ERASMUS UNIVERSITEIT ROTTERDAM

Flying the globe with travel influencers

An analysis of the role of influencer marketing in the aviation industry and the factors that drive its success

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Flying the globe with travel influencers - An analysis of the role of influencer marketing in the aviation industry and the factors that drive its success

Name student: Michelle van de Kamp
Student ID number: 453644

Supervisor: Dr. P. Gorji
Second assessor: Dr. A. Scekic

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1. Executive summary

The first study uses a conjoint analysis to show the impact of a travel-influencer video strategy on Dutch preferences towards Royal Dutch Airlines KLM. Analyses reveal that such a strategy would slightly impact preferences favourably. Through a market simulation with several airlines, it shows that both men and women prefer KLM with travel-influencer marketing over KLM without such a strategy. By using such marketing, KLM could thus capture a higher Dutch market share and strengthen its position. Furthermore, Dutch consumers find hygiene most important, which is likely influenced by Covid-19. This is followed by in-flight service, airfare, eco friendliness, flight comfort, travel-influencer marketing, and flight/luggage safety, respectively. Moreover, the best airline for Dutch consumers is a reasonably eco-friendly, low-cost carrier with an excellent in-flight service, average comfort (for women, high comfort for men), good hygiene, a travel-influencer video strategy and an average safety. Besides, analyses suggest that the effect of in-flight service and airfare on airline preferences is moderated by annual net income. Finally, the effect of eco friendliness of an airline and in-flight service on airline preferences is moderated by the environmental consciousness of consumers as well. These results must however be interpreted with caution, as there is not enough evidence to suggest that flight comfort, flight/luggage safety and travel-influencer marketing significantly affect airline preferences, and the aviation industry is more complex than assumed.

The second study uses a conjoint analysis to establish which video attributes drive the success of travel-influencer marketing. Research suggests that colour, video quality, sound and the accuracy of video content mainly drive its success, for which the first two factors are most essential. These factors follow the same ranking of importance for Dutch consumers, followed by the less important factors video length and a sponsorship compensation justification. Moreover, the best travel-influencer video for Dutch consumers is equal to a 45-second video (for women, 60-second video for men) with music, an enhanced video quality, vibrant colours, a sponsorship compensation justification, and a good accuracy of video content. Furthermore, analyses suggest that the effect of video quality on video preferences is moderated by both gender and social media activity. Also, the effect of video length on video preferences is moderated by age and annual net income. Finally, age, annual net income and social media activity moderate the relationship between colours and video preferences as well. These results must again be interpreted with caution, however, as there is insufficient evidence that sound, a sponsorship compensation justification, and video length significantly affect video preferences.

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2. Introduction

White Bali beaches, palm trees and crystal-clear oceans, or buzzing streets and skyscrapers in the city that never sleeps. These are just two examples of destinations that are promoted by travel influencers. By using social media, such as Facebook and Instagram, they promote wanderlust and reach millions of followers. Accompanied by this, consumer behaviour is rapidly changing. Through social networks individuals share knowledge, entertain each other, promote dialogues, and establish global communities. This consequently increases efficiency, convenience, competitive pricing and broadens product selection. Hereby consumers increasingly rely on peer-to-peer communications, which are more valued than firm promotions (Tiago & Verissimo, 2014). This electronic word-of-mouth (eWOM) is a positive or negative statement about a product or firm, which often encompasses unpaid communication. However, an increasing number of brands now use paid eWOM to establish products through opinion leaders, which is also called influencer marketing (Evans, Phua, Lim, & Jun, 2017).

In this digital era, video content is emerging (Thomson, 2019). Research shows that 87% of businesses now use video marketing, compared to 63% in 2017. The benefits are clear, as 83% of marketers report a good return on investment and by 2021, more than 80% of internet traffic will comprise of video material (Hayes, 2019; Cisco, 2019). Furthermore, a survey conducted by holiday rental insurance provider Schofields reveals that 40% of participants under 33 find 'instagrammability' important when choosing a holiday destination. Travel influencers that use video therefore have an increasing impact on consumers (Bergman, 2019).

These changing consumption patterns and digitalization are accompanied by climate change and pollution: issues that mainly stem from consumer behaviour. Consumers therefore increasingly strive for more sustainable consumption behaviour, which relates to behaviour that satisfies needs whilst benefiting or limiting environmental impact (Trudel, 2019). This trend is accompanied by flight shaming: the thought that air travel is a source of embarrassment. Airplane fuel now contributes to 2.5% of carbon emissions but is expected to increase to 22% by 2050 as other sectors' emissions decrease, and many consumers use other means of transportation to reduce environmental impact (Bergman, 2019). According to a survey of 6.000 travellers in the US, UK, France, and Germany, one in five reports an intent to limit flying because of this environmental damage. These trends are likely to hit airlines hard (Lake, 2019).

To fight flight shaming, Royal Dutch Airlines KLM has several sustainability programs (KLM, 2019a). There are however other ways to attract passengers. Most airlines are active on social media, but influencer marketing is not widely used. This is surprising, as influencer marketing proved to be effective for British Airways, Alaska Airlines and Virgin Atlantic in reaching millions of travellers (Social Bond, 2018). A travel-influencer video content strategy for airlines refers to the practice of hiring a travel influencer to promote an airline and destinations through video content. These videos focus on visualizing destinations instead of an extensive review. Would such a strategy be effective for KLM? And what drives the success of travel-influencer video content? These questions revolve around the main question imposed in this research:

What is the impact of a travel-influencer video content strategy on Dutch consumer preferences/brand attitudes towards KLM and which video attributes drive the success of travel-influencer video content?

This is divided into two studies. The first study investigates whether KLM with a travel-influencer video content strategy is more preferred to Dutch consumers than KLM without such a strategy or competitors. A survey, a choice-based conjoint analysis and airline attributes are used to establish answers. Also, most preferred alternatives and supplementary results are given on airline attributes, in addition to information on demographics and psychographics to give a complete overview of results. This first study comprises of the following sub questions:

1. Which airline attributes significantly affect Dutch consumer preferences for airlines?
2. Which attribute is most important to Dutch consumers when choosing airlines?
3. What is the best airline for Dutch consumers?
4. What is the share of preference of KLM with a travel-influencer video content strategy compared to the current KLM?
5. Which demographic and psychographic factors moderate the relationship between airline attributes and Dutch consumer preferences for airlines?

The second study dives deeper into travel-influencer video content and establishes which video attributes drive the success of travel-influencer marketing. A survey, a choice-based conjoint analysis, video attributes and demographics and psychographics are used to extract valuable insights about the focus in these videos. This study comprises of the following sub questions:

1. Which video attributes significantly affect Dutch consumer preferences for travel-influencer videos?

2. Which attribute is most important to Dutch consumers when watching travel-influencer videos?
3. What is the best travel-influencer video for Dutch consumers?
4. Which demographic and psychographic factors moderate the relationship between video attributes and Dutch consumer preferences for travel-influencer videos?

Several studies have been conducted on influencer marketing. Djafarova and Rushworth (2017) reveal that social media influencers significantly affect female purchase decisions. Also, non-traditional influencers are more effective than traditional celebrities due to enhanced trust, self-esteem, and credibility. Moreover, Katon, Zubcsek and Sarvary (2011) investigated the impact of word-of-mouth on social media and show that the number of friends that already use a product and the interconnectedness between these friends has a positive effect on individual adoption of the product. They suggest that a marketing campaign is more effective when it reaches highly interconnected customers rather than a sample of customers who merely have the highest number of connections, which has further implications for influencer marketing. Furthermore, Hughes and Brooks (2019) show several factors of influencer marketing that drive the success of online brand engagement. Influencers affect engagement differently in several settings and influencer characteristics, content, social media platforms and campaign intent are factors that play a role. Also, influencers ensure higher penetration and prove to be effective in the medical field. A study on opinion leaders and the adoption of a new prescription drug by physicians shows the positive impact of influencers in medical marketing campaigns (Iyengar, van den Bulte, & Valente, 2011). Finally, Trusov, Bodapati and Bucklin (2010) developed a model to identify influential users on social network sites. This model identifies users with the most significant impact, which is beneficial for managers who are tasked with advertising.

In addition to research on influencer marketing, studies have been conducted on airline attributes. For example, Seung-Bok Kim and Jin-Woo Park (2017) investigated the relative importance of airline attributes for full-service carriers and low-cost carriers. Their research reveals that for full-service carriers, safety, flight schedules, cabin interior and check-in processes are important, whereas airfare, safety, convenience of purchase processes and additional charges are most important for low-cost carriers.

However, research on the effectiveness of travel-influencer marketing for (Dutch) airlines does not exist. By combining travel-influencer marketing with a choice-based conjoint and several

attributes for Dutch airlines, the impact of a travel-influencer video content strategy on Dutch consumer preferences for KLM is revealed. In addition, despite studies on the drivers of success of influencer marketing in consumer engagement, specific research on which attributes of travel-influencer video content drive its success has not yet been published. This study therefore delivers a new and innovative contribution to existing literature.

Given the rise of sustainable consumption behaviour, flight shaming and the increasing use of other modes of transportation, airlines could be severely damaged (Trudel, 2019; Bergman, 2019). Despite KLM's sustainability programs (KLM, 2019a), this changing consumption behaviour imposes a significant threat. Therefore, given the effectiveness of influencer marketing for airlines such as British Airways (Social Bond, 2018), the lack of this marketing technique for Dutch airlines and the importance for such companies to keep sales at least stable, this research could have insightful implications. The investigation of the impact of a travel-influencer video content strategy on Dutch consumer preferences/brand attitudes towards KLM consequently gives airline managers insights into effective methods of acquiring passengers, which could boost KLM's sales and can help other airlines.

Furthermore, most preferred alternatives and supplementary results on airline attributes give airlines and their managers valuable information on which features of a flight experience are most important to Dutch consumers. This could suggest, for example, that the focus of an airline experience should shift more to comfort, service, or hygiene. Moreover, a comparison with competitor airlines provides managers with valuable information for future strategies.

Finally, by providing insights into which video attributes drive the success of a travel-influencer video content strategy, influencers can more accurately produce content to better reach their audience. For example, the length, sound, and colour of the video could play a vital role in consumer preferences. This may also be important for airline marketing managers, given their close cooperation with influencers to establish content. As a proper travel-influencer video is likely to be more effective, this paper provides relevant insights in this regard.

Throughout this paper, the Theoretical framework discusses related concepts and hypotheses. Furthermore, Data and methodology explains the data and methods used, followed by the Results chapter. To conclude, the Discussion and conclusion chapter presents an answer to the research question as well as several limitations and recommendations.

3. Theoretical framework

This chapter discusses the main concepts as well as hypotheses and conceptual models. To further elaborate on relevance, the concepts of influencer marketing, sustainable consumption behaviour and flight shaming are explained. Furthermore, information is given on a travel-influencer video content strategy and Royal Dutch Airlines KLM. Finally, attributes of airlines and influencer video content are discussed, in addition to specific airlines and demographic and psychographic factors.

3.1 Influencer marketing

Influencing is an integral part of all sorts of businesses. Companies influence consumers in many ways to increase brand awareness and consequently purchase intention. Think, for example, of TV advertisements, online advertisements, and radio advertisements. Moreover, consumers are influenced through word-of-mouth from their surroundings. As a form of influencing, influencer marketing is relatively new. The term refers to the brand practice of paying highly influential people to share brand messages with their online followers. Based on their audience, influencers are therefore chosen to create online sponsored content. Related to this, celebrity endorsement has been widely used to increase awareness. Hereby celebrities market products, which proves to be effective because of the creation of trust and consumer aspirations. Influencer marketing is seen as a specific form of this celebrity endorsement, as it contains social media celebrities (Sammis, Lincoln, & Pomponi, 2015). Finally, influencer marketing distinguishes itself from organically generated word-of-mouth as companies compensate influencers in the form of cash or free products (Hughes & Brooks, 2019).

Influencers are divided into three groups: celebrity influencers, category influencers and micro-influencers. First, celebrity influencers influence a large group of people. They traditionally are actors, athletes, and musicians, but they could also be category influencers with celebrity status. Examples are Kim Kardashian, Al Gore and Jessica Alba. Secondly, category influencers, who are the focus of this research, are known for having a genuine interest in a certain topic (for example beauty, cars, travel) and do not necessarily possess fame across a broad spectrum of fans. Nonetheless, they can sufficiently influence people's behaviour and choices. To further distinguish between category influencers, they can be divided into established and emerging category influencers. Examples are Tim Ferris for lifestyle design and Michelle Phan in Beauty. Finally, micro-influencers do not always have a significant online fan base but are nevertheless

passionate about something. They share experiences and therefore influence others. An advising mum blogger with 2.000 Instagram followers is a good example (Backaler, 2018).

Social media influencers are active on various platforms, ranging from blogs and Pinterest to Instagram, Twitter, Facebook, and YouTube. In these last categories, influencers use videos to reach millions of viewers (Sammis et al., 2016). This is highly leveraged by marketers, as approximately 75% of them now use social media influencers for the purpose of word-of-mouth marketing. Moreover, influencer marketing expenditures are expected to reach $ 10 billion (€ 8.42 billion) in 2020, as 65% of multinational brands state having plans to increase the use of this type of celebrity endorsement (Hughes & Brooks, 2019).

