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# Brace for impact! COVID-19, lockdown and the initial reaction and adaptability of Flemish travel consumers

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## Abstract:

**Purpose:** To determine the influence of COVID-19 and the first 2020 lockdown on Flemish people's initial travel behaviour perceptions, a hypothetical scenario was posed to respondents where they were asked to keep in mind a situation where they might be able to travel again during the summer of 2020 (July/August). This research had two main aims: i) the pre-lockdown travel plans for summer 2020 were determined; ii) the extent to which respondents would adapt their travel behaviour if they were hypothetically allowed to travel again by summer 2020.

**Methods:** This exploratory research was done by means of an online quantitative questionnaire of which 1803(n) complete responses were obtained through convenience and snowball sampling.

**Results:** The results revealed that respondents did have initial travel plans for the 2020 summer (July/August) period, but that they adjusted their planning to mostly travelling nationally/locally, potentially benefitting the local tourism industry. These findings (i) indicate the importance of directing marketing efforts towards the local travel market and (ii) contribute to literature regarding the resilience of the (local) tourism industry. Additionally, the research unveils how the industry should do long-term planning by taking the immediate travel behaviour changes of the Flemish travel consumers into account through regular intervals of consumer research so that it can pick up on possible behavioural trends and ready itself.

**Implications:** Government, together with the industry, can work towards policies that act as a safety net during possible future industry disasters to minimize the negative impacts and foster a swift recovery.

**Keywords:** Coronavirus, epidemic, lockdown, travel behaviour, tourism

**JEL Classification:** L10, R41, D18

**Biographical note:** Dr Marco Scholtz (marco.scholtz@nwu.ac.za) obtained his PhD in 2014 at the North-West University in South Africa, and is currently a tourism researcher at Thomas More University of Applied Sciences in Belgium. His main interests lie within the spheres of social impacts of tourism, travel motives and behaviour, and cultural heritage. Ms Kaat De Ridder (kaat.deridder@thomasmore.be), MSc in Tourism, is currently a tourism researcher at Thomas More University of Applied Sciences in Belgium. Her main research interest focusses on (cultural) heritage tourism with an emphasis on both tangible and intangible heritage. Additionally, she is exploring the sphere of travel behaviour research.

## 1 INTRODUCTION

The 2020 COVID-19 pandemic has had an unprecedented impact on global economies (UNTWO, 2020) and caused an estimated job loss risk of 120 million in 2020 (UNWTO, 2020). 'Social distancing' is the primary reason for the impact on tourism (Wilder-Smith & Freedman, 2020) because people had to keep their distance and country borders had to close; which was also the case for Belgium (RTLNieuws, 2020). This was coupled with a ban on non-essential travels, closing tourism attractions, accommodation and restaurants (Clapson, 2020). These measures resulted in an extreme impact on the Flemish region (Flanders) of Belgium, where the tourism industry employs over 260 000 people (in 2018) and is responsible for over 14 million arrivals (of which 55% international and 33,1 million

overnight stays) (Toerisme Vlaanderen, 2019), contributing 4,2% to the Flemish GDP in 2013 (Visit Flanders, 2013).

Flanders (Dutch-speaking region) is popular with tourists due to its various attractions and well developed public transport system (Vlaanderen, 2020). As a result, during the March 2020 lockdown, tourism revenue losses were estimated at 1,4 billion euros per month (Kamer, 2020). It was thus important for the tourism industry to recover rapidly through specific recovery plans which are based on a firm analysis and full understanding of the situation. One important aspect to take into account is the possible consumers' travel behaviour changes that could have taken place (De Vos, 2020). With such knowledge, the tourism industry could strategically adapt its planning, management and marketing efforts to swiftly recover from the pandemic and become more resilient for possible future crises.

Various studies have been done on the impact of multiple factors on consumers' travel behaviour (Delbosc et al., 2019); however, a minimal amount of research can help with the understanding of the dramatic global impacts of the 2020 COVID-19 pandemic, social distancing and nationwide lockdowns, as these are mostly new, unique situation during modern times. Such research is especially needed seeing as health, and natural disasters are predicted to not only repeat but also increase in frequency (Sigala et al., 2002; Hall, 2010; Park & Reisinger, 2010). To better help the regional tourism industry prepare for 'life-after-COVID-19' or to cope better during the 2020 COVID-19 pandemic and future pandemics, it was decided that the main aim of this study was to conduct research on the impact of the 2020 COVID-19 pandemic and the subsequent lockdown on the intended travel behaviour of Flemish people during such times.

Seeing as this research had to take place during the lockdown, a hypothetical situation had to be devised where respondents were asked if and how they would adjust their travel behaviour if the regulations were to be relaxed or revoked by the time the 2020 summer holidays would arrive (July/August). The aim of the study was achieved by reaching the following main goals: determine if the Flemish respondents did have travel plans before the lockdown regulations were implemented; determine where the respondents were planning to travel initially and if their plans would be adjusted (according to the hypothetical scenario); To determine fundamental travel behaviour changes that would result after extreme safety measures such as a lockdown; To make recommendations towards fostering a more resilient tourism industry pertaining to such crises.

## 2 LITERATURE REVIEW

### 2.1. The dynamics of travel behaviour

Travel behaviour can be defined as tourists' behaviour according to their attitudes before, during and after travels (Bhattacharya & Kumar, 2017). In turn, tourists' attitudes, subject to internal (motives and income, for instance) (Van Wee, 2009), and external (environment and social attributes such as safety) factors (Whyte, 2017), influence their reasons for travel. Knowledge of consumer's travel behaviour allows for proper planning, management and marketing of tourism offerings. Furthermore, travel behaviour is dynamic and should be measured frequently or in response to certain environmental changes (Zhang et al., 2020). Various events take place that influence consumers' travel behaviour over time (Gössling, et al., 2020); these can be technological, demographical, economic or social in nature (Mansfeld & Pizam, 2006; Park & Reisinger, 2010; Senbeto & Hon, 2020). However, sometimes events take place that can cause more drastic disruptions in travel behaviour, meaning that faster reaction times are needed from the tourism industry. Examples of such events include the 2008/2009 global economic recession (Scholtz, Saayman, & Kruger, 2012), natural disasters such as tsunamis, floods, volcanic eruptions (Rosselló, Becken, & Santana-Gallego, 2020) and droughts (Rangongo, 2018), as well as health disasters such as the 2020 COVID-19 pandemic (UNTWO, 2020). If such disasters are not well managed and systems are not resilient, they can evolve into crises (Faulkner, 2001) which create

negative consequences in the tourism industry (OECD, 2014; Rosselló et al., 2020). Such consequences can have a particularly negative impact on perceptions regarding risk and safety at destinations, as well as on the destination image; and factors that strongly influence the decision-making process of travellers (Faulkner, 2001; Beirman, 2003; Mansfeld, 2006; Rittichainuwat & Chakraborty, 2009; Page et al., 2012; Becken et al., 2016; Bhati et al., 2016; Chatzigeorgiou & Christou, 2020).

