[e]lementary school children were particularly fond of the animal characters. Specifically, young girls were attracted to animals' cuteness, whereas boys were attracted to animals' actions or voices."

The findings, presented in the form of a visual concept map and direct quotes from analysed articles, showcase the main themes identified via the content analysis by Leximancer.

In the following section, these five themes will be interpreted under the lens of Vygotsky's (1978a) SCT to address the second research objective, that is, discuss how the identified themes can be applied to children's learning experiences in tourism settings.

5. Discussion

5.1 Contribution of the main themes to children's learning experiences in tourism

To address the second research objective, the identified Leximancer themes were interpreted under the lens of Vygotsky's (1978a) SCT to establish a framework for enhancing children's learning through humour in tourism settings. In this framework (see Figure 3), the tourism site, either environmental or cultural, is considered the social context where children can enjoy learning through various forms of humour encounters, including play, humour in interactions with skilled partners such as parents, teachers, or tour guides, and humorous characters.

5.1.1. Tourism sites as a social context

Researchers from different disciplines have highlighted the social features of humour (Miller et al., 2021; Pabel & Pearce, 2016). McGhee (2019) argued that a positive learning atmosphere is the most significant feature that humour offers in learning contexts. Such an environment can optimise children's learning. Similarly, Addyman et al. (2018) emphasised the importance of social laughter and humour in creating social bonds and cognitive development among pre-schoolers. Humour is a social experience that can result in positive outcomes in tourism settings since interesting interactions can occur in this context (Pearce & Pabel, 2015). Children acquire "scientific concepts" by building upon spontaneous or everyday concepts (Wells, 2000, p. 29). This highlights the potential value of incorporating playful interactions and humorous experiences at tourism sites as social activities for children, positively influencing their learning process.

The themes "social" and "play" are particularly important elements in the research on children's humour, as indicated by the analysis of the various articles in this study, as these two themes can be extended to tourism contexts. Cultural and environmental tourism sites offer educational and social contexts where children can benefit from play activities (Seraphin, 2020) and interact with different individuals, particularly tour guides, facilitators, and peers. Children

recognise social interactions and making new friends as significant motivations for their holidays (Larsen & Jenssen, 2004). Therefore, diverse tourism settings serve as favourable social and educational contexts that provide opportunities for play, learning, and the shaping of sustainable behaviour among younger tourists.
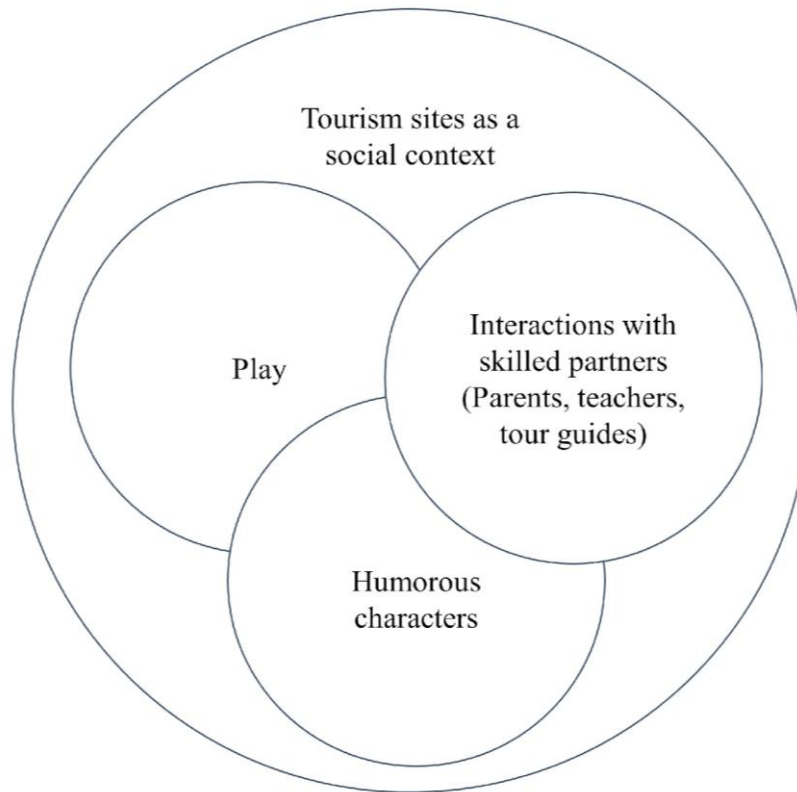

Figure 3. Enhancing children's learning through different encounters of humour in tourism environments.