The significant effect of influencer marketing on consumer behaviour has become evident over the years (Hughes & Brooks, 2019). For example, Djafarova and Rushworth (2017) suggest that Instagram celebrities significantly influence the purchase decisions of females aged 18-30 years. Influencer marketing/eWOM can highly influence purchasing behaviour because of factors such as trust and enhanced self-esteem. Moreover, their study reveals that non-traditional celebrities, also known as the earlier discussed non-traditional celebrity influencers and category influencers, are more effective. They possess higher credibility, and consumers are better able to relate to these figures. Finally, the attractiveness and quality of images and sponsored content are of great importance.

Not only in the commercial world but also in the medical field opinion leaders are effective. A study on opinion leaders and the adoption of a new prescription drug by physicians shows the positive influence of influencers in such campaigns. These influencers are defined as well-connected people, consequently making them able to reach others. Additionally, the customer lifetime value of these influencers is generally higher as they are heavy users and early adopters of the product. The research suggests that influencers, combined with the ability to reach more people, can influence people sooner and more effectively than others (Iyengar et al., 2011).

Moreover, a study on influencer marketing factors that drive the success of online brand engagement suggests that influencer marketing affects engagement differently in different situations. This is dependent on influencer characteristics, content, social media platforms and campaign intent. For example, when a blog is used, blogger expertise is more effective in online brand engagement when the campaign intention is focussed on creating awareness rather than

increasing usership. Therefore, when companies use bloggers to increase awareness, the influencer's expertise and credibility should be featured. This does, however, not hold for Facebook. Content strategies on this platform, and platforms alike, should vary depending on the campaign's intention. For example, online brand engagement for trial campaigns can increase through highly hedonic influencer posts. Besides, influencers with many viewers ensure higher penetration and engagement. Finally, the effectiveness of campaign incentives (for example giveaways) differs depending on the platform type. They are negatively associated with platforms such as Facebook but positively associated with blogs (Hughes & Brooks, 2019).

Related to influencer marketing, Berger and Milkman (2012) investigated which factors make online content successful. The extent of virality of content depends on the emotions invoked by it. Content that entails positive emotions is more successful than negative content, but a further distinction can be made. More specifically, the success of online content is also affected by the extent of arousal. Content that has high-arousal positive (astonished, excited) or negative (anger, frustration) emotions has more success compared to content with low-arousal emotions. This outcome is still valid after controlling for several factors that influence virality of content and external drivers.

As discussed, Katona, Zubcsek and Sarvary (2011) investigated the impact of word-of-mouth on social media sites. Their research shows that the adoption rate of friends and the interconnectedness between these people positively influences the adoption of an individual. Additionally, a marketing campaign is more effective when it is focussed on highly connected customers in comparison to customers who merely have many followers. This consequently has implications for influencer marketing. Finally, Trusov et al. (2010) developed a model to identify influential users on social network sites. This model identifies social network users with the most significant impact, which is beneficial for managers who are tasked with advertising. However, based on this literature research, it becomes clear that an analysis of the effectiveness of a travel-influencer video content strategy for airlines does not yet exist. Research on which attributes of travel-influencer video content drive its success is also lacking.

3.2 Flight shaming and sustainable consumption behaviour

Flight shaming, the guilt of one's aviation-related carbon footprint, is increasingly promoted. As a result, fewer airplane tickets are purchased and alternative transportation is used, which

costs airlines billions (Stevens, 2019). Supported by environmentalist Greta Thunberg, this 'Greta effect' gained ground and Germany already reduced long-distance train fares (Berton, 2019; Oltermann, 2020). Research by Swiss bank UBS states that expected passenger growth could be halved if this trend grows stronger. The number of EU flights will likely rise by only 1.5% per year and US flights growth is expected to fall from 2.1% to 1.3% (BBC News, 2019).

Harmful consumption behaviour threatens welfare of mankind and nature. Current consumption levels require resources of 1.4 earths and environmental degradation risks, such as deforestation, biodiversity loss and soil erosion, are big concerns. Moreover, this climate change simultaneously causes health issues, as it affects 325 million people and causes 300.000 deaths annually. Also, economic losses reach $ 125 billion (€ 105.29 billion) yearly. As a result, mindful consumption is emerging, which is the consciousness of consumers about consumption consequences. This relates to the greening approach, which is defined as the maximization of 'green' product usage; products that have a low environmental footprint. This is gaining attention among businesses, as a sustainability response is vital for competition and survival (Sheth, Sethia, & Srinivas, 2011).

Research by Haws, Winterich and Naylor (2014) explored and developed a green consumption values scale, which defines the tendency to express environmental importance through consumption behaviour. They predict that stronger green consumption values result in higher preferences for eco-friendly products, as it leads to more positive evaluations of non-eco-friendly attributes. Moreover, research by Peloza, White and Shang (2013) shows that a focus on personal responsibility for choices drives ethical responses more effectively than highlighting guilt. Even though advertising eco-friendly products can lead to guilt and thus ethical consumption, this only occurs when subtle cues reinforce personal accountability. Finally, individuals often resist incurring time, effort, or changes to increase eco-friendly consumption. The question therefore arises which appeal is most effective in influencing eco-friendly behaviour. Injunctive appeals express what others think one should do, descriptive appeals show what others do and benefit appeals express individual benefits. Personal identity relates to a person's individual self and collective identity relates to the groups to which a person belongs. If the collective self is present, injunctive appeals and descriptive appeals are effective. Yet, when the individual self is present, benefit appeals and descriptive appeals must be used (White & Simpson, 2013).

3.3 Royal Dutch Airlines KLM and sustainability programs

In 2004, approximately 23.8 million flights were performed globally, which increased to 38.1 million in 2018. In 2019, this number reached 39 million (Figure 1 Appendix A), showing an increase of over 50% compared to 2004. In 2020, this number was again expected to rise to 40.3 million before the global Covid-19 pandemic hit the aviation industry (Mazareanu, 2019a). Passenger airlines, with a 2018 global revenue of approximately $ 812 billion (€ 683.89 billion), come in many forms. They can, for example, be a mainline airline or a regional airline that operates over shorter non-intercontinental distances. Besides, a distinction exists between low-cost carriers, such as Ryanair and Southwest Airlines, charter airlines that operate outside regular schedules, and major airlines with a minimum revenue of $ 1 billion (€ .84 billion). A selection of the largest airlines consists of American Airlines, Southwest Airlines, Delta Air Lines, Deutsche Lufthansa, United Intercontinental Holdings, China Southern Airlines and Air France-KLM (Mazareanu, 2019b). With a 2018 revenue of $ 31.3 billion (€ 26.4 billion), Air France-KLM is ranked the 5th largest airline worldwide (Table 1 Appendix A**)** (Mazareanu, 2019c). However, in terms of market value, they lag significantly behind Delta ($ 5.3 billion/€ 4.5 billion for Air France-KLM and $ 38.1 billion/€ 32.1 billion for Delta Air Lines; Figure 2 Appendix A) (Mazareanu, 2019d).

Royal Dutch Airlines KLM, one of the airlines of Air France-KLM, was founded in October 1919 and is the oldest airline still operating under its original name. With 33.000 employees and its home base in Amsterdam, they generated € 10 billion in revenue in 2017. Also, KLM and KLM Cityhopper carry 34.1 million passengers and are part of the KLM Group. With a network of 92 European cities and 70 intercontinental destinations they connect millions of passengers globally. The KLM Group owns Transavia and Martinair, of which Transavia is the leading low-cost airline in the Netherlands. Additionally, KLM is a partner in the SkyTeam Alliance, which serves 1.063 destinations in 173 countries. In 2004 the company merged with Air France, and over the years they have continued their concept of one Air France-KLM Group with the operation of two airlines, the transport of passengers and cargo and the performance of engineering and maintenance as their three core activities (KLM, 2019b). However, both Air France and KLM retain their own identity, name, and brand. The merge allows them to carry more than 77 million passengers to 318 destinations in 118 countries annually (KLM, 2019c).

Despite statements that the company is stable, KLM saw its profits shrink from € 785 million in 2017 to € 573 million in 2018 (Royal Dutch Airlines KLM, 2019a). Moreover, the Covid-19

pandemic that terrorizes countries since the end of 2019 imposes problems on several airlines, including KLM. The firm states that it has had a significant impact on their air traffic to China and Asia, and it severely damages the European network as well. KLM therefore decided to lower costs, to temporarily send staff home and to stop hiring new personnel. Information technology investments are postponed, and costs must be reduced by 20% for ongoing projects. Also, Air France-KLM reported in February 2020 that they expected a cost of € 150-200 million due to the virus, as February 2020 bookings dropped by 3% compared to 2019 (Stil, 2020). By then, the market value of Air France-KLM had already dropped by nearly 22% since the outbreak of the virus (De Jong, 2020). In March, total passengers reduced to 3.1 million; a drop of 57% compared to 2019, and the load factor dropped by 21%. Also, in April they expected to suspend over 90% of capacity in April and May due to travel restrictions (Derrick, 2020). KLM has said to further cut 1.500 jobs, reducing its staff by 20%. As of today, the future of Air France-KLM is not given. The group may not survive the current crisis if they cannot lower costs, despite financial help of € 10.4 billion from both the Dutch and French governments in July (Reuters, 2020).

To fight this profit decline and to tap into changing consumption behaviour, the company has several programs to keep passengers interested. For example, over the last four years, KLM added nearly 30 destinations and welcomed 6.4 million new passengers. They continuously seek improvements, alignment of processes and innovative investments. By creating memorable experiences, they want to move passengers' worlds. Finally, their ambition is to be customer centric, innovative and efficient, and their culture is to change, participate and win (Royal Dutch Airlines KLM, 2019a).

In addition to its ambition and culture, KLM is active in sustainability efforts. Fly Responsibly is KLM's commitment to provide a sustainable future for aviation. With this initiative, they seek awareness for shared responsibility (KLM, 2019d). Together with twenty organisations, they launched the 'Smart and Sustainable plan' for Dutch sustainable growth of the aviation industry. Moreover, KLM believes in biofuels to reduce their footprint, and they strive for fleet renewals, electrification of group equipment and carbon compensation. The impact of these efforts can be seen in the Dow Jones Sustainability Index, in which Air France-KLM has been ranked second in its industry for the past fourteen years and now holds the number one position (Royal Dutch Airlines KLM, 2019a; Royal Dutch Airlines KLM, 2019b).

A key aspect of KLM's sustainability strategy is to reduce their environmental footprint. Compared to 2011, the company aims to reduce CO_2 emissions per passenger by 20% in 2020. This proves to be effective, as 2018 data show a decline of 17.3%. Furthermore, KLM invests in fleet renewal, resulting in more fuel-efficient aircrafts that produce less noise. Through route optimisation (saving of 11.000 tons of CO_2 in 2018) and a reduction of board weight (saving of 4.400 tons of CO_2 in 2018), fuel is saved. Also, they are a pioneer in sustainable biofuel, which emits 80% less CO_2 compared to fossil kerosene, and they plan to reduce production of residual waste by 50% in 2030 compared to 2011 (Royal Dutch Airlines KLM, 2019a).

As regards customer experience, the company offers responsible products and services, such as CO2ZERO. Through this program, passengers can compensate carbon emissions. Data show that 88.000 passengers compensated 40.500 tons of CO_2 in 2018, which is equal to 343.000 trees. With 9% less waste compared to 2011, 9.4 million sustainably produced sandwiches in European flights and 312 hectares of tropical forest planted in Panama, KLM is a good example of an airline that pursues sustainability (Royal Dutch Airlines KLM, 2019a). However, other possible ways to keep customers interested, such as influencer marketing, are not yet used.

3.4 A travel-influencer video content strategy

Consumers increasingly use social media to get information about brands. These social media platforms can spread information across a wide range of people and influencers leverage this opportunity by promoting branded products and services. They increasingly use video content to reach millions of followers, which is especially effective as it enriches the word-of-mouth visually (Erkan & Evans, 2016; Sammis et al., 2016). The focus of this research therefore is a travel-influencer video content strategy. This refers to the practice of hiring a travel influencer to promote a certain product or service through videos. In this paper specifically, it relates to an airline hiring a travel influencer to produce a travel-content video. These videos would start or end with the visualization of a specific airline such as KLM, followed by several shots of a destination for which the airline provides flights[1]. The video is therefore not focussed on promoting the airline through a review from the influencer, but on visualizing the destination. Through this, the airline and its destinations are promoted. It therefore relates to a category

[1]Marie Fe and Jake Snow are a travel-influencer couple. One of their videos is used in the survey: https://www.youtube.com/watch?v=SszwAmnz87I&t=48s

influencer that spreads a travel-influencer video through, for example, Instagram, YouTube and Facebook (Backaler, 2018).