Research that map and quantify the relationship between disasters, crises, and tourism is scarce, often highlighting the impact on a national level through case studies with a focus on the impact on visitor numbers and limited to isolated cases; however the COVID-19 crises is different (Hall, 2010; Park & Reisinger, 2010). Moreover, the effects of such an international event on the individual demand, tourist behaviour and recovery policies remain relatively uncharted grounds (Bronner & de Hoog, 2014; Okuyama, 2018; Senbeto & Hon, 2020), yet important to pursue. Due to the combination of urbanisation, industrialisation, technology, hypermobility and climate change, the number, size and impact of disasters and crises have increased (Hall, 2006; Hall, 2010; Park & Reisinger, 2010), resulting in a need for better comprehension of the various immediate consequences, its impact on consumers' travel behaviour as well as preparedness to cope with them (Fan, et al., 2019; Sinclair-Maragh & Simpson, 2021).

### 2.2. Previous research on the effect of negative events

The influence of mostly stratified negative events has been studied. Such negative events, in general, create a consumer shift towards destinations that are deemed 'risk-free' (Mansfeld, 2006). It can also cause consumers to cancel bookings and adjust expenditure and length of stay (Mansfeld, 2006; Page et al., 2012; Senbeto & Hon, 2020). Research on the risk of the 2003 SARS virus outbreak in Asia, for instance, showed how mass media led to a sharp decline in visitor numbers and expenditure (Wilder-Smith, 2006; Senbeto & Hon, 2020). The 2001 English foot-and-mouth disease outbreak created a long term negative impact on rural tourism (Miller & Ritchie, 2003; Page et al., 2012). Unlike natural disasters, pandemics have a long-lasting impact on the image of destinations, or at least until a vaccine is made available (Chien & Law, 2003).

Altered travel choices and behaviour may differ according to the nature of the event. In cases of terrorism and crises such as pandemics, travellers indicate that they prefer to avoid crowded attractions (Rittichainuwat & Chakraborty, 2009). Events and crises of financial and economic nature limit travellers' possibilities to travel to long-haul destinations as the decision-making process is highly influenced by job insecurity and a possible decrease in disposable income (Papatheodorou & Pappas, 2017; Senbeto & Hon, 2020). This has led to public sectors, for instance, promoting domestic tourism during the 2008-2009 economic crisis, as international tourists were more likely to economise on their travels in terms of time and budget (Page et al., 2012). However, it remains unclear to what extent crises influence domestic tourism and how increased domestic tourism activities may contribute or compensate for loss of revenue from incoming international tourism (Li et al., 2010; Milwood & Crick, 2021).

### 2.3. Tourism recovery after a crises

A full recovery of the tourism industry at a destination after a disaster or crisis can take long and can be complex (Cavlek, 2002; Sigala & Christou, 2006; Rittichainuwat & Chakraborty, 2009). Although the specific impacts of disasters and crises vary, there are certain common factors that need to be addressed in their aftermath. A central pillar in tourism recovery concerns meticulous disaster management steps that need to be taken to plan, prepare, protect and rebuild the destination image to ensure continuity and support of tourism organisations (Hystad & Keller, 2008; Okuyama, 2018). A vital first step in disaster management planning is to disseminate unambiguous and transparent information. Such messages should be underpinned by the already existing destination image in consultation with the sector's key stakeholders. It should attract the correct type of visitors at the right moment, considering possible limitations concerning the tourism supply, while isolating the potential problematic zones from other risk-free areas (Cavlek, 2002; Hystad & Keller, 2008; Hughey & Becken, 2016; Okuyama, 2018).

### 2.4. Influence of 2020 COVID-19 on tourism, predicted and observed travel behaviour

As tourism activities potentially facilitate the transmission of COVID-19 (Wesolowski et al., 2014), most destinations (wholly or partially) closed their borders and cancelled many incoming international flights in March 2020 (UNTWO, 2020). Several other measures were put in place to prevent people from gathering in specific areas (e.g. suspension of mass events and lockdowns) (Gretzel et al., 2012; Del Chiappa et al., 2021; Fotiadis, 2018; Fotiadis & Williams, 2018).

Furthermore, hotels, restaurants and tourist attractions were (partly or wholly) closed, and airline companies were requesting monetary assistance from governments (Gössling et al., 2020). Such restrictive actions, affecting 90% of the world's population (Gössling et al., 2020; Nella & Christou, 2021), had put the tourism industry on hold (Niewiadomski, 2020) and would drastically decrease the consistent growth of the travel industry for the first time in 10 years (UNWTO, 2020). Thus, tourism was one of the hardest hit industries (UNWTO, 2020), both in Flanders and globally (Lock, 2020). Possible significant threats to the international tourism industry consisted of economic recessions, increased unemployment and uncertainty concerning the length of the pandemic (UNWTO, 2020). Due to the crisis, destinations and communities that rely heavily on international arrivals as an economic source were most vulnerable to the effects of the regulations, while those with strong domestic markets were less vulnerable (Tsao & Ni, 2016; UNWTO, 2020; Bonarou, 2021).

Regardless of UNTWO's (2020) report, domestic tourism was expected to recover faster than international demand. Also, a fraction of travellers indicated that many international travel plans made before COVID-19 were cancelled, and newly planned international trips remain limited (Sequeda, 2020). Travellers who indicated that they were still planning to travel internationally would postpone their trips until autumn 2020 (northern hemisphere). An increased interest in spending the 2020 summertime (northern hemisphere) in one's own country and the vicinity of the place of residence

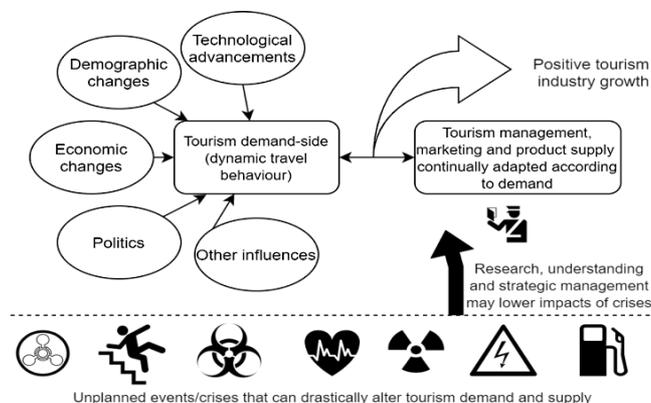
was already noticeable (Sequeda, 2020; Chen et al., 2020; Kiesnoski, 2020). In Flanders (Belgium), the regional Destination Management Organisation (DMO), Tourism Flanders, pointed all its promotional efforts towards the domestic market (Toerisme Vlaanderen, 2020a). From the information above, consumers appeared to be optimistic about the post-COVID-19 recovery and linked household spending (Jones, 2020). However, during the crises, consumers indicated that a possible decrease in savings/disposable income and a general sense of insecurity, and even danger concerning travel, would likely make them spend less on travel and recreational activities (Charm et al., 2020; Jones, 2020; Sequeda, 2020). As a result, the size of travelling groups with recreative motives was expected to also decrease compared to the size of groups pre-Corona, together with a general decrease in spending (Charm et al., 2020; Chen et al., 2020).