5.1.2. *The importance of play*

In the present study, "play" was associated with linguistic concepts such as jokes, words, verbal, and stories. This finding indicates that humour is vital in learning via language play (Burrell & Beard, 2018). According to the SCT, play is a social practice that allows children to become part of a discourse to communicate meanings, intentions, and activities (Wood, 2014). Children can display their social skills and develop their verbal communication through play (Wood, 2014). They play with language via jokes, parody and exaggeration (e.g., Yuill, 2009).

The use of language and play as a mediated tool toward social learning is reflected in the SCT. Vygotsky (1978a) particularly highlighted make-believe or pretend play. Similarly, McGhee (2019) drew a distinction between exploratory (non-humorous) and pretend play, highlighting their distinct effectiveness in facilitating children's learning in varied ways. Hammershøj (2021) describes play as "humour in action" of a linguistic nature. This aspect should not be overlooked, as it plays a crucial role in offering children engaging and enjoyable

activities that are instrumental in educating them about sustainability issues (Seraphin, 2020). Language play as a linguistic activity offers fresh perspectives for future tourism studies.

5.1.3. Interactions with skilled partners: parents, teachers, and tour guides

Based on the presented concept map (Figure 2), "teachers" and "parents" overlap the two previously discussed concepts of "social" and "play". This overlap suggests that the use of humour by teachers and parents plays a significant role in children's learning process, particularly through interactions in various social contexts. Boyle and Stack (2014) argued that learning can become a natural and effortless by-product of a humorous experience. As a humour scholar, Bergen (2019) suggested that teachers and parents can respond to children's playful behaviour and humour by fostering a playful environment where humour is encouraged at home or school.

The humour literature suggests that teachers and parents can affect learning in the ZPD by using humour or facilitating its use among children in a learning context. Thararuedee and Wette (2020) proposed that incorporating humour is a pedagogical strategy for scaffolding positive emotions and establishing a relaxed atmosphere to enhance language learning. Facilitating the use of humour by teachers has been highlighted by Poveda (2005), who argues that teachers can employ humour, particularly playfulness, to resolve peer conflicts in preschool classrooms. Therefore, teachers and parents can benefit from using humour for children in different situations to reinforce their learning experience.

Parents and teachers accompanying children in tourism environments can have different roles in educating them. Previous studies have highlighted the significance of teachers' interactions in children's learning experiences (Carr et al., 2012) and the role of parents who actively educate their children in tourism environments (Wu & Wall, 2017). Tour guides are another critical group to include in such settings. For example, a central component of quality interactions is communication between children and their parents, teachers and interpreters/guides at science centres (Falk & Storksdieck, 2005). However, their roles in providing humour to facilitate learning may vary. Tourism contexts provide opportunities for humour directed at children via scaffolding, where they learn from tour guides. Whereas parents can use humour or encourage its use to provide a relaxing learning atmosphere.

5.1.4. Humorous characters

The theme of "characters" in the present study derived from the various studies investigating playful and humorous characters for children in the literature, including cartoons, animations, and advertisements. While some of the analysed articles merely investigated popular humorous characters and figures (e.g., Chen et al., 2005), others focused on providing the necessary humorous material that contributes to children's learning (e.g., Banasik-Jemielniak, 2021). Examining humorous characters from a SCT perspective, humorous figures and characters in the children's literature or cartoons can be considered historical and pedagogical artefacts (Lantolf, 2000), which can be used as a tool to transmit cultural values (Boutte et al., 2008). Vygotsky (1978a) asserted that the use of tools within SCT represents a useful method of intellectual adaptation that children internalise through social interactions. Tools can be diverse and vary from culture to culture, hence, humorous characters and sources can also differ as tools to facilitate children's learning.