3.5 Study one: attributes and attribute levels of airlines

When consumers make purchase decisions, the brand is not the only important factor. For example, when choosing an airline for a holiday destination, other factors such as airfare play a role as well. In these decisions, consumers often forego unattractive options and choose the one resulting in the highest utility. This utility is established through product attributes and their levels, which are responsible for attitudes towards the product or service (Erickson, Johansson, & Chao, 1984). Consumer preferences for product attribute levels, which represent product characteristics, can be identified through conjoint analysis (Green & Krieger, 1991). To investigate the impact of a travel-influencer video content strategy on consumer preferences for KLM, it is therefore necessary to specify key attributes of airlines. Many of these attributes make up passenger's choices. For example, convenience of reservations, airfares, the check-in process, baggage handling, departure accuracy, cabin facilities, in-flight service, flight safety and marketing are all factors that play a role (Kim & Park, 2017). To make this research more applicable, the relevant attributes are *Airfare, In-flight service, Flight comfort, Cabin cleanliness, Eco friendliness, Travel-influencer marketing,* and *Flight/luggage safety*. Factors such as departure accuracy are foregone, as this is influenced by airports as well.

The first attribute is *Airfare*, which considers the price paid by passengers. Generally, airlines can be categorized as either low-cost carriers providing cheaper flights or premium carriers providing more expensive flights. These categorizations are also related to, for example, service standards. Therefore, this attribute is divided into the levels 'low-cost carrier' and 'premium carrier'. The law of supply and demand indicates that price influences consumer behaviour in such a way that a higher price generally yields a lower willingness to pay (Gale, 1955). In addition, a study by Kim and Park (2017) about airlines indicates the importance of airfare when consumers make airline choices. Their research reveals that low-cost carrier passengers are often more price sensitive than full-service carrier passengers. Low-cost carriers should therefore focus more thoroughly on cost superiority rather than product differentiation. In contrast, other research states that willingness to pay for in-flight service and comfort, and thus for a higher airfare, is relatively high (Balcombe, Fraser, & Harris, 2009). Also, business travellers are generally less price sensitive than leisure travellers (Proussaloglou & Koppelman,

1999). Therefore, different consumers are likely to have a different willingness to pay when it comes to airfares. However, given the relative importance of in-flight service and comfort (Balcombe et al., 2009), it is expected that passengers are willing to pay slightly more for a premium carrier.

The second attribute is *In-flight service,* which involves everything related to the menu and quality of meals, entertainment such as movies and music, professionalism, friendliness of staff, and more. As this attribute covers many factors, it is divided into the levels 'below average in-flight service', 'average in-flight service', 'good in-flight service' and 'excellent in-flight service'. Previous research indicates the importance of cabin crew service, in-flight entertainment and cabin food when making airline decisions (Danaher, 1997). Also, Proussaloglou and Koppelman (1999) support the importance of service quality in consumer preferences for carriers, which is again reimbursed by recent research on the importance of airline selection attributes (Kim & Park, 2017). Additional research states that passengers are willing to pay a reasonable amount for in-flight services, indicating the importance of the choice factor (Balcombe et al., 2009). Based on these studies, it is expected that consumers prefer an excellent in-flight service.

The third attribute is *Flight comfort,* which mainly considers legroom, blankets, headrests and arm/shoulder room (Kim & Park, 2017). As airlines differ considerably in terms of flight comfort, this attribute is divided into the levels 'low comfort', 'average comfort' and 'high comfort'. Research indicates that flight comfort is an important factor for consumers (Danaher, 1997). Despite the competitiveness in the aviation market due to emerging low-cost carriers, consumers' willingness to pay for in-flight service and flight comfort is relatively high (Balcombe et al., 2009). Given possible differences between individuals, it is therefore expected that passengers prefer a high level of comfort.

The fourth attribute is *Cabin cleanliness,* which reports the level of cabin hygiene. As airlines differ significantly regarding this aspect, the attribute is divided into the levels 'dirty', 'average hygiene' and 'good hygiene'. According to Danaher (1997), cabin hygiene is an important factor in airline decisions, which is reimbursed by later research (Kim & Park, 2017). Besides, Chen and Chao (2015) investigated whether passenger demographics affect choice factors when selecting airlines. Despite some differences in demographical characteristics, they acknowledge the importance of hygiene and state that it is in the top ten of most important airline attributes.

Finally, according to travel consultancy agency Skytrax, cabin hygiene is becoming important in customer experiences (Skytrax, 2016). Based on these results, it is expected that consumers prefer a good hygiene.

The fifth attribute is *Eco friendliness,* which covers the extent to which airlines have sustainable activities. Airlines increasingly pursue sustainability efforts due to flight shaming (BBC News, 2019). An example is the Fly Responsibly movement of KLM and their efforts to reduce CO_2 emissions (KLM, 2019d; Royal Dutch Airlines KLM, 2019a). As airlines differ in the extent of sustainable efforts, the levels 'non-eco-friendly', 'reasonably eco-friendly' and 'very eco-friendly' are chosen. Research indicates that an increasing number of consumers are willing to pay more for eco-friendly products and services (Szmigin & Piacentini, 2018). Furthermore, Unilever reported a 69% faster growth of its Sustainable Living brands compared to other products in 2018. These brands account for 75% of the company's growth. Moreover, two out of three consumers report choosing a brand based on its stand on social issues and 90% of millennials are willing to buy brands that promote a cause. These sustainable brands do exactly that, indicating the rising importance of sustainable efforts (Unilever, 2019). It is expected that a similar reasoning holds for airlines, resulting in a preference for very eco-friendly carriers.

The sixth attribute is *Travel-influencer marketing,* which states whether the airline uses a travel-influencer video content strategy. This attribute is divided into the levels 'present' and 'not present'. Marketing, whether it is in the form of a frequent flyer/Mileage program or advertisements, is an important attribute when considering airlines (Kim & Park, 2017). Influencer marketing could therefore have a positive effect on consumers. Research suggests that the purchase intention is higher when search goods or products with high brand awareness are promoted through sponsored blog posts (Lu, Chang, & Chang, 2014). Additionally, a study on the impact of digital influencers on brands shows that influencer marketing is positively associated with brand engagement, expected brand value and purchase intention (Jiménez-Castillo & Sánchez-Fernández, 2019). Based on these results, it is expected that customers prefer the presence of a travel-influencer video content strategy.

Furthermore, the importance of these airline attributes is confirmed in a pre-test conducted through Qualtrics (Appendix B, and Table 1 Appendix B). This is an experience management platform that allows anyone to gather, access and share data (Qualtrics, 2019). 50 respondents revealed that, as expected, in-flight service (20.92%), airfare (18.83%), flight comfort (15.48%)

and cabin cleanliness (5.44%) are most important when considering flight experiences. Eco friendliness (1.67%) and marketing (including travel-influencer marketing) (.84%) are less important. This is not surprising, however, as these factors are not the first to come to mind when considering airlines. The earlier discussed studies therefore nonetheless provide a justification for these attributes. It is also evident that flight duration, departure/arrival times and direct/indirect flights are of importance. Yet, as a single airline often provides several flights with different duration, departure/arrival times and direct/indirect options, and as this is often influenced by outside factors such as airports as well, these attributes are not considered.

Pre-test results also reveal that flight and luggage safety is relatively important to consumers (3.77%) (Table 1 Appendix B). Despite its lower percentage compared to the other attributes, it is expected that most consumers highly value this factor, as previous research indicates the significant importance of safety (Kim & Park, 2017). Therefore, *Flight/luggage safety* is the seventh attribute of interest. As unsafe airlines are relatively rare, this attribute is divided into 'average safety' and 'excellent safety'. It is expected that consumers prefer an excellent safety.

Based on extensive literature research and sub questions, several hypotheses are formulated for the first study that investigates the impact of a travel-influencer video content strategy on Dutch consumer preferences/brand attitudes towards KLM. Given the previously discussed relevance of the airline attributes *Airfare, In-flight service, Flight comfort, Cabin cleanliness, Eco friendliness, Travel-influencer marketing* and *Flight/luggage safety,* it is expected that all seven have a significant effect on Dutch consumer preferences for airlines.

Hypothesis 1.1: airfare, in-flight service, flight comfort, cabin cleanliness, eco friendliness, travel-influencer marketing and flight/luggage safety have a significant effect on Dutch consumer preferences for airlines.

Given the importance of the airline attributes and the ranking as stated in the pre-test results, the ranking of attribute importance is likely to follow a similar pattern (Table 1 Appendix B). Therefore, it is expected that in-flight service is most important to Dutch consumers, followed by airfare, flight comfort, cabin cleanliness, flight and luggage safety, eco friendliness and travel-influencer marketing. Even though travel-influencer marketing is expected to be least important to consumers, it can nonetheless affect Dutch consumer preferences.

Hypothesis 1.2: in-flight service is most important to Dutch consumers when choosing airlines, followed by airfare, flight comfort, cabin cleanliness, flight/luggage safety, eco friendliness and travel-influencer marketing.

Based on the discussed literature research, it is also expected that Dutch consumers prefer to pay more for premium carriers, an excellent in-flight service and high comfort. Besides, a good hygiene is likely to be favoured as well as a very eco-friendly airline. Finally, it is expected that the presence of a travel-influencer video content strategy and excellent safety are desired.

Hypothesis 1.3: the best airline for Dutch consumers is a very eco-friendly, premium carrier with an excellent in-flight service, high comfort, good hygiene, a travel-influencer video content strategy and an excellent safety.

Finally, given the praise of influencer marketing in previous studies and the earlier discussed effectiveness for other airlines, it is expected that KLM with a travel-influencer video content strategy has a higher share of preference compared to the current KLM. As of today, a travel-influencer video content strategy is non-existent for the latter.

Hypothesis 1.4: the share of preference of KLM with a travel-influencer video content strategy is higher compared to the current KLM.

3.6 Study one: specific airlines and their attribute levels

Royal Dutch Airlines KLM has many competitors, both low-cost and high-end. To provide a market simulation, five airlines are selected. These are KLM (with a travel-influencer video content strategy), Emirates, Lufthansa, EasyJet, and Ryanair. Aviation consultancy agency Skytrax surveyed 21 million passengers to provide the 2019 world's top 100 airlines list. In this list, Emirates comes 5th, Lufthansa 9th, KLM 18th, EasyJet 37th and Ryanair 59th (Skytrax, 2019a). To give a good representation of the market, Emirates and Lufthansa are chosen as they are slightly better than KLM. Ryanair and EasyJet are included as representatives of low-cost airlines. To specify these five airlines in terms of the discussed attributes and levels, Vakantiepanel is used. This company combines Dutch passenger and expert reviews to come to an overall airline evaluation (Vakantiepanel, 2019a). As this research revolves around Dutch passengers, this should give a representative overview of attribute levels. Finally, even though these airlines are used, participants of this research are not aware of airline names to avoid bias. This will be more thoroughly discussed in Data and methodology.

KLM, with its home base of Amsterdam Schiphol Airport, is a 4-star premium carrier (Skytrax, 2020a) with a good in-flight service. Passengers and experts rate it a 7.8 for entertainment and facilities, an 8 for staff service and a 7.5 for food and beverages. This results in an average score of 7.8. In terms of flight comfort, KLM scores average with a 7.2 (Vakantiepanel, 2019b) and a typical seat pitch of 31" (79 cm) for Economy Class medium and long-haul flights (Skytrax, 2020b). Furthermore, KLM has a good hygiene with a score of 7.9 (Vakantiepanel, 2019b) and is very environmentally friendly given its efforts. Also, based on the purpose of this research, a travel-influencer video content strategy is present hypothetically. Finally, even though exceptions are present for all airlines, KLM provides excellent flight and luggage safety with a 7/7 rating (AirlineRatings, 2020a). These safety ratings by AirlineRatings are justified by an extensive analysis of information from the aviation governing body, governments and crash data (AirlineRatings, 2020b).

Ryanair is a 3-star low-cost carrier (Skytrax, 2020c) with a below average in-flight service. With a 4.4 for entertainment and facilities, a 6.3 for staff service and a 5.7 for food and beverages, it scores an average of 5.5. In terms of flight comfort, it scores low with a 6.0 (Vakantiepanel, 2019c) and a seat pitch of 30" (76 cm) for Economy Class medium and long-haul flights (Skytrax, 2020b). Moreover, hygiene is average with a 6.9 (Vakantiepanel, 2019c). Ryanair is also active in eco-friendly activities, as its policy is to be the greenest and cleanest airline in Europe, whilst investing in engine technology and fuel-efficient airplanes. Its aim is to reduce CO_2 emissions per passenger kilometre by 67% from 182 grams in 2000 to under 60 grams in 2030. In addition, environmental partnerships with First Climate enable donations to offset emissions, of which passenger donations go to The Irish Whale and Dolphin Group, the Native Woodland Trust and Renature Monchique (Ryanair Corporate, 2019). Therefore, it is reasonably eco-friendly[2]. A travel-influencer video content strategy is not present and it has an average flight and luggage safety with a 4/7 rating (AirlineRatings, 2020c).

EasyJet, with its home base of Gatwick Airport in London, is a 4-star low-cost carrier (Skytrax, 2020d) with an average in-flight service. With a 4.8 for entertainment and facilities, a 7.2 for staff service and a 6.2 for food and beverages, it has an average score of 6.1. Also, with a 6.2

[2]All competitor airlines get the label 'reasonably eco-friendly' to differentiate it from KLM. KLM has been ranked second for the past fourteen years in the Dow Jones Sustainability Index and now holds the number one position (Royal Dutch Airlines KLM, 2019a; Royal Dutch Airlines KLM, 2019b). This makes them the leader in sustainability.