Huijbens (2020) reiterates the importance of safety in that there is an expectation of more self-centred travellers, social distancing demand and a search for alternatives to public transport (Chen et al., 2020; The Research Alliance, 2020), such as walking and biking activities (De Vos, 2020), and shorter travel distances (which corresponds well with domestic tourism campaigns launched by various DMOs) (Christou, 2010; Diskin, 2020; Page, 2020; Ron, 2020; The Nation Thailand, 2020; Toerisme Vlaanderen, 2020a; Visit Britain, 2020).

According to a McKinsey & Company study (Chen, et al. 2020), consumers would therefore prefer to visit open-air attractions and avoid crowded places. Also post-Corona, the potential threats include perceptions of safety risk and lower tourism demand. Therefore, innovative policies, practices and guidelines towards resilience and preparedness for future moments of crisis are needed (Novelli, 2020; Nechoud et al., 2021).

From the literature, the research framework (Figure 1) was created. It reveals interactions between tourism demand and supply, with supply continually adapting to the dynamic behaviour of the demand-side. Furthermore, crises might arise, which can catch this system off guard; however, through proper research and strategic management, the impacts of such crises could potentially be minimised.

Figure 1: Research framework – the influence of crises of tourism demand and supply



Source: Created literature findings

### 3 RESEARCH METHODOLOGY

This research was exploratory and made use of quantitative data collection using an online questionnaire (in Dutch); the rest of the method used is explained in this section.

#### 3.1. The questionnaire

The questionnaire consisted of four sections. The first section (Section A) determined the possible travel plans that Flemish respondents had made prior to the March 2020 regulations. Through closed-ended questions, it measured whether the respondents did have initial travel plans; whether they would adjust their travel plans; and where they were planning on travelling (nationally or internationally). With open-ended questions, their planned expenses for their trips as well as the travel group sizes were measured. Section B measured respondents' 2020 July/August summer travel perceptions regarding the possibility of travel.

Section C provided a hypothetical situation where respondents were asked to take into account a situation where the travel regulations could be relaxed or cancelled before the summer holidays (July/August 2020) to allow for travel – the importance of keeping the hypothetical situation in mind was stressed throughout the questionnaire. The respondents' newly envisaged travel plans or behavioural changes were explored. Questions such as where they would, in light of the hypothetical possible relaxation of the lockdown, plan on travelling to during the 2020 summer season (July/August) and why; as well as various other behavioural changes that they were planning to make such as changes to group sizes; planned spending; preferred attractions in Belgium (if not yet allowed to travel abroad); as well as their general travel preferences (detached from the lockdown). The question on the preferred attractions was asked in three separate rating scales – one for the Flanders region, one for Brussels, and one for the Wallonia region. Respondents could indicate their favourite type of attraction with a '1', while the least preferred was given a '10'. The question on the preferred general travel preferences were asked on a 5-point semantic differential scale where different travel preferences were placed on the polar parts of the scale, for example, preference for beach holiday or mountains holiday; city trip or somewhere in nature; rustic experience or luxurious, for instance. The last section (Section D), measured general socio-demographic information such as respondents' age; occupation; place of residence within Flanders; the sizes of their households; as well as the number of children per household.

The steps proposed by Field (2003) and Tustin et al. (2005) were used to design and validate the questionnaire. The process included an in-depth review of the literature to endorse the content; secondly, face validity was used where various professionals in the field of tourism and research, and two non-professionals, examined the questionnaire against the goals of this study, to ensure the correctness of language, questions, and question types which would contribute to the correct data being measured in such a way to allow for further analysis.

#### 3.2. Survey and method

The federal state of Belgium consists of Flemish, French and German-speaking communities within particular regions. Each region has individual economic autonomy, resulting in a Flemish, Brussels Capital and Walloon Region (Belgian Federal Government, 2020). This research was carried out at a Flemish educational institution, which is, in turn, a community matter – thus limiting the study to this region (Map1).

Map 1: The regions of Belgium used in the study



Source: [https://www.familysearch.org/wiki/en/Belgium\\_Languages](https://www.familysearch.org/wiki/en/Belgium_Languages) (free-to-use)

Due to the regulations, an online questionnaire was used as data collection tool– it was developed in Qualtrics (2020) which allowed a link to the questionnaire to be distributed to the people in Flanders. Both convenience and snowball sampling (non-probability) within stratified sampling (where the main cities of each province in Flanders formed a stratum) were used. Various official Facebook groups for official town/city groups in Flanders, Belgium; N=756 353; see Appendix A) were joined, where the questionnaire link was posted. Furthermore, various DMOs helped to distribute the questionnaire link (the DMOs' reach regarding distribution cannot be determined). Multiple forms of broadcast media also picked up on the survey and broadcasted it on radio and television news (such as RTV News) or in online newspapers such as vrtNWS. Data collection took place from 14 April 2020 to 22 April 2020 – data collection was halted after a good spread of the strata was achieved with 1803(n) responses.

Table 1: Breakdown of provinces, population sizes and spread of the sample

Aspects measured	Population (1 Jan 2020)	Percentage of population	Percentage in sample
Antwerp	1857986	23,8%	45%
Flemish-Brabant	1146175	14,7%	18%
West-Flanders	1195796	15,3%	14%
East Flanders	1515064	19,4%	16%
Limburg	874048	11,2%	5%
Brussels	1208542	15,5%	2%
Total	7797611	100%	100%

Source: (STATBEL, 2020) & own results

#### 3.3. Statistical analysis and results

According to Statistiek Vlaanderen (2019), the Flanders region had approximately 6,6 million (N) inhabitants in 2019.

Seeing as many Flemish-speaking people live in the Brussels Capital Region, this province was also incorporated, making the total population 7,8 million (N). For a 95% confidence level and 5% margin of error, the sample size for Flanders should be at least 385n for a statistically representative sample. Furthermore, a distribution of responses from all five provinces in Flanders and Brussels was achieved. As per the 2011 Belgium census, the average age of Flemish people was 41,74 years (STATBEL, 2020), which correlates with the sample's average age of 44,42 years (see Table 2). To examine the representativeness of the geographical distribution of the respondents, a comparison was drawn up in Table 1. A fair number of respondents from all provinces in Flanders, as well as Brussels, took part in the survey.

The data were exported from Qualtrics to Microsoft Excel, inspected for errors/inconsistencies and further analysed in SPSS Version 26 (SPSS, 2020). Firstly, frequency tables were used to determine the profile of the respondents, as well as their travel behaviour in general. Secondly, crosstabs and t-tests were used to identify possible changes in the respondents' travel behaviour. Statistically significant differences ( $p < 0,05$ ) are reported in this manuscript.