5.2 Theoretical contributions

The framework in Figure 3 offers several key insights based on Vygotsky's (1978a) SCT. Firstly, it emphasises the effectiveness of humour in creating the ZPD for children's learning by

recognising the importance of *social interactions with skilled partners* such as parents, teachers and tour guides. These individuals may use humour as a scaffolding tool to introduce new information to children during their tourism experiences (cf. Margolis, 2020). The framework also highlights the dimension of *play* as an effective strategy for incorporating humour into children's learning. Wordplay and other forms of language-based humour can be leveraged to enhance the learning process. Particularly in tourism settings, humour in the form of pretend play, role-playing, and immersive experiences can serve as a useful scaffolding approach, making the learning process more enjoyable and effective for children (Vygotsky, 1978b; Bodrova & Leong, 2015). Finally, the dimension of *humorous characters* in the framework recognises the inclusion of cultural-historical tools that work well with humour. An example of this is the Turtle Talk Show at Disneyland Florida which showcases how interactive and humorous characters can provide an engaging and educational experience for children.

Vygotsky's (1978a) SCT allowed us to reflect on how humour can be used as a pedagogical tool to support children's learning in tourism settings for four main reasons: 1) humour is socially situated and can be used in various contexts to assist social learning among children; 2) the use of humour by adults can provide adult-assisted learning or learning in the ZPD; 3) humour is closely connected with the concept of play which has been identified as necessary in children's learning and developing their skills; and 4) humour can provide the emotional support that children need to facilitate learning in the social context, particularly among peers.

Previous studies on the tourism and humour relationship have mainly focused on adult experiences, but this study highlights the potential of humour to support children's learning. For instance, Pabel and Pearce (2016) investigated tourists' use of funny stories or self-deprecatory humour that are rooted in daily conversations and routines that could happen at tourism sites. However, the current study suggests that humour for children can take place in the form of play, humorous characters, and interactions with skilled partners, which can contribute to learning outcomes. The outlined framework in Figure 3 provides a foundation for further research into children's learning outcomes through humour.

5.3 Implementation of framework by tourism operators

While tourism sites provide the natural and/or cultural context in which the three dimensions of the proposed framework are applied, the age groups of young customers also need to be considered when designing humorous and fun tourism experiences such as interpretive programs. The dimensions in the framework constitute the building blocks, which make tourism experiences more diverse and effective in promoting children's learning, allowing tourism managers, in collaboration with parents and teachers, to use humour as a tool to foster a positive and enriching learning environment for children.

Apart from play with words and language, age-appropriate pretend play during tourism experiences could include treasure hunts or scavenger hunts around national parks by providing children with maps, hints, and puzzles to solve while learning fun facts about the site. Other options are storytelling sessions or live performances, which could include vicarious audience participation (Pabel & Pearce, 2016) that bring local legends and folklore to life to capture children's imagination and create a stronger connection to the destination's cultural heritage. For example, more immersive experiences can be created when children are provided the option to dress up in costumes and participate in role-playing scenarios. Furthermore, interactive displays/exhibits catering to children's curiosity and desire to explore could be installed at tourism sites, e.g., engaging multimedia can help children learn about local history and nature in a fun and playful way.

The interactions with tour guides who wish to better connect with young audiences need to be based on information that is relatable and enjoyable for children to enhance their overall

experience. The use of age-appropriate language, storytelling techniques, and hands-on activities is important to make the experience fun and educational. Collaborative planning involving parents, teachers, and tour guides could be helpful by seeking input on the types of activities and humorous and educational elements that best align with children's interests and learning objectives (cf. Thararuedee & Wette, 2020; Turnsek et al., 2019).

Industry professionals engaged with child-oriented tourism activities such as museum curators, event managers, facilitators and animators may consider adopting the developed conceptual framework centred around humour. The conceptual framework serves as a guiding compass, outlining where and how the infusion of humour is most effective. For instance, animators or event managers can integrate popular humorous characters into their programs, or museums can develop interactive humorous plays for children to engage and entertain them while enriching their learning experience.