(Vakantiepanel, 2019d) and a seat pitch of 29” (74 cm) for Economy Class medium and long-haul flights, it does not offer outstanding flight comfort (Skytrax, 2020b). In terms of hygiene, EasyJet scores averagely with a 7.1 (Vakantiepanel, 2019d). Moreover, it is the first airline that offsets fuel CO_2 emissions for all flights by planting trees, reducing deforestation, and increasing renewable energy. EasyJet continuously explores new ways to be sustainable, such as taxiing on one engine and making aircrafts less heavy. Besides, carbon emissions per passenger kilometre reduced by 33.6% compared to 2000 and the company designs more fuel-efficient airplanes. With a loading factor of 92.9%, nearly all flights are filled, and it aims to produce electronic planes by supporting Wright Electronic. Also, plastic usage is reduced (EasyJet, 2019), which makes it reasonably eco-friendly. Finally, a travel-influencer video content strategy is not present and it has an average flight and luggage safety with a 4/7 rating (AirlineRatings, 2020d).

Lufthansa is a 5-star premium carrier (Skytrax, 2020e) with a good in-flight service. It scores a 6.8 for entertainment and facilities, an 8 for staff service and a 7.2 for food and beverages. Overall, this comes down to an average of 7.3. Furthermore, with a 7.4 (Vakantiepanel, 2019e) and an Economy Class medium and long-haul flight seat pitch of 31” (79 cm), it has an average flight comfort (Skytrax, 2020b). The airline also has a good hygiene with a score of 8 (Vakantiepanel, 2019e), and is reasonably eco-friendly. For example, the company invests in more fuel-efficient aircrafts and research into alternative fuels. In 2018 it had a new efficiency record; only 3.65 litres of kerosene were needed on average to transport a passenger 100 kilometres, and fuel consumption has reduced by 30% since 1994 (Lufthansa Group, 2019a). Among other things, passengers can offset their emissions (Lufthansa Group, 2019b), plastic usage is reduced (Lufthansa Group, 2019c) and the airline invests considerably in reducing aircraft noise (Lufthansa Group, 2019d). Finally, a travel-influencer video content strategy is not present and it provides an excellent flight and luggage safety with a 7/7 rating (AirlineRatings, 2020e).

Emirates, with its home base of Dubai International Airport, is a 4-star premium carrier (Skytrax, 2020f) with an excellent in-flight service. It scores an 8.6 for entertainment and facilities (Vakantiepanel, 2019f), and is the best airline for entertainment according to Skytrax (Skytrax, 2019b). With an additional 8.6 for staff service and 8.1 for food and beverages, it has an average score of 8.4. Moreover, with a 7.7 in flight comfort (Vakantiepanel, 2019f) and a seat pitch range for Economy Class medium and long-haul flights of 32”-33” (82-84 cm), it

provides a high flight comfort (Skytrax, 2020b). A good hygiene is present with a score of 8.3 (Vakantiepanel, 2019f) and the airline is reasonably eco-friendly. To support the planet and reduce emissions, it operates with modern and efficient airplanes. Next to investments in conservation and wildlife, Emirates also tries to reduce resource consumption (Emirates, 2019). Finally, a travel-influencer video content strategy is not present and it has an excellent flight and luggage safety with a 7/7 rating (AirlineRatings, 2020f). Table 3.6.1 presents an overview of attributes and levels per airline.

Table 3.6.1

An overview of specific airlines and their attribute levels

	Airlines				
Attributes	**'New' KLM***	**Ryanair**	**EasyJet**	**Lufthansa**	**Emirates**
Airfare	Premium carrier	Low-cost carrier	Low-cost carrier	Premium carrier	Premium carrier
In-flight service	Good service	Below average service	Average service	Good service	Excellent service
Flight comfort	Average comfort	Low comfort	Low comfort	Average comfort	High comfort
Cabin cleanliness	Good hygiene	Average hygiene	Average hygiene	Good hygiene	Good hygiene
Eco friendliness	Very eco-friendly	Reasonably eco-friendly	Reasonably eco-friendly	Reasonably eco-friendly	Reasonably eco-friendly
Travel-influencer marketing	Present	Not present	Not present	Not present	Not present
Flight/luggage safety	Excellent safety	Average safety	Average safety	Excellent safety	Excellent safety

Note. The current KLM is equal to the 'new' KLM but without travel-influencer marketing.

3.7 Study two: attributes and attribute levels of influencer video content

As previously discussed, a choice-based conjoint analysis reveals consumer preferences for certain attributes. These attributes represent different characteristics of a product or service (Green & Krieger, 1991). To identify what drives the success of a travel-influencer video content strategy, key travel-influencer video attributes are identified. The attributes *Sound, Video quality, Colour, Length of video, Sponsorship compensation justification* and *Accuracy of video content* are most prominent.

The first attribute *Sound* states with what type of sound the video is supported. Monologue or music are common support systems in commercials. Therefore, the attribute is divided into the levels 'monologue' and 'music'. Research indicates that most commercials rely more heavily on the latter (Craton & Lantos, 2011), as advertisement music helps with brand recognition, improving brand identity (Raja, Anand, & Kumar, 2018) and message processing (Macinnis & Whan Park, 1991). Additionally, advertisement music could enhance commercial recognition and recall (Craton & Lantos, 2011), and music could service as a catalyst for the commercial when treated in the proper way (Raja et al., 2018). It must however be noted that favourable music is a necessary but insufficient condition for a favourable advertisement that uses music. Furthermore, unfavourable music could result in negative advertisement associations (Craton & Lantos, 2011). Based on these studies, it is expected that consumers prefer music over a monologue.

The second attribute *Video quality* reflects the image quality. As videos can range from low to high quality, this attribute is divided into the levels 'low video quality', 'standard video quality' and 'enhanced video quality'. Presence among media users refers to being in a remote, mediated environment, either physically or mentally. Research indicates that for television, a higher video quality leads to a stronger presence. For example, media users find local news more credible when watching it in enhanced video quality. Moreover, a higher video quality may increase message impact (Bracken, 2006). Based on this research, it is expected that consumers prefer an enhanced video quality.

The third attribute *Colour* states whether the video incorporates colour. Therefore, the attribute is divided into the levels 'black-and-white', 'normal colours' and 'vibrant colours'. For a clarification, see Figure 3 Appendix A. Research indicates that colours play an important role in consumer decisions. They influence thoughts, feelings, as well as behaviour, which is why marketers increasingly use it in their advertisements, products, and stores. In advertisements, colours contribute to brand recognition and image, and it offers information that influences consumer moods and evaluations. Moreover, high-value colours induce relaxation and high saturation colours (vibrant colours) stimulate excitement (Labrecque, Patrick, & Milne, 2013). Based on this research, it is expected that consumers prefer colour over black-and-white. This furthermore links with KLM's (and most other airlines') mission to move passengers' worlds and therefore to create excitement, and so it is expected that consumers prefer vibrant colours over black-and-white and normal colours (Royal Dutch Airlines KLM, 2019a).

The fourth attribute *Length of video* considers the length of the travel-influencer video content. This is divided into the levels '30 seconds', '45 seconds' and '60 seconds'. Research on online video advertisements indicates that length matters significantly. Online advertisement length has a positive relationship with advertisement recall. Surprisingly, the length is negatively related to annoyance, where annoyance significantly decreases with length for 3-, 8-, 15- and 30-second videos. Therefore, the longer the video, the less intrusive it is and the better the brand attitude and purchase likelihood. This is likely because longer advertisements are better able to convey information and emotions (Goodrich, Schiller, & Galletta, 2015). Given the similarity between these online video advertisements and travel-influencer video content, a similar outcome is expected. Also, as travel-influencer videos must create a story for watchers and need to tap into their imagination and emotions, it is expected that a 60-second video is preferred.

The fifth attribute is a *Sponsorship compensation justification*. This attribute states whether the video includes a justification for the sponsorship collaboration, which provides more elaborate reasoning on why the sponsored video is justified (Stubb & Nyström, 2019). This attribute is divided into the levels 'present' and 'not present'. Research indicates that many social media users experience annoyance in the subtility of sponsored posts. Sponsored brand content often gets negative and sceptic reactions from followers, which could ultimately have a negative impact on brand attitudes (Uzunoğlu & Kip, 2014). To solve this and to increase the credibility and efficiency of influencer marketing, a sponsorship compensation justification should be included. Compared to merely disclosing sponsorships (such as #Ad), this proves to be more effective in terms of attitude among followers (Stubb & Nyström, 2019). Based on this, it is expected that consumers prefer the presence of a sponsorship compensation justification.

The earlier discussed Qualtrics pre-test provides additional information on video attribute importance (Appendix B, and Table 2 Appendix B). 50 respondents confirm that the length of the video (21.47%), video quality (19.02%), sound (10.43%) and colour (7.98%) are important video attributes. However, it is evident that the sponsorship compensation justification is less important to consumers (2.45%). Nonetheless, this attribute is still considered given the earlier discussed literature. Other airline and influencer factors mentioned are less relevant for the investigation of video attributes in this research, but they nonetheless provide valuable additional information. For example, consumers find the trustworthiness, reputation, appeal, and honesty of influencers important when watching marketing videos.

Furthermore, the pre-test reveals that consumers value a good impression and information of the destination, in addition to a video that is true to reality. As these factors combined account for 19.63% of responses, a sixth and final attribute *Accuracy of video content* is incorporated (Table 2 Appendix B). This attribute defines whether the travel-influencer video content gives a good impression of the holiday destination and therefore whether it is true to reality. As this captures the essence of the video and as unrepresentative videos are unlikely to be accepted by airlines, levels are divided into 'average accuracy' and 'good accuracy'. Based on the pre-test results, it is expected that Dutch consumers favour a good accuracy of video content.

Based on this in-depth literature research and sub questions, several hypotheses are formulated for the second study that investigates which video attributes drive the success of travel-influencer video content. Given the prominence and significance in previous literature, it is likely that the travel-influencer video attributes *Sound, Video quality, Colour, Length of video, Sponsorship compensation justification* and *Accuracy of video content* have a significant effect on Dutch consumer preferences for travel-influencer video content.

Hypothesis 2.1: sound, video quality, colour, length of video, a sponsorship compensation justification and accuracy of video content have a significant effect on Dutch consumer preferences for travel-influencer video content.

Also, given the importance of the video attributes and the ranking as stated in the pre-test (Table 2 Appendix B), it is likely that the ranking of attribute importance follows a similar pattern. It is thus expected that video length is most important to Dutch consumers, followed by accuracy of video content, video quality, sound, colour, and a sponsorship compensation justification.

Hypothesis 2.2: the length of the video is most important to Dutch consumers when watching travel-influencer video content, followed by the accuracy of video content, video quality, sound, colour, and a sponsorship compensation justification.

Based on previously discussed literature, it is furthermore expected that consumers prefer music over a monologue. Also, it is likely that consumers desire an enhanced video quality, vibrant colours, and a 60-second video length. Finally, consumers presumably favour the presence of a sponsorship compensation justification and a good accuracy of video content.

Hypothesis 2.3: the best travel-influencer video for Dutch consumers is a 60-second video with music, enhanced video quality, vibrant colours, a sponsorship compensation justification, and a good accuracy of video content.

3.8 Study one and two: demographic and psychographic factors

In addition to airline and video attributes, demographic and psychographic factors are important. Demographic factors, such as gender, have long been used in scientific research. As many consumers differ from each other as regards demographics, these factors often have a significant impact on consumer behaviour. However, to thoroughly understand consumers, demographics are rarely sufficient. Psychographics, which refer to opinions, attitudes, interests, lifestyles, needs, values and personality traits, are relevant as well and their use has contributed significantly to understanding consumer behaviour (Wells, 1975). This is confirmed by Lin (2002); despite demographics being essential, they are insufficient on their own. Psychographics provide information on lifestyle and personality and can identify relevant brand characteristics. A multi-segmenting method of demographics and psychographics thus provides the most valuable information. Therefore, both factors are used in this paper. In the literature research of study one, emphasis is placed on the interaction of demographic and psychographic factors with travel-influencer marketing. However, these factors may have a significant influence on other attributes as well. Finally, some factors are of lesser importance in the choice-based conjoint analysis of study two, which is mentioned in the respective paragraphs.

The first factor is *Gender*, which determines whether a respondent is 'male', 'female', 'transgender' or 'feels uncomfortable answering'. Research states that Instagram celebrities have a significant influence on the buying behaviour of females aged 18-30. Females are more affected by social influence than men and are more likely to purchase goods that are used or promoted by influencers. This is partially caused by the fact that women trust the opinions of others more due to a lack of confidence (Djafarova & Rushworth, 2017). Women are therefore more likely to adhere to social opinions than men, are more likely to imitate influencers and are more affected by influencer marketing (Wilcox & Stephen, 2013). Finally, especially women are active on Instagram and Facebook, which are platforms that are highly leveraged by influencers (Sheldon & Bryant, 2016). Based on these studies, it is likely that particularly females prefer the existence of a travel-influencer video content strategy for airlines. Therefore, it is expected that gender moderates the relationship between travel-influencer marketing and airline preferences.