### 3.4. The profile of the respondents

The analysis of respondents' ages and household sizes (Table 2) reveals that the largest age groups were between 31 and 40 (24%) or between 41 and 50 years (23%) of age. Their households consisted of two (39%) or four persons (23%) (2,83 persons per households on average).

Table 2: Respondent profile

Aspects measured	Result(s)
Age	31 – 40 years (24%); 41 – 50 years (23%); 44,42 years average age
Size of household	Two persons (39%), four persons (23%); 2,83 persons per household on average

The next section contains the results of this research and the analyses.

## 4 FINDINGS AND ANALYSIS

### 4.1. Overview of initial travel plans and possible behaviour changes

The majority of respondents (85%) indicated that they had already planned their summer holiday (July 2020) before Belgium went into lockdown (Table 3). As a result of the crisis, 64% of the total respondents indicated that they would adapt their overall travel behaviour and 84% believed that international travel would still not be allowed by July/August 2020.

Table 3: Initial travel plans and behaviour changes

Aspects measured	Result(s)
Initial travel plans in place before the lockdown?	Yes (85%)
Adapt travel plans as a result of lockdown?	Yes (64%)
Do they think international travel will be possible by July/August 2020?	No (82%)

### 4.2. The differences in initial and possibly adapted travel behaviour

T-tests and crosstabulations were used to reveal differences between initial travel behaviour and adjusted behaviour

(based on the hypothetical lowering or elimination regulations).

i. *Differences regarding intended and new destination types*  
Table 4 reveals the differences between respondents' initial destination types and their possibly adjusted plans. Initially, 73% of respondents planned only to travel internationally; however, 49% would change their plans to travel both locally and internationally, while 22% would rather stay in their own town/city.

Table 4: Types of travel

Behavioural aspects	Type of travel	Initial plans & behaviour	Adjusted plans & behaviour
Destination choice(s) (national or international)	Only national travel	13%	20%
	Only international travel	73%	9%
	Both: national and international travel	14%	49%
	Stay in own town/city	-	22%

Significant differences were observed between initial and adapted travel types ( $p > 0,05$ ) (Table 5). Of those who initially planned to only travel in Belgium, 62% would still do so, while 21% would rather remain home and 16% who would want to travel in Belgium and abroad (21%). For those who had initially planned only to travel abroad, only 28% would still do so, with 44% who would change their plans to travel in Belgium as well as internationally (44%), 10% who would only travel in Belgium and 18% who would rather stay home. When examining those who were planning to travel in both Belgium and abroad, 63% would still do so. However, 21% of this group indicated that they would rather travel in Belgium only, and 13% considered staying home. The main reasons why respondents would be willing to travel more in Belgium included 'local travel is safer' (44%), 'I want to support the local economy' (28%), and 'it is easier to simply travel in Belgium' (14%).

Table 5: Initial and adjusted travel plans compared

		Adjusted holiday plans				Total	
		Only national travel	Only international travel	Both: national and international travel	Stay home/local		
Initial travel plans	Only national travel	Count	69	1	18	24	112
		%	62%	1%	16%	21%	100%
	Only international travel	Count	69	194	299	121	683
		%	10%	28%	44%	18%	100%
	Both: national and international travel	Count	107	16	312	64	499
		%	21%	3%	63%	13%	100%

Phi ( $\phi$ ): 0,492\*\*\* df: 12 p-value: 0,00  
\* Indicates significance at 5% level; phi-value: \*\*small effect=0,1; \*\*\*medium effect=0,3; \*\*\*\*large effect=0,5; p<0,05 = significant

ii. *Differences in spending per intended destination type (Initial vs New Plans)*

A t-test revealed the difference between initial spending and newly planned spending (see Table 6) for the 2020 summer holiday (July/August 2020). The largest effect sizes were revealed in the categories where people prefer to travel both in Belgium ( $p = .000$ ; Cohen's  $d = 0,336$ ) and abroad ( $p = .000$ ; Cohen's  $d = 0,354$ ). In both it was found that the respondents were planning to spend significantly less when travelling both in Belgium (€38,07 or 6,6% decrease) and abroad (€665,86 or 30,33% decrease). Those who planned to still travel abroad only, will also spend significantly less ( $p = .007$ ) but with a small effect size (Cohen's  $d = 0,1$ ); from €3227,38 to €2906,15 (€321.23 or 9,95% decrease). Those

who plan to travel in Belgium only are planning to spend significantly more ( $p = .000$ ; Cohen's  $d = 0,16$ ); from €757,95 to €937,10 (€179.15 or 23,62% increase).

Table 6: Comparison of initial and newly planned spending (t-test)

Type of travel	Initial vs new	N	Spending (average)	Standard deviation	Sig.	Effect size
Only national travel	Initial	108	€757,95	824,684	,000	0,16**
	New	205	€937,10	1303,401		
Only international travel	Initial	126	€3227,38	3352,436	,007	0,1**
	New	126	€2906,15	3095,378		
Both: Belgium	Initial	512	€576,53	1079,614	,000	0,336***
	New	399	€538,46	1181,428		
Both: International	Initial	512	€2195,52	2215,418	,000	0,354***
	New	403	€1529,66	1473,09		

\* Indicates significance at 5% level; phi-value: \*\*small effect=0,1; \*\*\*medium effect=0,3; \*\*\*\*large effect=0,5;  $p < 0,05 =$  significant

### iii. Changes in types of travels considered/planned

An initial t-test revealed significant differences ( $p > 0.005$ ) between the average number of people per travel group for both those who planned to only travel in Belgium and those who prefer to travel abroad (Table 7). For those who plan to travel in Belgium alone, the average group size showed a decrease (3,28 to 2,71 persons; 17% decrease) with a small effect size ( $p = .000$ ; Cohen's  $d = 0.287$ ) when comparing initial plans and adjusted plans. However, the decrease in group size is smaller (2,68 to 2,53 persons; 5,22% decrease) when examining those who prefer to only travel abroad ( $p = .000$ ; Cohen's  $d = 0.087$ ).

Table 7: Comparison of initial and newly planned group sizes (t-test)

Types of travel		N	Average travel group size (adults)	Std. Deviation	Sig.	Effect sizes
Only national travel	Initial	114	3,28	2,302	,000	0.287**
	New	214	2,71	1,612		
Only international travel	Initial	735	2,68	1,652	,000	0.087
	New	172	2,54	1,616		

\* Indicates significance at 5% level; phi-value: \*\*small effect=0,1; \*\*\*medium effect=0,3; \*\*\*\*large effect=0,5;  $p < 0,05 =$  significant

### 4.3. Preferred attractions during lockdown

From the results in Table 8, it appears that the respondents would mostly prefer restaurants and cafes (67% and 55%, respectively) or nature areas (66% and 60%, respectively) in Flanders and Wallonia. When travelling to Brussels, respondents would mostly do so to visit restaurants and cafes (65%).