This can be achieved by designing tours and activities with specific themes that resonate with children's interests, such as adventure, fairy tales, or wildlife. To further educate children on sustainability related issues, storybook-inspired tours could be offered where children can follow a narrative and meet characters from their favourite stories or cartoons. This creates a sense of wonder and adventure as they explore the destination through familiar and beloved tales. An example is *Ella's Adventures* (Miller, 2020), a book about a green sea turtle on the Great Barrier Reef where children learn about the importance of keeping our oceans healthy.

6. Conclusion

This research focused on two research objectives: first, identifying the main themes of humour which are discussed in the academic literature for children and, second, discussing how the identified themes can be applied to children's learning experiences in tourism settings. An interdisciplinary systematic review was conducted based on the PRISMA framework. The analysis of 190 articles in Leximancer resulted in five themes: *social*, *parents*, *play*, *teacher*, and *characters*. Then, the emergent themes were interpreted using Vygotsky's SCT. After relabelling the themes, a new framework was developed for enhancing children's learning in tourism environments. The framework consists of four dimensions: tourism sites as the social context, play, interactions with skilled partners (parents, teachers and tour guides), and humorous characters.

This study contributes to the extant literature in two ways. First, having reviewed the literature from multidisciplinary fields through relevant keywords, this study addresses a gap in the tourism literature regarding the topic of humour for children. Second, as Poria and Timothy (2014) argued, one obstacle to studying children in tourism is the lack of appropriate theoretical frameworks. The framework proposed in this study makes future research on children and humour in tourism a more straightforward undertaking.

Theoretically, the presented framework offers a new perspective on the use of humour in tourism settings, specifically for children, and provides a basis for further research into the outcomes of humour in this context. It also highlights the potential for humour to be a universal language that can be used to engage children from different cultural backgrounds via play and humorous characters. Additionally, the current study suggests that the social context of tourism environments can be leveraged for children's learning experiences through interactions with skilled partners. Future research can utilise this framework to better understand children's experiences of humour in tourism settings and evaluate the impact of these experiences on their cognitive and emotional development (cf. Davidson & Black, 2007; Rhoden et al., 2016).

This research also has practical implications for tourism operators targeting children as an essential market segment. Since humour has already been recognised as a valuable tool by

educators to support children's learning (Dormann & Biddle, 2006), site managers can benefit from considering humour for designing educational programs for children at tourism sites. The dimensions proposed in the conceptual framework can also provide practical insights for museum curators, event managers, facilitators, and animators. When planning an event, service, or content, they are encouraged to consider where they might add humour to foster children's learning experiences. The role of play associated with humour in children's learning and development is already known in the field of education (see Bergen, 2018). However, there are further opportunities to consider the social aspects of play and its connection to humour for children in tourism contexts.

This study has several limitations. The first one is that the age of children in the selected articles was rather broad ranging from infancy to 17 years old. Age has been recognised as a vital factor in studies related to humour (Boyle & Stack, 2014) and future research endeavours should consider adopting a more targeted approach in the selection of specific age groups for a better understanding of the subjects. Additionally, this study only considered publications in English, while valuable insights may exist in other languages. Further research is needed to validate the framework and its presented dimensions.

Future studies may use the proposed conceptual framework to develop humorous interpretation programs for children and investigate the appropriate use of humour in learning. There is an opportunity to empirically test the different humour dimensions proposed in the framework via observational studies to investigate how children learn and remember information after they experience humour in tourism settings. Employing child-friendly data collection methods such as drawing or photo-elicitation interviews are also possible pathways to evaluate children's experiences after various humour encounters in tourism environments. There is a notable lack of research on the ways in which children respond to different types of humour in tourism, including their cognitive, affective, and behavioural responses. Additionally, this systematic review highlighted the possibility of play as a form of humour and a developmental activity for children, which could be a promising area for future research in tourism studies.

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