Moreover, trust and credibility are important for the effectiveness of influencer marketing. As a sponsorship compensation justification enhances trust and positive attitudes among followers (Stubb & Nyström, 2019), and given that women are more likely to be affected by influencer

marketing (Wilcox & Stephen, 2013), it is expected that especially females prefer the existence of a sponsorship compensation justification in travel-influencer video content. Therefore, it is likely that gender moderates the relationship between a sponsorship compensation justification and travel-influencer video preferences.

Hypothesis 1.5: gender moderates the relationship between travel-influencer marketing and airline preferences.

Hypothesis 2.4: gender moderates the relationship between a sponsorship compensation justification and travel-influencer video preferences.

The second factor is *Age*, which is divided into 'aged below 20', '20-39 years' or '40 or older'. Generation Y, a term for millennials born roughly between 1981 and 2000, highly contribute, share, and consume data through social media. Being called digital natives, they are the first generation that have had digital access their entire life and they have a high exposure to social media platforms such as Facebook, Instagram, and YouTube. Moreover, they highly rely on technology for entertainment, social interaction and emotional regulation (Bolton et al., 2013), and a study by CBS reveals that 96% of Dutch citizens aged 18-35 use social media daily, compared to 87% and 76% for 35-55 and 55-75-year-olds, respectively (SocialConcept, 2019). Besides, people aged 18-34 are generally more likely to value the opinion of others on social media (Bolton et al., 2013), and research indicates the significant influence of Instagram celebrities on the buying behaviour of females aged 18-30 (Djafarova & Rushworth, 2017). Given this social media data on millennials and the fact that people aged 18-34 generally are more likely to value the opinion of others, it is expected that generation Y is more affected by travel-influencer marketing and particularly prefer a travel-influencer video content strategy for airlines. Consequently, it is expected that age moderates the relationship between travel-influencer marketing and airline preferences.

Furthermore, millennials are generally more concerned with the environment and have a higher willingness to pay for eco-friendly products and services (The Nielsen Company, 2014). This is confirmed by a Deloitte study, which indicates that millennials are especially concerned with climate change and the environment. According to 42% of respondents, they have deepened their relationship with certain brands that have a positive impact on the environment and society, and 37% stopped or lessened business relationships when there was a lack of ethical behaviour (Deloitte, 2019). Therefore, it is likely that millennials prefer very eco-friendly

airlines. Consequently, it is expected that age moderates the relationship between eco friendliness and airline preferences.

Finally, millennials will likely be the core focus for marketers in the future. They are the most demanding generation and tend to be price sensitive (Atallah & El-Mawardy, 2018). They are therefore likely to favour low-cost carriers over premium carriers. Consequently, it is expected that age moderates the relationship between airfare and airline preferences. Also, given their presence on social media and their high exposure to content, millennials may have different preferences for the aspects of travel-influencer video content. Therefore, it is expected that age moderates the relationship between video attributes and travel-influencer video preferences.

Hypothesis 1.6: age moderates the relationship between travel-influencer marketing and airline preferences, eco friendliness and airline preferences, as well as the relationship between airfare and airline preferences.

Hypothesis 2.5: age moderates the relationship between video attributes and travel-influencer video preferences.

The third factor of interest is *Annual net income,* which is divided into '€ 0-20.000', '€ 20.001-40.000', '€ 40.001-60.000' and 'above € 60.000'. In general, a higher income is associated with higher air travel demand. Due to the luxury nature of air transport, income and the share of air travel demand of income are likely to be positively correlated. Surprisingly, research also indicates a positive relationship between income and price sensitivity, meaning that high income passengers are often more price sensitive than low income passengers. This can be explained by the fact that because the share of air travel demand is higher for high income passengers, the utility loss of an airfare increase is higher despite decreasing marginal utility of income. Also, business passengers are less price sensitive than leisure passengers (Brons, Pels, Nijkamp, & Rietveld, 2002), and a higher income is associated with a higher environmental sensitivity (Straughan & Roberts, 1999). Moreover, different airfares are often associated with different levels of service, comfort, sustainability efforts, hygiene, and safety, meaning that income may influence the preferences for these factors as well. This influence is also likely for travel-influencer marketing. Based on these studies, it is expected that annual net income moderates the relationship between all airline attributes and airline preferences. Finally, it may affect preferences for several video components that are associated with travel-influencer marketing. Consequently, it is expected that annual net income moderates the relationship between video attributes and travel-influencer video preferences.

Hypothesis 1.7: annual net income moderates the relationship between all airline attributes and airline preferences.
Hypothesis 2.6: annual net income moderates the relationship between video attributes and travel-influencer video preferences.

The fourth factor is *Environmental consciousness,* which states the extent to which the participant believes he or she is environmentally conscious. This is divided into 'not environmentally conscious', 'reasonably environmentally conscious' or 'very environmentally conscious'. As discussed before, flight shaming, the guilt of one's aviation-related carbon footprint, is increasingly used as an argument to reduce flying. This can cost airlines billions (Stevens, 2019), and growth will likely stagnate (BBC News, 2019). Mindful consumption, which relates to consciousness about consumption consequences, community, and nature, therefore emerges because of climate change. This results in a reduction of harmful purchases and is related to more green consumption, for which the sales of products with a low environmental footprint is maximized (Sheth et al., 2011). Finally, research indicates that stronger green consumption values result in a higher preference for eco-friendly products (Haws et al., 2014). Based on these studies, a trend is visible in which consumers are increasingly environmentally conscious and adjust their consumption behaviour accordingly. Therefore, given that some airlines are eco-friendlier than others, it is expected that perceived environmental consciousness moderates the relationship between eco friendliness and airline preferences. For the second study, this factor is less relevant.
Hypothesis 1.8: environmental consciousness moderates the relationship between eco friendliness and airline preferences.

The fifth factor is *Social media activity,* which states the frequency of social media usage. This is divided into 'never', 'less than once a month', '1-3 times a month', 'once a week', 'several times a week', 'every day' and 'several times a day'. As previously discussed, consumers increasingly use social media to justify their purchasing habits (Erkan & Evans, 2016). Influencers leverage these social media platforms to reach a large base of followers and to promote branded products and services (Sammis et al., 2016). Therefore, social media can nowadays be seen as the new influence enabler, allowing the wider spread and reach of influencer content (Brown & Hayes, 2008). Based on the prominence of influencer marketing on social media, it is likely that active social media users favour the presence of a travel-influencer video content strategy for airlines more than less active social media users. This is

expected as active social media users are more likely to find travel-influencer videos useful and are presumably more exposed to this content. Consequently, it is likely that the extent of social media activity moderates the relationship between travel-influencer marketing and airline preferences. Finally, social media activity may also influence choice behaviour towards travel-influencer video content itself.

Hypothesis 1.9: the extent of social media activity moderates the relationship between travel-influencer marketing and airline preferences.

Hypothesis 2.7: the extent of social media activity moderates the relationship between video attributes and travel-influencer video preferences.

The sixth factor of interest is *Frequency of flying,* which states how often the participant flies on average. This ranges from 'never', to 'less than once a year', 'once a year', '2-3 times a year', '4-5 times a year' and 'more than 5 times a year'. A survey by Statista indicates that 40% of Dutch respondents never flew for leisure purposes in 2018. Respondents flew once 34% of the time and 10% of respondents flew 2-5 times (Kramer, 2020a). For business purposes, 92% did not fly at all and 4% flew once. This is not surprising, however, as a relatively small part of the Dutch population flies for business reasons (Kramer, 2020b). It is likely that the frequency of flying impacts consumer preferences for airlines. For example, environmental and safety concerns may become more important, and a passenger is likely to devote more money (and therefore more airfare) to legroom, hygiene, and service once he or she flies more often. Also, it is expected that frequent flyers prefer a travel-influencer video content strategy more than their less frequent flying counterparts, as these campaigns are more relevant to them. Therefore, it is expected that the frequency of flying moderates the relationship between all airline attributes and airline preferences. This factor is less relevant for study two.

Hypothesis 1.10: the frequency of flying moderates the relationship between all airline attributes and airline preferences.

The seventh factor is *Travelling purpose,* which states whether a participant travels for 'mainly leisure purposes' or 'mainly business purposes'. Studies show that whether an airline passenger travels for leisure or business purposes has a significant impact on price sensitivity, as leisure travellers are generally more price sensitive (Brons et al., 2002). Also, the willingness to pay for a higher class is greater for a business traveller. As a higher class is associated with better service and comfort, business travellers are thus willing to pay more for these factors than their leisure counterparts (Proussaloglou & Koppelman, 1999), which may also be true for hygiene.

Finally, as business travellers travel for business purposes, it is unlikely that they find travel-influencer video content relevant. As this content is more focused on leisure travellers who would like to go on holidays, it is expected that they favour travel-influencer marketing more. Based on these studies, it is likely that the purpose of travelling moderates the relationship between airfare and airline preferences, in-flight service and airline preferences, flight comfort and airline preferences, cabin cleanliness and airline preferences, as well as travel-influencer marketing and airline preferences. As regards study two, this factor is less relevant.

Hypothesis 1.11: the purpose of travelling moderates the relationship between airfare and airline preferences, in-flight service and airline preferences, flight comfort and airline preferences, cabin cleanliness and airline preferences, as well as travel-influencer marketing and airline preferences.

3.9 Study one and two: conceptual models

Figure 3.9.1 and 3.9.2 provide a conceptual model for study one and two, respectively.

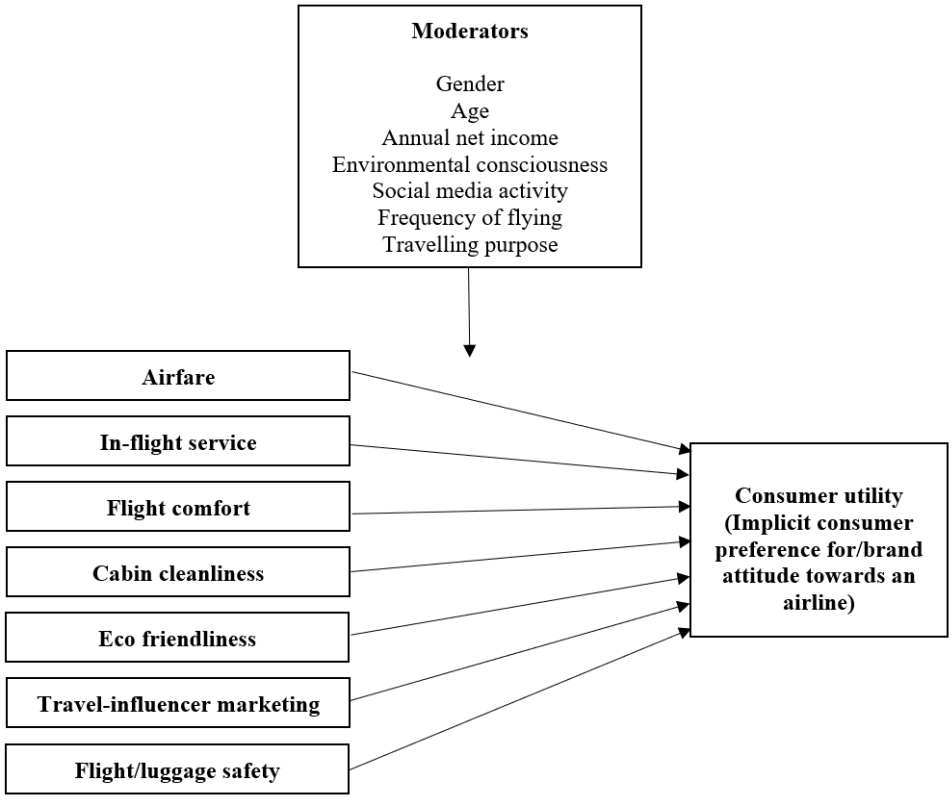

Figure 3.9.1. Conceptual model for study one, in which moderators affect several relationships

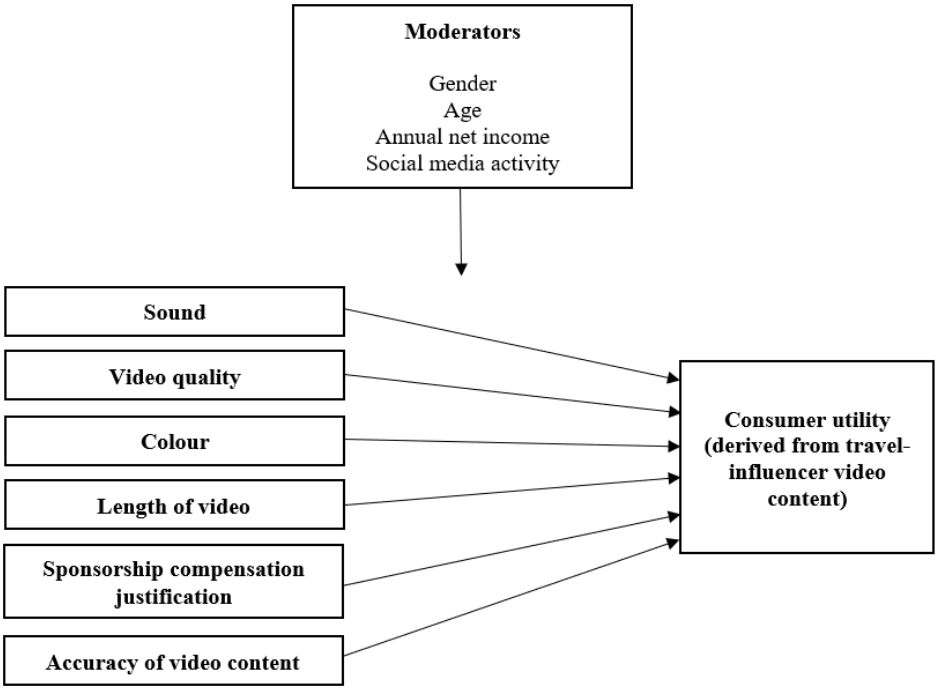

Figure 3.9.2. Conceptual model for study two, in which moderators affect several relationships

4. Data and methodology

This chapter gives an overview of the data and methods used. Characteristics of the data source, data generation and representativeness, the experimental design, variables, descriptive statistics, and the techniques used to analyse the data are discussed.