Table 8: Preferred attraction types

Type of attraction	Flanders region	Brussels region	Wallonia region
Restaurants & Cafes	67%	65%	55%
Nature areas (landscape, forests)	66%	-	60%
Cities	57%	-	48%
The coast	55%	-	-
Cultural and heritage areas (such as museums, castles etc.)	52%	57%	46%
Zoo's and theme parks	51%	-	46%
Recreation and water parks	50%	-	45%

## 5 DISCUSSION

When examining the respondents' initial travel plans and comparing it to the hypothetical situation where the lockdown regulations are relaxed or removed by the time of the 2020 summer holidays (July/August), various findings

become apparent regarding the impact of the pandemic on Flemish consumers' travel behaviour.

### 5.1. More will rather travel in their own country

Travel consumers would adjust their initial destination choices, in light of COVID-19, with a significant increase (+7%) in those who would rather travel locally (in Belgium) or stay within their own town or city limits (+22%), while those who were planning to only travel internationally drastically decreased by 64%. and those who would travel both internationally as well as nationally increased by 35%. When probed regarding their possible travel decision changes, the majority indicated that they did so because they perceive local travel as safer, easier and more convenient, and they saw it as a way to support the Flemish economy, and especially the tourism industry to which they felt a form of responsibility during such critical times. This finding reveals the Flemish people's sense of responsibility towards their local tourism industry which poses a golden opportunity for the local tourism industry to grow their local market segment by being aware of this behavioural change and by adapting its planning and marketing efforts towards it. The industry can potentially grow local consumer loyalty which will provide various benefits both in the short term (support during the lockdown) and in the long term (continued support post-COVID and increased resilience when faced with future crises). A push towards local travel was also supported by the Belgian government's decision to provide each resident of the country 12 free train tickets to travel to anywhere in the country in order to motivate people to travel locally and to promote the local tourism industry (Chini, 2020). Within Flanders, a clear adjustment towards the local travel market by DMOs was already observed later in 2020 (Toerisme Vlaanderen, 2020a) with a marketing campaign containing the slogan *reis in eigen land* or 'travel in your own country' where different locations and spaces were marketed as potential places the Flemish people still need to go see and discover. An added objective of this campaign was to create a sense of pride among the Flemish residents to the attractions their country has to offer.

This finding corroborates the findings of recent research (Chen et al., 2020; Kiesnoski, 2020; Sequeda, 2020), and supports studies that show how countries that rely too heavily on international arrivals and direct most of their resources towards it, are more vulnerable to the effects of such crises (Chen et al., 2020; Kiesnoski, 2020; Sequeda, 2020). The results contradict that of Sequeda (2020), who found that international travel will simply be postponed. An increase in local travels will also lead to an increase in local spending, to which the next finding comes to light.

### 5.2. People are willing to spend more disposable income on local travels

Consumers would spend significantly more of their disposable income on travel within Belgium (+€179,15; 19% more) than prior to the lockdown – a finding that was not yet supported in literature by the time this research was done. However, spending of those who would take part in international travel would only decrease (€321,23; 10% less), and similar results were found by other authors (Charm, et al., 2020; Jones, 2020; Sequeda, 2020). For those who would travel both nationally and internationally, if travel was

possible, their spending on travel within Belgium would decrease by €38,07 (or 7% less), while their spending on international travel would significantly decrease by €665.86 (or 30% less). The finding here is that respondents would be much more inclined to directing their spending towards national travel.

An increase in local spending can be attributed to the fact that their intended spending for international travel would be redirected back into Belgium. This finding, again, reiterates the importance of the tourism industry focussing its marketing efforts towards the local travel market as it could be its saving grace during the 2020/2021 lockdown, as well as post-COVID and during possible future epidemic and / or crises periods. The local market is a closer and more well-known market to direct tourism marketing efforts towards and by creating a sense of pride and importance of the Flemish region's attractions, a market will be developed which will provide sustainable financial benefits to the region. It is important to note that, according to Jones (2020), a general improvement in the COVID-19 infection rate led to more positive consumer outlooks and increased household spending, implying that the image of safety could contribute to higher levels of spending; this leads into the next finding.

### 5.3. Group sizes would decrease

Taking into account respondents safety concerns, most respondents did indicate that they would generally travel in smaller groups. For those who would only travel nationally, it was indicated that they would lower their group size by almost one person (17% smaller) while those who would travel internationally only would travel in groups that would be 5% smaller. These differences seem small, but they are significant. Similar decreases in group sizes were also observed by Charm et al. (2020) and Chen, et al. (2020), with some of the main reasons for smaller groups being safety concerns in terms of avoiding areas where crowds would congregate which would enhance the rate or possibility of further virus transmissions. As a result, consumers also indicated that they rather prefer open-air attractions (such as open-air restaurants and attractions), which will make social distancing measures easier to adhere to (Charm et al., 2020; Chen, et al., 2020) - this brings the fourth finding to light.

### 5.4. Respondents would prefer to visit places that appear safer

The final finding is that respondents would rather prefer to travel to and experience attractions that exhibit lower chances of infection where social distancing can be controlled or naturally achieved, such as respondents who indicated that they would rather visit restaurants and cafes (perhaps because strict health regulations are applied) or natural areas such as beautiful landscapes and forests in the three main regions of Belgium (Flanders, Brussels and Wallonia). Only around half of respondents would still prefer city trips or visits to cultural and heritage areas (such as some of the country's museums and castles, for instance. The move towards more open or controlled spaces for travel corroborates the findings of Chen, et al. (2020), and echoes the expectations by Huijbens (2020), who indicated that consumers would rather prefer less crowded open areas. From this finding, it is clear that attractions and events in Flanders should, where possible, be hosted in open air (not inside buildings) where social

distancing, air flow and other COVID-measures such as limiting the number of visitors, would make visitors feel safer. Attractions, restaurants and other tourism facilities should examine what measures they could possibly put in place and then explicitly market the measures that were taken to help potential tourists make informed decisions about where they may be able to have safe touristic experiences.

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## 5 CONCLUSIONS

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The purpose of this research was to explore the possible impacts of the COVID-19 pandemic on the travel behaviour of Flemish people by making use of a hypothetical situation where the lockdown regulations might be relaxed or cancelled before the Belgian summer holiday (July/August 2020). Similar to other studies where authors predicted and measured behavioural changes, this research revealed how such a pandemic could influence consumers' behaviour. From the results of this study and the discussion, it becomes clear that the Flemish respondents, with full knowledge of the virus threat, would still want to travel if allowed to do so. However, to enable them to do so, they would make certain sacrifices by adjusting their behaviour. They will increase local travel and spending and also be more mindful of the types of places they visit and their group sizes (smaller groups and safer areas).

Although the tourism industry took an extreme knock in 2020, it can increase its resilience by shifting its focus to local travellers, not only during crises but in the long-term (through strategic planning), by being aware that the local market's travel behaviour is dynamic and that the industry should adapt accordingly. The importance of the local travel market, which was also partially revealed in the studies on France and China, should be shown in marketing messages to foster consumers' loyalty to it. In conclusion, when crises, such as the 2020 COVID-19 pandemic, strike, the tourism industry should keep in mind that there are measures that they can take to make the industry more resilient and ensure a more rapid recovery by taking the local travel market into account.

The limitations of this research is acknowledged. Firstly, non-probability sampling methods (online survey), although applied within a stratum, do not provide optimal representativity. Secondly, this study depended on primarily descriptive statistics; however, it is argued that the results, irrespective of further analyses, provide a good indication of the change of the Flemish respondents' travel behaviour. For future research, it is important to follow up on possible long-term behavioural changes due to the pandemic – has the travel market changed

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## REFERENCES

- Becken, S., Jin, X., Zhang, C.J. and Gao, J. (2016). Urban air pollution in China: Destination image and risk perceptions. *Journal of Sustainable Tourism*, 25(5): 130-147.
- Beirman, D. (2003). United States: September 11, 2001 terrorist attack. The impact on American and global tourism. In D. Beirman (Ed.), *Restoring tourism destinations in crisis: A strategic marketing approach* (pp. 43-68). Crows Nest, NSW: Allen Unwin.

- Belgian Federal Government (2020). Belgium, a federal state. [https://www.belgium.be/en/about\\_belgium/government/federale\\_staet](https://www.belgium.be/en/about_belgium/government/federale_staet) [Accessed the 27th of May 2021, 10:15].
- Bhati, A., Upadhyaya, A.A. and Sharma, A. (2016). National disaster management in the ASEAN-5: an analysis of tourism resilience. *Tourism Review*, 71(2): 148-164.
- Bhattacharya, S. and Kumar, R.V. (2017). A RIDIT approach to evaluate factors influencing tourist destination brand selection behaviour pertaining to Indian tourism sector. *Journal of Modelling in Management*, 12(4): 583-602.
- Bonarou, C. (2021). The poetics of travel through unravelling visual representations on postcards: A critical semiotics analysis. *Journal of Tourism, Heritage & Services Marketing*, 7(1), 44–53.
- Bronner, F. and De Hoog, R. (2014). Vacationers and the economic ‘double dip’ in Europe. *Tourism Management*, 40: 330-337.
- Cavlek, N. (2002). Tour operators and destination safety. *Annals of Tourism Research*, 29(2): 478-496.
- Charm, T., Bhargava, S., Das, R., Grimmelt, A., Kim, E., Robinson, K. and Tormo, S. (2020). Survey: US consumer sentiment during the Coronavirus crisis. <https://www.mckinsey.com/business-functions/marketing-and-sales/our-insights/survey-us-consumer-sentiment-during-the-coronavirus-crisis> [Accessed the 27th of May 2021, 10:15].
- Christou, E. (2010). Investigating attitudes towards mobile commerce for travel products. *Tourism: An International Interdisciplinary Journal*, 58(1): 7–18.
- Chatzigeorgiou, C., & Christou, E. (2020). Promoting agrotourism resorts online: an assessment of alternative advertising approaches. *International Journal of Technology Marketing*, 14(3): 249-266.
- Chen, K., Enger, W., Yu, J. and Zhang, C. (2020). Hitting the road again: How Chinese travelers are thinking about their first trip after COVID-19. <https://www.mckinsey.com/featured-insights/asia-pacific/hitting-the-road-again-how-chinese-travelers-are-thinking-about-their-first-trip-after-covid-19#> [Accessed the 27th of May 2021, 10:17].
- Chien, C. L. and Law, R. (2003). The impact of the Severe Acute Respiratory Syndrome on hotels: a case study of Hong Kong. *International Journal of Hospitality Management*, 22(3): 327-332.
- Chini, M. (2020). Belgium launches free rail pass scheme. *The Brussels Times*. <https://www.brusselstimes.com/news/belgium-all-news/129290/belgiums-free-rail-passes-available-from-today/> [Accessed the 27th of May 2021, 10:18].
- Clapson, C. (2020). Greater restrictions on movement in the offing. <https://www.vrt.be/vrtnws/en/2020/03/26/greater-restrictions-in-movement-in-the-offing/> [Accessed the 27th of May 2021, 10:19].
- De Vos, J. (2020). The effect of COVID-19 and subsequent social distancing on travel behavior. *Transportation Research Interdisciplinary Perspectives*, 5(2020): 1-3.
- Delbosc, A., McDonald, N., Stokes, G., Lucas, K., Circella, G. and Lee, Y. (2019). Millennials in cities: Comparing travel behaviour trends across six case study. *Cities*, 90(2019): 1-14.
- Del Chiappa, G., Bregoli, I., & Fotiadis, A. (2021). The impact of COVID-19 on the Italian accommodation sector and related response actions: A supply-perspective using a mixed method approach. *Journal of Tourism, Heritage & Services Marketing*, 7(1), 13–22.
- Diskin, G. (2020). Domestic tourism in Spain is the source of hope after the coronavirus. <https://www.tourism-review.com/spain-to-focus-on-domestic-tourism-after-corona-news11485> [Accessed the 27th of May 2021, 10:17].
- Fan, Y.V., Jamison, J.D. and Summers, H.L. (2019). Pandemic risk: how large are the expected losses? *Bull World Health Organ*, 96(2): 129-134.
- Faulkner, B. (2001). Towards a framework for tourism disaster management. *Tourism Management*, 22(2): 135-147.
- Field, A. (2003). Designing a questionnaire. [http://www.statisticshell.com/docs/designing\\_questionnaires.pdf](http://www.statisticshell.com/docs/designing_questionnaires.pdf) [Accessed the 27th of May 2021, 10:22].
- Fotiadis, A. (2018). Modelling wedding marketing strategies: An fsQCA Analysis. *Journal of Tourism, Heritage & Services Marketing*, 4(1), 23-26.
- Fotiadis, A., & Williams, R. (2018). “TiCoSa” a 3d matrix conceptual model to investigate visitors’ perceptions in an athletic event. *Journal of Tourism, Heritage & Services Marketing*, 4(2), 32-36.
- Gössling, S., Scott, D. and Hall, C.M. (2020). Pandemics, tourism and global change: a rapid assessment of COVID-19. *Journal of Sustainable Tourism*, 29(1): 1-20.
- Gretzel, U., Sigala, M. and Christou, E. (2012). Social Media Change the Name of the Game in the Tourism and Hospitality Industries, *The European Financial Review*, 20 October, available at: <http://www.europeanfinancialreview.com/?p=1340>.
- Hall, C.M. (2006). Tourism, disease and global environmental change: The fourth transition? In S. Gössling, S., C.M. Gössling, and C.M. Hall (Eds.), *Tourism & global environmental change: Ecological, social, economic and political interrelationships* (pp. 173-193). London: Routledge.
- Hall, C.M. (2010). Crisis events in tourism: Subjects of crisis in tourism. *Current Issues in Tourism*, 13(5): 401-417.
- Hughey, F.D. and Becken, S. (2016). Value-engaged evaluation of a tourism-specific disaster management plan. *Tourism Management Perspectives*, 19: 69-73.
- Huijbens, E. (2020). ATLAS Review and Webinar: Tourism and the Corona crisis: Some ATLAS reflections. <https://www.youtube.com/watch?v=gZ0OIVvzTBE> [Accessed the 27th of May 2021, 10:21].
- Hystad, W.P. and Keller, C.P. (2008). Towards a destination tourism disaster management framework: Long-term lessons from a forest fire disaster. *Tourism Management*, 29(1): 151-162.
- Jones, K. (2020). How COVID-19 Consumer Spending is Impacting Industries. <https://www.visualcapitalist.com/consumer-spending-impacting-industries/> [Accessed the 27th of May 2021, 10:23].
- Kamer, L. (2020). Estimated monthly revenue loss in the tourism industry in the Brussels-Capital Region and Flanders (Belgium) due to COVID-19 in 2020. <https://www.statista.com/statistics/1107555/revenue-loss-of-tourism-in-brussels-and-flanders-belgium-due-to-coronavirus/> [Accessed the 27th of May 2021, 10:17].
- Kiesnoski, K. (2020). Travel changed after 9/11; Here’s how it will look after the Covid-19 pandemic finally recedes. <https://www.cnbc.com/2020/05/10/heres-how-travel-will-change-after-the-covid-19-pandemic-recedes.html> [Accessed the 27th of May 2021, 10:10].
- Li, S., Blake, A. and Cooper, C. (2010). China’s tourism in a global financial crisis: a computable general equilibrium approach. *Current Issues in Tourism*, 13(5): 435-453.
- Lock, S. (2020). COVID-19: forecast job loss in travel and tourism sector worldwide 2020, by region. <https://www.statista.com/statistics/1104835/coronavirus-travel-tourism-employment-loss/> [Accessed the 27th of May 2021, 10:15].
- Mansfeld, Y. (2006). The role of security information in tourism crisis management: the missing link. In Y. Mansfield, and A. Pizam (Eds.), *Tourism, security & safety from theory to practice* (pp. 271-290). Boston (MA): Elsevier Butterworth-Heinemann.
- Mansfeld, Y. and Pizam, A. (2006). Toward a theory of tourism security. In Y. Mansfeld, and A. Pizam (Eds.), *Tourism,*