4.1 Characteristics of the data source, data generation, and representativeness

Primary data for study one and two are collected via a structured English and Dutch questionnaire that is distributed through several online platforms (Brace, 2018). Qualtrics software is used, which is an experience management platform that allows gathering, accessing and sharing of data (Qualtrics, 2019). For study one, respondents are confronted with twelve choice sets with two alternatives each, followed by ten choice sets for study two and several demographic and psychographic questions. More on the experimental design follows in Section 4.2. By answering several fixed-alternative questions, respondents represent a sample of the Dutch target population (Brace, 2018). Bias is however inevitable, as the entire population cannot be accessed. Therefore, simple random sampling is used to gather a more representative selection of respondents and to enable better generalizability and accuracy. With this method, every Dutch citizen has an equal chance to participate. A sampling error is inescapable however, and different samples yield different outcomes. Nonetheless, the random nature of simple random sampling reduces bias (McEvoy, 2018).

The data gathered in this research are used to perform a choice-based conjoint, which is discussed in the next paragraph. A minimal sample size rule of thumb for a choice-based conjoint has been established in previous research. This comes down to the formula $\frac{nta}{c} \geq 500$, where *n* stands for the number of respondents, *t* stands for the number of choice sets, *a* represents the number of alternatives per choice set and *c* is equal to the largest number of levels in the research design. For study one, t = 12, a = 2 and c = 4, leading to a minimum required sample size of 84. For study two, t = 10, a = 2 and c = 3, which results in a minimum sample size of 75. This rule of thumb should, however, not be used to justify a small sample size. In conjoint experiments, sample sizes range from 150 to 1.200 participants. In addition, to detect significant differences between subgroups, at least 200 respondents per group are required (Orme, 2019). Given limitations in collecting a sufficiently large sample size, 278 respondents were gathered. Therefore, given that Dutch citizens are the target population, it must be stressed that representativeness is questionable, and results should be generalized with caution.

4.2 Experimental design

To investigate the impact of a travel-influencer video content strategy on Dutch consumer preferences/brand attitudes towards KLM, and to clarify which video attributes drive the success of travel-influencer video content, an artefactual field experiment is performed. This relates to an experiment in which real participants participate in an artificial task in an artificial context. Participants are therefore aware of the experiment (List, 2011). As discussed, Dutch consumers are selected based on simple random sampling and are asked to answer several fixed-alternative questions. As participants indicate which alternative they would choose in a real-life situation, this experiment focuses on perceptual metrics.

This artefactual field experiment can be further specified as a binary discrete choice experiment (DCE), and more specifically a choice-based conjoint. The latter is a specific form of a discrete choice experiment. DCEs use a quantitative technique to shed light on consumer preferences when revealed preference data are unavailable. For study one specifically, respondents state their preference in twelve hypothetical choice sets with two possible airline alternatives each. A similar design is applicable for study two, and the alternatives are characterized according to the earlier discussed airline and video attributes. The data then indicate, among other things, whether certain attributes significantly influence preferences (Mangham, Hanson, & McPake, 2009). This is done by using the disaggregate approach, as the relationship between individual choices and characteristics of alternatives is highlighted rather than aggregate, homogeneous data (McFadden & Reid, 1975). Such an approach helps discover why a consumer makes a certain decision in specific circumstances and better reflects changing behavior due to changes in characteristics of the participant or alternatives.

The rationale for DCEs lies in random utility theory, in which consumers are confronted with several alternatives and choose the one that provides the highest utility. However, researchers are unable to observe actual utility and are merely confronted with consumer choices. Utility is therefore divided into a systematic and a random part. The former is explainable, whereas the latter consists of a stochastic error term that accounts for measurement error. The random utility model, which is a stochastic function, comes down to the following formula:

$$U_m = V_m + \varepsilon_m = x'_m\beta \ + \ \varepsilon_m$$

where U_m is defined as the utility of alternative m, V_m and $x'_m\beta$ specify the deterministic or observable utility and ε_m stands for the error or unobservable utility. As researchers are unable to observe the actual utility of consumers, they can only observe choice probabilities. The probabilistic choice rule comes down to the following formula:

$$P_m = P(U_m > U_b, \forall b \neq m)$$
$$= P(V_m + \varepsilon_m > V_b + \varepsilon_b, \forall b \neq m)$$

The probability that alternative m is preferred is dependent on the probability that its utility is bigger than other alternatives in a choice set. More specifically, the probability of alternative m is the probability that the utility of m is bigger than that of alternative b, given that they are unequal (Louviere, Flynn, & Carson, 2010).

The first part of the random utility formula, namely the deterministic utility $x'_m\beta$, can be further explained. It has become evident that when consumers make purchase decisions, the option resulting in the highest utility is chosen. Utility is established through product attributes and levels, which are responsible for attitudes towards the product or service (Erickson et al., 1984). This makes utility an additive function, in which the preference for each attribute is integrated into an overall utility. The utility is therefore a summation of smaller preferences. For study one, these attributes are *Airfare, In-flight service*, *Flight comfort, Cabin cleanliness*, *Eco friendliness, Travel-influencer marketing*, and *Flight/luggage safety*. For study two, the attributes are *Sound, Video quality, Colour, Video length, Sponsorship compensation justification,* and *Accuracy of video content*. Every alternative (m) for study one then represents a certain airline, which consists of a combination of specific attribute levels (c). A similar reasoning applies for videos in study two. For alternative m, the set of attribute levels consists of Xm = [Xm1, …, Xmc]. The utility function of alternative m then comes down to:

$$U_m = f(x_{m_1}\beta_1 + .. + x_{mc}\beta_c) = f(x'_m\beta)$$

x_{m1} represents attribute one in alternative m, which is specified into different levels. One of these levels is defined as the reference level. x_{mc} is therefore a vector that indicates which level of an attribute is present. β_1 represents the preference for a specific level of attribute one, where

the attribute consists of categorical levels. β_c is therefore a vector of utility weights that corresponds to each level (Fader & Hardie, 1996).

To enable the earlier discussed choice probability calculation, the multinomial logit (MNL) model is applied. This model assumes that errors are independently and identically distributed and have a Gumbel distribution, which is also known as an extreme value distribution (Swait & Louviere, 1993). This logit model is assumed to be superior to a probit model, as the former is more adaptive to outliers due to its bigger tails. The choice probability calculation for alternative m then comes down to:

$$P_m = \frac{exp(V_m)}{\sum_{b=1}^{M} exp(V_b)}$$ (Fader & Hardie, 1996).

In this formula, where the probability is specified as a number between 0 and 1, P_m represents the probability that alternative m is chosen. This is followed by $exp(V_m)$, the exponential of the utility of alternative m. Finally, $\sum_{b=1}^{M} exp(V_b)$ represents a summation of exponential utilities of other alternatives. Based on this formula, the probability of alternative m increases whenever the numerator and denominator increase and decrease, respectively.

The experimental designs for study one and two are fractional factorial designs as opposed to a full factorial design. The latter consists of all possible attribute level combinations, whereas the former contains an orthogonal subset. If a full factorial design is applied, study one and two would contain 864 and 216 alternatives, respectively ($2^3 * 3^3 * 4^1 = 864$ and $2^3 * 3^3 = 216$; this refers to the number of attribute levels and their respective number of attributes). Serving participants 864 and 216 alternatives is simply too time-consuming and tedious. Therefore, a fractional factorial design is used with 24 and 20 alternatives divided across 12 and 10 choice sets for study one and two, respectively. Respondents are asked to imagine that Covid-19 is over and alternatives are assigned generic labels rather than airline names to avoid bias, and respondents are provided with an opt-out option in each choice set (Mangham et al., 2009).

To sufficiently measure effects, an optimally efficient design must be generated that offers the most informative choice sets. Such an efficient design has four properties: level balance, orthogonality, minimal level overlap and utility balance. Level balance entails that attribute levels occur with equal frequencies. Moreover, orthogonality states that the joint occurrence of

any two levels of different attributes appears with frequencies equal to the product of their marginal frequencies. This assures that variable effects are independently estimated. For example, level balance exists for two attributes with 2 and 3 levels when their marginal frequencies are 1/2 and 1/3, respectively. This means that each level of an attribute should occur in 1/2 and 1/3 of the cases. In this example, if any combination of two attribute levels occurs in 1/6 of alternatives, orthogonality is also satisfied. Besides, minimal overlap states that the probability that an attribute level repeats itself in a choice set is minimal. When these conditions are met, a utility-neutral design is present. The final property is utility balance, which refers to the condition that alternatives in a choice set have similar utilities. This enables minimization of dominating and dominated alternatives. To enable utility balance, prior estimates are used that are incorporated by using a Bayesian efficient design (Huber & Zwerina, 1996). This assumes a prior distribution for parameter vectors; the multivariate normal distribution $f(\beta) = MVN(\beta_0, \Sigma_0)$, where β_0 is the prior mean vector and Σ_0 is the prior variance-covariance matrix of parameters (Sandor & Wedel, 2001). The prior means for study one and two are given in Tables 1 and 2 Appendix C, respectively. The (expected) most preferred level is set as the reference level, therefore resulting in negative proxy prior means for other levels. Finally, JMP uses effect coding to incorporate these prior means. The choice sets that are generated for study one and two based on these methods are presented in Tables 3 and 4 Appendix C, respectively. Appendix D provides an overview of the survey.

4.3 Variables

Variables in this research consist of continuous and categorical variables. A continuous variable can take any value between two numbers, whereas the measurement scale of a categorical variable consists of categories (Agresti, 2013). The independent variable of study one, which investigates the impact of a travel-influencer video content strategy on Dutch consumer preferences/brand attitudes towards KLM, is the continuous variable *Consumer Utility1*. This implicitly measures consumer preferences for and brand attitudes towards airlines numerically.

In addition, study one has seven independent variables:

- *Airfare* – this categorical variable measures the prices of an airline. The levels of the attribute consist of ‘low-cost carrier’ and ‘premium carrier’.

- *In-flight service* – this categorical variable measures the in-flight service of an airline. The levels of the attribute consist of 'below average in-flight service', 'average in-flight service', 'good in-flight service' and 'excellent in-flight service'.
- *Flight comfort* – this categorical variable measures the extent of flight comfort of an airline. The attribute levels are 'low comfort', 'average comfort' and 'high comfort'.
- *Cabin cleanliness* – this categorical variable measures the extent of hygiene of an airline. The attribute levels consist of 'dirty', 'average hygiene' and 'good hygiene'.
- *Eco friendliness* – this categorical variable measures the environmental sustainability of an airline. The attribute levels consist of 'non-eco-friendly', 'reasonably eco-friendly' and 'very eco-friendly'.
- *Travel-influencer marketing* – this categorical variable considers whether an airline incorporates travel-influencer marketing or not. The attribute is divided into the levels 'present' and 'not present'.
- *Flight/luggage safety* – this categorical variable takes the flight and luggage safety of an airline into account. The attribute levels are 'average safety' and 'excellent safety'.

Study two, which investigates which video attributes drive the success of travel-influencer video content, has a similar dependent variable *Consumer Utility2*. This continuous variable measures consumer utility derived from travel-influencer video content.

Moreover, study two has six independent variables:

- *Sound* – this categorical variable measures the sound of the video. Therefore, the attribute consists of the levels 'monologue' and 'music'.
- *Video quality* – this categorical variable measures the visual quality of the video. The attribute levels consist of 'low video quality', 'standard video quality' and 'enhanced video quality'.
- *Colour* – this categorical variable indicates video colours. The attribute levels therefore are 'black-and-white', 'normal colours' and 'vibrant colours'.
- *Length of video* – this categorical variable states how long the video is. Therefore, attribute levels are '30 seconds', '45 seconds' and '60 seconds'.
- *Sponsorship compensation justification* – this categorical variable states whether a sponsorship compensation justification is present. The attribute levels are divided into 'present' and 'not present'.

- *Accuracy of video content* – this categorical variable states whether the video gives an accurate representation of the experience. Therefore, the attribute levels are 'average accuracy' and 'good accuracy'.