- security & safety from theory to practice (pp. 1-28). Boston (MA): Butterworth-Heinemann.
- Miller, G. and Ritchie, B. (2003). A farming crisis or a tourism disaster. An analysis of the Foot and Mouth Disease in the UK. *Current Issues in Tourism*, 6(2): 150-171.
- Milwood, P. A. and Crick, A. P. (2021). Culinary tourism and post-pandemic travel: Ecosystem responses to an external shock. *Journal of Tourism, Heritage & Services Marketing*, 7(1): 23-32.
- Nechoud, L., Ghidouche, F. and Seraphin, H. (2021). The influence of eWOM credibility on visit intention: An integrative moderated mediation model. *Journal of Tourism, Heritage & Services Marketing*, 7(1): 54-63.
- Niewiadomski, P. (2020). COVID-19: from temporary de-globalisation to a re-discovery of tourism? *Tourism Geographies*, 22(3): 651-656.
- Nella, A. and Christou, E. (2021). Market segmentation for wine tourism: Identifying sub-groups of winery visitors. *European Journal of Tourism Research*, 29, 2903.
- Novelli, M. (2020). ATLAS Review and Webinar: Tourism and the Corona crisis: Some ATLAS reflections. <https://www.youtube.com/watch?v=gZ0OIVvzTBE> [Accessed the 27th of May 2021, 10:17].
- OECD (2014). Guidelines for resilience systems analysis. OECD Publishing. <https://www.oecd.org/dac/Resilience%20Systems%20Analysis%20FINAL.pdf> [Accessed the 27th of May 2021, 10:17].
- Okuyama, T. (2018). Analysis of optimal timing of tourism demand recovery policies from natural disaster using the contingent behavior method. *Tourism Management*, 64: 37-54.
- Page, R. (2020). New NT Tourism campaign puts focus on domestic tourism. <https://www.cmo.com.au/article/680969/new-nt-tourism-campaign-puts-focus-domestic-tourism/> [Accessed the 27th of May 2021, 10:18].
- Page, S., Song, H. and Wu, D.C. (2012). Assessing the impacts of the global economic crisis and swine flu on inbound tourism demand in the United Kingdom. *Journal of Travel Research*, 51(2): 142-153.
- Papatheodorou, A. and Pappas, N. (2017). Economic recession, job vulnerability, and tourism decision making: A qualitative comparative analysis. *Journal of Travel Research*, 56(5): 663-677.
- Park, K. and Reisinger, Y. (2010). Differences in the perceived influence of natural disasters and travel risk on international travel. *Tourism Geographies*, 12(1): 1-24.
- Qualtrics. (2020). Qualtrics. Copyright 2020. Provo, Utah, USA. <https://www.qualtrics.com> [Accessed the 27th of May 2021, 10:22].
- Rangongo, T. (2018). The drought seemed to hit Cape Town tourism hard – but a new report says hotels did okay. <https://www.businessinsider.co.za/the-impact-of-the-cape-town-drought-on-tourism-was-rather-tiny-2018-7> *Business Insider South Africa*. [Accessed the 27th of May 2021, 10:24].
- Rittichainuwat, N.B. and Chakraborty, G. (2009). Perceived travel risks regarding terrorism and disease: The case of Thailand. *Tourism Management*, 30(3): 410-418.
- Ron, O. (2020). Tel Aviv launches new tourism campaign following coronavirus crisis. <https://www.jpost.com/israel-news/tel-aviv-launches-new-domestic-tourism-campaign-following-covid-19-crisis-631424> [Accessed the 27th of May 2021, 10:24].
- Rosselló, J., Becken, S. and Santana-Gallego, M. (2020). The effects of natural disasters on international tourism: A global analysis. *Tourism Management*, 79: 1-10.
- RTL Nieuws (2020). België gooit grens met Nederland dicht voor 'onnodige' reizen. <https://www.rtlnieuws.nl/nieuws/buitenland/artikel/5064246/> belgie-gooit-grens-naar-nederland-dicht-voor-onnodige-reizen [Accessed the 27th of May 2021, 10:25].
- Scholtz, M., Saayman, M. and Kruger, M. (2012). The influence of the economic recession on visitors to the Kruger National Park. *Journal of Economic and Financial Sciences*, 5(1): 247-270.
- Senbeto, L.D. and Hon, Y.H. (2020). The impacts of social and economic crises on tourist behaviour and expenditure: an evolutionary approach. *Current Issues in Tourism*, 23(6): 740-755.
- Sequeda, F.M. (2020). Covid-19 disrupts savings, spending and summer holidays in Europe. <https://think.ing.com/articles/covid-19-continues-to-disrupt-savings-spending-and-summer-holidays-in-europe/> [Accessed the 27th of May 2021, 10:25].
- Sigala, M., Christou, E. and Baum, T. (2002). The impact of low cost airlines on business travel. *Proceedings of AIEST Conference (Vol. 44, pp. 313-334)*, Salvador-Bahia, Brazil.
- Sigala, M. and Christou, E. (2006). Investigating the impact of e-customer relationship management on hotels 'website service quality. *ECIS 2006 Proceedings*, 118: 1-13.
- Sinclair-Maragh, G. and Simpson, S. B. (2021). Heritage tourism and ethnic identity: A deductive thematic analysis of Jamaican Maroons. *Journal of Tourism, Heritage & Services Marketing*, 7(1), 64-75.
- SPSS (2020). Statistical package for the social sciences (Version 25). IBM.
- STATBEL (2020). Bevolking naar woonplaats, nationaliteit (Belg/niet-Belg), burgerlijke staat, leeftijd en geslacht. <https://bestat.statbel.fgov.be/bestat/crosstable.xhtml?view=161080d2-d411-4e40-9a0f-a27db5e2b6e1> [Accessed the 27th of May 2021, 10:26].
- The Nation Thailand (2020). 'We Love Thailand' campaign to stimulate domestic tourism. <https://www.nationthailand.com/news/30387237> [Accessed the 27th of May 2021, 10:27].
- The Research Alliance (2020). Together beyond Covid19. Retrieved from Istituto Piepoli. <https://www.istitutopiepoli.it/wp-content/uploads/2020/05/Together-Beyond-Covid19-1.pdf> [Accessed the 27th of May 2021, 10:27].
- Toerisme Vlaanderen (2020a). Wat is en doet 'Vlaanderen Vakantieland 2.0'? <https://www.toerismevlaanderen.be/vlaanderen-vakantieland-20> [Accessed the 27th of May 2021, 10:28].
- Toerisme Vlaanderen (2020b). Monitoring trends toerisme en coronavirus. <https://www.toerismevlaanderen.be/corona/monitoringcorona> [Accessed the 27th of May 2021, 10:28].
- Toerisme Vlaanderen (2019). Toerisme in kerncijfers: editie 2019. [https://www.toerismevlaanderen.be/sites/toerismevlaanderen.be/files/assets/documents\\_KENNIS/cijfers/Kerncijfers/2019-Toerisme-kerncijfers-2018\\_0.pdf](https://www.toerismevlaanderen.be/sites/toerismevlaanderen.be/files/assets/documents_KENNIS/cijfers/Kerncijfers/2019-Toerisme-kerncijfers-2018_0.pdf) [Accessed the 27th of May 2021, 10:28].
- Tsao, C. and Ni, C. (2016). Vulnerability, resilience and the adaptive cycle in a crisis-prone tourism community. *Tourism Geographies*, 18(1): 80-105.
- Tustin, D.H., Ligthelm, A.A., Martins, J.H. and Van Wyk, H.D. (2005). *Marketing research in practice*. Pretoria: UNISA Press.
- UNWTO (2020). UNWTO World Tourism Barometer May 2020 - Special focus on the Impact of COVID-19. <https://www.e-unwto.org/doi/book/10.18111/9789284421930> [Accessed the 27th of May 2021, 10:29].
- Van Wee, B. (2009). Self-selection: a key to a better understanding of location choices, travel behaviour and transport externalities?. *Transport reviews*, 29(3): 279-292.
- Visit Britain (2020). Helping the tourism industry recover from COVID-19. <https://www.visitbritain.org/helping-tourism-industry-recover-covid-19> [Accessed the 27th of May 2021, 10:29].