In Section 3.8 of the Theoretical framework, several demographic and psychographic factors were discussed. These factors function as possible moderators, which affect the relationship between an independent variable and a dependent variable. The interaction of a possible moderator and an independent variable shows whether moderation has occurred. More specifically, if the effect of independent variable X on dependent variable Y is moderated by Z, then X and Z interact (Hayes & Rockwood, 2017). The possible moderators of study one are:

- *Gender* – this categorical variable states whether the participant is 'male', 'female', 'transgender' or 'feels uncomfortable answering'.
- *Age* – this categorical variable indicates the age of the participant. More specifically, the participant is either 'aged below 20', '20-39 years' or '40 or older'.
- *Annual net income* – this categorical variable states whether the participant's average annual net income is '€ 0-20.000', '€ 20.001-40.000', '€ 40.001-60.000' or 'above € 60.000'.
- *Environmental consciousness* – this categorical variable entails perceived environmentally consciousness. This consciousness consists of 'not environmentally conscious', 'reasonably environmentally conscious' and 'very environmentally conscious'.
- *Social media activity* – this categorical variable states the extent of social media activity of participants. This activity is divided into 'never', 'less than once a month', '1-3 times a month', 'once a week', 'several times a week', 'every day' and 'several times a day'.
- *Frequency of flying* – this categorical variable states how often the participant flies on average. This is divided into 'never', 'less than once a year', 'once a year', '2-3 times a year', '4-5 times a year' and 'more than 5 times a year'.
- *Travelling purpose* – this categorical variable states the travelling purpose of participants. This consists of 'mainly business purposes' and 'mainly leisure purposes'.

Moreover, *Gender, Age, Annual net income* and *Social media activity* are possible moderators of study two as well. For a more thorough description of the independent variables and moderators, please refer to Section 3.5, 3.7 and 3.8 of the Theoretical framework.

4.4 Descriptive statistics

278 participants were gathered through online platforms. Most respondents are female (54.32%) and are aged 20-39 years (52.88%). Of the respondents, 16.55% are aged below 20 and 30.58% are 40 years or older. Given the dominating annual net income of € 0-20.000 (53.24%) and the fact that most participants are millennials, it is likely that most respondents are students. Moreover, 67.63% consider themselves as reasonably environmentally conscious and most are active on social media several times a day (60.79%). This is not surprising and is consistent with earlier discussed research, which states that millennials are especially concerned with the environment (The Nielsen Company, 2014), are defined as digitally native (Bolton et al., 2013) and states that 96% of Dutch citizens aged 18-35 use social media daily (SocialConcept, 2019). Finally, statistics reveal that most people fly either once a year (35.61%) or 2-3 times a year (34.53%), followed by less than once a year (16.91%), and the majority of respondents mainly fly for leisure purposes (94.91%). However, compared to the discussed Statista survey on flying frequency of Dutch citizens in 2018, the results of this paper show a higher frequency of flying. Yet, the relatively low percentage of business travellers is consistent with existing data (Kramer, 2020a; Kramer, 2020b). Table 5 Appendix C provides an overview of descriptive statistics of the research sample.

4.5 Techniques used to analyse the data

As discussed, a choice-based conjoint analysis is used to answer the research question, as this is a useful technique to extract preferences when actual behaviour cannot be analysed. To perform analyses, JMP is used. This software allows scientists, engineers and others to perform statistical choice analyses and to consequently understand complex relationships (JMP, 2020). Results in both studies are analysed using parameter estimates of likelihood ratio tests, effect marginals and utility profilers. Finally, for study one the earlier discussed choice probability of the multinomial logit model is used to extract market shares for different airlines.

Both studies use likelihood ratio tests to investigate whether an attribute has a significant effect on consumer behaviour when choosing airlines and watching videos. Likelihood ratio tests are statistical tests that allow a basis for model selection. They are used to compare the fit of different models by stating the likelihood of data, where one model is a special case of the other. More specifically, it compares the fit of the model including the attribute with the model excluding the attribute, where the former is related to the alternative hypothesis and the latter

to the null hypothesis (Lewis, Butler, & Gilbert, 2011). Attributes and interactions with moderators therefore have a null hypothesis and an alternative hypothesis:
H0 (attribute) = the attribute does not have a significant effect on consumer preferences for airlines/videos (study one and two, respectively).
Ha (attribute) = the attribute has a significant effect on consumer preferences for airlines/videos (study one and two, respectively).

H0 (moderator) = the interaction between moderator Z and attribute X has no significant effect on consumer preferences for airlines/videos (study one and two, respectively).
Ha (moderator) = the interaction between moderator Z and attribute X has a significant effect on consumer preferences for airlines/videos (study one and two, respectively).

The null hypothesis is rejected at a 90% confidence interval and 10% significance level as a baseline. JMP is unable to extract p-values for each attribute level. However, via these likelihood ratio tests, overall attribute significance and significance of interactions with moderators is provided.

When overall attribute significance is established, a more thorough analysis of attributes for both studies is provided using effect marginals. In statistical literature, a marginal effect refers to a partial effect that measures the impact on the dependent variable whenever a change occurs in an independent variable, ceteris paribus (Williams, 2012). In JMP, it captures the importance of an attribute in comparison with the other attributes regarding consumer preferences. Attributes with a larger range of marginal utility have a higher importance than attributes with a smaller range, which therefore provides a ranking of attributes. Moreover, the marginal utilities of several attribute levels indicate which levels are most preferred within an attribute.

Furthermore, both studies use utility profilers to extract a ranking of the most preferred alternatives for subgroups such as gender. Additionally, these utility profilers allow market simulations, which is especially relevant for study one. This enables the calculation of the earlier discussed choice probabilities of the multinomial logit model. Based on the attribute description of KLM and competitors (Table 3.6.1), the utilities and choice probabilities for these airlines are derived. This reveals whether KLM with a travel-influencer video content strategy has a higher share of preference/market share than the current KLM without a travel-influencer video content strategy or competitors.

5. Results

This chapter presents the statistical results of study one and two. First, attribute significance is discussed with likelihood ratio tests, followed by an attribute (level) comparison using effect marginals. Moreover, the most preferred airline and video are presented, and the significance of moderators is discussed. Finally, the share of preference of KLM with a travel-influencer video content strategy is compared to the current KLM and competitors for study one.

5.1 Study one: airline attribute significance

Hypothesis 1.1, which states that airfare, in-flight service, flight comfort, cabin cleanliness, eco friendliness, travel-influencer marketing and flight/luggage safety have a significant effect on Dutch consumer preferences for airlines, is analysed with likelihood ratio tests. Table 1 Appendix E provides an overview of results. Tests reveal that airfare and the provided in-flight service have a weak, significant influence on Dutch consumer preferences for airlines, χ^2 (1, N = 278) = 2.724, $p < .10$ and χ^2 (3, N = 278) = 6.378, $p < .10$, respectively. Moreover, the extent of cabin cleanliness shows to significantly affect Dutch consumer choices, χ^2 (2, N = 278) = 7.797, $p < .05$, and the eco friendliness of an airline has a strong, significant influence on airline preferences, χ^2 (2, N = 278) = 10.740, $p < .01$. However, there is not enough evidence to suggest that flight and luggage safety and whether an airline has travel-influencer marketing significantly affect preferences for airlines, χ^2 (1, N = 278) = .000, $p > .10$. Finally, sufficient evidence lacks to suggest that the extent of flight comfort significantly influences Dutch consumer preferences, χ^2 (2, N = 278) = .000, $p > .10$.

Despite proven relevance in earlier studies, only airfare, in-flight service, cabin cleanliness and eco friendliness significantly affect Dutch consumer preferences for airlines. Therefore, hypothesis 1.1 is partially supported.

5.2 Study one: airline attribute (level) importance

Despite insignificance of some attributes, additional information is relevant. An attribute ranking and an indication of which levels are most preferred within an attribute are presented through effect marginals and ranges of marginal utility. Hypothesis 1.2, which states that in-flight service is most important to Dutch consumers when choosing airlines, followed by airfare, flight comfort, cabin cleanliness, flight/luggage safety, eco friendliness and travel-influencer marketing, is hereby tested.

Table 5.2.1 captures the importance of an attribute in comparison to other attributes. Cabin cleanliness is most important to Dutch consumers when considering airlines. This is followed by the service provided in the form of food and drinks, entertainment, and staff. Moreover, the airfare paid is the third most important factor, followed by the extent of eco friendliness of an airline, and the comfort provided during the flight. Yet, it must be stressed that the ranges of marginal utility for eco friendliness and flight comfort are close to one another. Finally, travel-influencer marketing and flight/luggage safety are of lesser importance to Dutch consumers. These results do not follow the pattern of the earlier discussed pre-test (Table 1 Appendix B), leading to a rejection of hypothesis 1.2.

Table 5.2.1

Ranking of airline attributes of study one based on the range of marginal utility and effect marginals

Attribute	**Range of marginal utility**	**Attribute rank**
Cabin cleanliness	2.848	1
In-flight service	2.413	2
Airfare	1.408	3
Eco friendliness	.875	4
Flight comfort	.817	5
Travel-influencer marketing	.371	6
Flight/luggage safety	.073	7

Based on literature research, hypothesis 1.3 states that the best airline for Dutch consumers is a very eco-friendly, premium carrier with an excellent in-flight service, high comfort, good hygiene, a travel-influencer video content strategy and an excellent safety. Table 2 Appendix E provides an overview of marginal utilities. Effect marginals for airfare reveal that the highest marginal utility of .704 is given to low-cost carriers. The lowest marginal utility of -.704 thus goes to premium carriers, suggesting that Dutch consumers prefer low-cost carriers over premium carriers. However, as it was expected that passengers would prefer to pay more for premium carriers, these results are not in line with expectations. As regards service, the highest marginal utility of 1.262 is given to an excellent in-flight service, followed by .018 for a good service and -.0128 for an average service. Finally, the lowest marginal utility of -1.151 is given to a below average in-flight service. To conclude, Dutch consumers favour excellent in-flight service, followed by a good, average, and below-average in-flight service. Based on previous

research it was expected that consumers would prefer an excellent in-flight service, which therefore is in line with results.

Moreover, for flight comfort, the highest marginal utility of .364 is given to an average comfort, followed by .089 for high comfort. The lowest marginal utility of -.453 thus goes to a low comfort, suggesting that Dutch consumers prefer an average comfort in airplanes followed by a high and low comfort. However, as it was expected that Dutch consumers would have the highest preference for a high comfort, results are different from expectations. Also, effect marginals for cabin cleanliness reveal that the highest marginal utility of 1.134 is given to a good hygiene, followed by a .579 for an average hygiene. The lowest marginal utility of -1.714 goes to a dirty airline. Based on these results, Dutch consumers therefore prefer a good hygiene over an average hygiene and a dirty airline, which is in line with earlier discussed expectations.

Furthermore, effect marginals for eco friendliness show that the highest marginal utility of .302 goes to a reasonably eco-friendly airline, followed by .271 for a very eco-friendly airline. These marginal utilities are close to one another. The lowest marginal utility of -.573 is given to a non-eco-friendly airline, suggesting that Dutch consumers prefer a reasonably eco-friendly airline over a very eco-friendly and non-eco-friendly airline. However, as it was expected that Dutch consumers would have the highest preference for very eco-friendly carriers, results are not in line with expectations. As regards travel-influencer marketing, the highest marginal utility of .185 is given to the presence of such a campaign. Consequently, the lowest marginal utility of -.185 goes to its absence. This suggests that Dutch consumers favour travel-influencer marketing, which is in line with expectations. Finally, for flight/luggage safety, the highest marginal utility of .036 goes to an average safety, followed by -.036 for an excellent safety. Therefore, results reveal that Dutch consumers favour an average safety over an excellent safety, which is inconsistent with expectations.

Based on these results, the best airline for Dutch consumers is a reasonably eco-friendly, low-cost carrier with an excellent in-flight service, average comfort, good hygiene, a travel-influencer video content strategy and an average safety. Hypothesis 1.3 is therefore partially supported, and it is stressed that results must be interpreted with caution as analyses reveal that some attributes lack significance.

5.3 Study one: utility profilers and a market simulation

Utility profilers extract a ranking of most preferred alternatives for subgroups. This is relevant, as Section 5.2 presented the best airline for Dutch consumers, but the best airline may differ for men and women in terms of attribute levels. The research design provides 864 combinations of attribute levels. Out of these 864 possible airlines, the best airline for women is equal to a reasonably eco-friendly, low-cost carrier with an excellent service, average comfort, good hygiene, average safety, and the presence of travel-influencer marketing. This is based on a utility of 3.670 and is equal to the earlier discussed most preferred airline. For men, the best airline is equal to that of women but with a high comfort. This is based on a utility of 3.616. However, the second-best airline for men is equal to that of women with a utility of 3.546 and is thus similar in terms of utility to the best airline for men.