- Visit Flanders (2013). Tourism in figures 2013: the Belgian market in Flanders. [https://www.toerismevlaanderen.be/sites/toerismevlaanderen.be/files/assets/documents\\_KENNIS/cijfers/Marktrapporten/BELGIAN\\_market\\_13.pdf](https://www.toerismevlaanderen.be/sites/toerismevlaanderen.be/files/assets/documents_KENNIS/cijfers/Marktrapporten/BELGIAN_market_13.pdf) [Accessed the 27th of May 2021, 10:30].
- Vlaanderen (2020). Discover Flanders: At the heart of Europe. <https://www.visitflanders.com/en/destinations/> [Accessed the 27th of May 2021, 10:31].
- Statistiek Vlaanderen. (2019). Bevolking: omvang en groei. <https://www.statistiekvlaanderen.be/nl/bevolking-omvang-en-groei> [Accessed the 27th of May 2021, 10:31].
- Wesolowski, A., Stresman, G., Eagle, N., Stevenson, J., Owaga, C., Marube, E., Bousema, T., Drakeley, C., Cox, J. and Buckee, O. Quantifying travel behavior for infectious disease research: a comparison of data from surveys and mobile phones. *Nature*, 4(1): 1-7.
- Wilder-Smith, A. (2006). Tourism and SARS. In J. Wilks, D. Pendergast, and P. Leggat (Eds.), *Tourism in turbulent times: Towards safe experiences for visitors* (pp. 53-61). Oxford: Elsevier.
- Wilder-Smith, A. and Freedman, D.O. (2020). Isolation, quarantine, social distancing and community containment: pivotal role for old-style public health measures in the novel coronavirus (2019-nCoV) outbreak. *Journal of Travel Medicine*, 27(2): 1-3.
- Whyte, L.J. (2017). Understanding the relationship between push and pull motivational factors in cruise tourism: A canonical correlation analysis. *International Journal of Tourism Research*, 19(5): 557-568.
- Zhang, N., Jia, W., Lei, H., Wang, P., Zhao, P., Guo, Y., Dung, C-H., Bu, Z., Xue, P., Xie, J., Zhan, Y., Chen, R. and Li, Y. (2020). Effect of human behaviour changes during the COVID-19 pandemic on influenza spread in Hong Kong. *Clinical Infectious Diseases*. [in publication].

*Appendix A: List of Facebook groups where the questionnaire link was distributed*

The table below contains the list of Facebook groups that were joined during the lockdown where the questionnaire link was posted. These groups represent a good spread of the Flemish Region in Belgium.

Nr	Facebook groups joined	Area	Number of group members
1	Ge zijt van Zwijndrecht of Burcht als ge zonder censuur ...	Zwijndrecht & Burcht	4 100
2	Ge zijt van Mechelen als ...	Mechelen	20 000
3	Ge zijt van Antwerpen als ge...	Antwerpen	640 000
4	Ge zijt van Brugge als	Brugge	14 000
5	Ge zijt van Gent als ge...	Gent	39 400
6	Ge zijt van Humbeek als	Humbeek	2 800
7	Ge zijt van Grimbergen als	Grimbergen	10 953
8	Ge zijt van Grimbergen als (zonder censuur)	Grimbergen	1 900
9	Ge zij van Geel als,	Geel	7 200
10	Ge zijt van Leuven als ge...	Leuven	16 000
		Total:	756 353

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