Moreover, hypothesis 1.4 states that the share of preference of KLM with a travel-influencer video content strategy is higher compared to the current KLM. Based on Table 3.6.1, a market simulation is provided through choice probabilities of the multinomial logit model. Table 5.3.1 shows that KLM with a travel-influencer marketing strategy is ranked 236th out of 864 for women, with a utility of 1.147. With this, KLM with a travel-influencer marketing strategy is ranked second for the six selected airlines. Emirates is most preferred, and EasyJet, Lufthansa, the current KLM, and Ryanair are ranked 3rd to 6th, respectively. Furthermore, and consistent with expectations, women prefer KLM with a travel-influencer marketing strategy over the current KLM, as the latter is ranked 266th out of 864 with a utility of 1.005. For men, Table 5.3.2 shows that KLM with a travel-influencer marketing strategy is ranked 327th out of 864 with a utility of .572. Different from women, KLM with a travel-influencer marketing strategy is hereby ranked third for the six selected airlines. Emirates is again most preferred followed by EasyJet, and Lufthansa, the current KLM and Ryanair come 4th to 6th, respectively. Despite a higher preference for EasyJet compared to the new KLM, men also prefer KLM with travel-influencer marketing over the current KLM, as the latter is ranked 380th out of 864 with a utility of .320.

Table 5.3.1

Ranking of airlines for women based on utility profilers

Airlines	Rank out of 864	Rank out of selected airlines	Utility
Emirates	167	1	1.551
KLM with travel-influencer marketing	236	2	1.147
EasyJet	239	3	1.131
Lufthansa	251	4	1.082
Current KLM	266	5	1.005
Ryanair	381	6	.371

Table 5.3.2

Ranking of airlines for men based on utility profilers

Airlines	Rank out of 864	Rank out of selected airlines	Utility
Emirates	191	1	1.357
EasyJet	217	2	1.234
KLM with travel-influencer marketing	327	3	.572
Lufthansa	340	4	.525
Current KLM	380	5	.320
Ryanair	409	6	.199

To support these findings statistically, a share of preference for the new and current KLM is extracted using the multinomial logit model. For women, these shares of preference are:

$$Women's\ share\ of\ preference\ current\ KLM = \frac{\exp(1.005)}{\exp(1.005) + \exp(1.551) + \exp(1.131) + \exp(1.082) + \exp(.371)} = 18.28\%$$

$$Women's\ share\ of\ preference\ KLM\ with\ travel-influencer\ marketing = \frac{\exp(1.147)}{\exp(1.147) + \exp(1.551) + \exp(1.131) + \exp(1.082) + \exp(.371)} = 20.50\%$$

The probability that the Dutch female population chooses to fly with the current KLM when they can choose between the five stated airlines (excluding KLM with travel-influencer marketing) is therefore equal to 18.28%. When KLM decides to implement travel-influencer marketing, this share of preference increases to 20.50%. Given that the properties of the multinomial logit model make a choice probability equal to a market share, this increase in market share is significant and could boost KLM's sales. Yet, this analysis is subject to

limitations and must be interpreted with caution, as the aviation industry comprises of more than the five selected airlines and not all attributes show significance.

For men, the shares of preference are:

$$Men's\ share\ of\ preference\ current\ KLM = \frac{\exp(.320)}{\exp(.320) + \exp(1.357) + \exp(1.234) + \exp(.525) + \exp(.199)} = 11.86\%$$

$$Men's\ share\ of\ preference\ KLM\ with\ travel - influencer\ marketing = \frac{\exp(.572)}{\exp(.572) + \exp(1.357) + \exp(1.234) + \exp(.525) + \exp(.199)} = 14.76\%$$

The probability that the Dutch male population chooses to fly with the current KLM when they can choose between the five airlines (excluding KLM with travel-influencer marketing) is equal to 11.86%. This considerably lower percentage compared to women can be explained by the fact that overall, men give a significantly lower utility to the new KLM, Lufthansa, the current KLM, and Ryanair than women. When KLM decides to implement a travel-influencer marketing strategy, this share of preference increases to 14.76%. Even though the shares of preference are lower for men compared to women, the implementation of a travel-influencer marketing strategy for KLM entails a larger increase in market share in terms of percentage points for men. This increase in market share is significant and could boost sales.

To conclude, the share of preference of KLM with a travel-influencer video content strategy is higher compared to the current KLM for both men and women, suggesting that hypothesis 1.4 is supported. Despite limitations and the insignificance of travel-influencer marketing as an attribute, it is evident that based on this utility analysis, a travel-influencer marketing strategy for KLM could be effective.

5.4 Study one: demographic and psychographic factors

To analyse whether gender, age, annual net income, environmental consciousness, social media activity, frequency of flying and travelling purpose moderate the relationship between airline attributes and Dutch consumer preferences for airlines, likelihood ratio tests are used. According to hypothesis 1.5, gender moderates the relationship between travel-influencer marketing and airline preferences. However, analyses reveal that the effect of travel-influencer marketing on airline preferences is not significantly different for Dutch men and women (Table

3 Appendix E). Consequently, there is insufficient evidence to suggest that gender moderates the relationship between travel-influencer marketing and Dutch consumer preferences for airlines. Based on previous research, it was however expected that particularly females would prefer the existence of a travel-influencer video content strategy. This does not follow from results, leading to a rejection of hypothesis 1.5. Finally, the effect of the other airline attributes on airline preferences is not significantly different for Dutch men and women either (Table 3 Appendix E). This is not only in line with expectations but also with utility profilers, which show that most preferred airlines are very closely related for men and women.

Moreover, hypothesis 1.6 states that age moderates the relationship between travel-influencer marketing and airline preferences, eco friendliness and airline preferences, as well as the relationship between airfare and airline preferences. Yet, likelihood ratio tests show that the effect of travel-influencer marketing, eco friendliness and airfare on airline preferences is not significantly different for Dutch people aged below 20, aged 20-39 and aged 40 or older (Table 4 Appendix E). As a result, there is not enough evidence to suggest that age moderates these relationships. This is not in line with expectations, as it was presumed that millennials would particularly prefer the existence of a travel-influencer video content strategy, as well as very eco-friendly and low-cost airlines. As this does not follow from results, hypothesis 1.6 is rejected. Finally, and as expected, the effect of the other airline attributes on airline preferences is not significantly different for Dutch people with different age groups either (Table 4 Appendix E).

Also, hypothesis 1.7 states that annual net income moderates the relationship between all airline attributes and airline preferences. Analyses show that the effect of airfare on airline preferences is strongly, significantly different for Dutch people with annual net incomes of € 0-20.000, € 20.001-40.000, € 40.001-60.000, and above € 60.000, χ^2 (3, N = 278) = 12.438, p < .01 (Table 5 Appendix E). Besides, the effect of in-flight service on airline preferences is significantly different for the four annual net incomes, χ^2 (9, N = 278) = 21.671, p < .05. Annual net income therefore moderates these relationships. Yet, the effect of other airline attributes on airline preferences is not significantly different for Dutch people with different annual net incomes. As a result, there is insufficient evidence to suggest that annual net income moderates the relationship between these attributes and airline preferences. Yet, it was expected that annual net income would affect all relationships, which is thus not in line with results. Nonetheless,

results show that annual net income significantly affects airline preferences in terms of airfare and in-flight service, therefore partially supporting hypothesis 1.7.

Hypothesis 1.8 states that environmental consciousness moderates the relationship between eco friendliness and airline preferences. Likelihood ratio tests reveal that the effect of eco friendliness of an airline on airline preferences is strongly, significantly different for Dutch people who consider themselves as not environmentally conscious, reasonably environmentally conscious, and very environmentally conscious, χ^2 (4, N = 278) = 29.310, p < .01 (Table 6 Appendix E). Environmental consciousness therefore moderates this relationship, which is in line with expectations and thus supports hypothesis 1.8. Moreover, results reveal that the effect of in-flight service on airline preferences is significantly different for the three perceptions of environmental consciousness, χ^2 (6, N = 278) = 16.709, p < .05 (Table 6 Appendix E). Finally, and as expected, the effect of the other airline attributes on airline preferences is not significantly different for people with different perceptions of environmental consciousness. Therefore, there is insufficient evidence to suggest that environmental consciousness moderates the relationship between these attributes and airline preferences.

Besides, hypothesis 1.9 states that the extent of social media activity moderates the relationship between travel-influencer marketing and airline preferences. Yet, analyses show that the effect of travel-influencer marketing on airline preferences is not significantly different for Dutch people who, for example, never use social media compared to Dutch people who use it several times a day (Table 7 Appendix E). Consequently, there is not enough evidence to suggest that social media activity moderates the relationship between travel-influencer marketing and Dutch consumer preferences for airlines. Based on previous research, it was however expected that active social media users would especially favour the presence of a travel-influencer video content strategy for airlines. As this does not follow from results, hypothesis 1.9 is rejected. Finally, and as expected, the effect of the other airline attributes on airline preferences is not significantly different for different gradations of social media activity (Table 7 Appendix E).

Also, hypothesis 1.10 states that the frequency of flying moderates the relationship between all airline attributes and airline preferences. However, Table 8 Appendix E reveals that the effect of none of the airline attributes on airline preferences is significantly different for Dutch people who, for example, fly less than once a year compared to people who travel by plane 2-3 times a year. As a result, there is insufficient evidence to suggest that frequency of flying moderates

the relationship between airline attributes and preferences. It was however expected that more frequent flyers would be more concerned about the environmental impact, as well as airfare, safety, comfort, service, and hygiene. Also, it was expected that frequent flyers would especially prefer a travel-influencer video content strategy. As this does not follow from results, hypothesis 1.10 is rejected.

Finally, hypothesis 1.11 states that travelling purpose moderates the relationship between airfare and airline preferences, in-flight service and airline preferences, flight comfort and airline preferences, cabin cleanliness and airline preferences, as well as travel-influencer marketing and airline preferences. Yet, tests show that the effect of airfare, in-flight service, flight comfort, cabin cleanliness and travel-influencer marketing on airline preferences is not significantly different for Dutch people who mainly fly for leisure purposes and Dutch people who mainly fly for business purposes (Table 9 Appendix E). Therefore, there is insufficient evidence to suggest that travelling purpose moderates the relationship between these attributes and Dutch consumer preferences for airlines. As it was expected that leisure travellers would be more price sensitive and would favour travel-influencer marketing, and that business travellers would be more willing to pay for service, hygiene and comfort, results are not in line with expectations. Hypothesis 1.11 is thus rejected. Finally, and as expected, the effect of the other airline attributes on airline preferences is not significantly different for people who mainly fly for leisure purposes or business purposes (Table 9 Appendix E). Table 10 Appendix E provides an overview of hypotheses of study one.

5.5 Study two: video attribute significance

Even though sufficient evidence lacks to suggest that travel-influencer marketing significantly affects Dutch consumer preferences for airlines, information is relevant regarding travel-influencer video content itself. The second study dives deeper into this content and establishes which video attributes drive the success of travel-influencer marketing.

Hypothesis 2.1 states that sound, video quality, colour, video length, a sponsorship compensation justification and the accuracy of video content significantly affect Dutch consumer preferences for travel-influencer video content. Table 1 Appendix F provides an overview of results. Analyses reveal that the video quality and the colours used have a strong, significant influence on consumer preferences for travel-influencer video content, χ^2 (2, N =

278) = 13.170, $p < .01$ and χ^2 (2, N = 278) = 79.096, $p < .01$, respectively. Furthermore, the accuracy of video content has a weak, significant influence on travel-influencer video preferences, χ^2 (1, N = 278) = 2.390, $p < .10$. However, there is insufficient evidence to suggest that the sound of the video and the presence of a sponsorship compensation justification significantly affect preferences for travel-influencer videos, χ^2 (1, N = 278) = .000, $p > .10$. Finally, sufficient evidence lacks to suggest that the length of the video significantly impacts Dutch consumer preferences, χ^2 (2, N = 278) = .000, $p > .10$.

Despite previous research, only the video quality, the colours used, and the accuracy of video content significantly affect Dutch consumer preferences for travel-influencer videos. Therefore, hypothesis 2.1 is partially supported.

5.6 Study two: video attribute (level) importance

Like study one, additional information on attributes provides relevant insights despite the insignificance of some factors. Effect marginals and ranges of marginal utility provide an attribute ranking and information on which levels are most preferred within an attribute.

Hypothesis 2.2 states that the length of the video is most important to Dutch consumers when watching travel-influencer videos, followed by the accuracy of content, the quality of the video, the sound, colours and whether a sponsorship compensation justification is present. Table 5.6.1 captures the importance of an attribute in comparison to the other attributes. The colours used in the video are most important to Dutch consumers, followed by video quality. The third most important factor is whether the video has a monologue or music, followed by the accuracy of content. Given the relatively high ranges of marginal utility for these attributes, it seems that especially these factors drive the success of travel-influencer marketing. Finally, the length of the video and whether a sponsorship compensation justification is present are of lesser importance to Dutch consumers. These results do not follow the pattern of the earlier discussed pre-test (Table 2 Appendix B), leading to a rejection of hypothesis 2.2.

Table 5.6.1

Ranking of video attributes of study two based on the range of marginal utility and effect marginals

Attribute	Range of marginal utility	Attribute rank
Colour	2.477	1
Video quality	1.792	2
Sound	1.071	3
Accuracy of video content	.900	4
Length of video	.347	5
Sponsorship compensation justification	.295	6

Based on previous research, hypothesis 2.3 states that the best travel-influencer video for Dutch consumers is equal to a 60-second video with music, an enhanced video quality, vibrant colours, a sponsorship compensation justification, and a good accuracy of video content. Table 2 Appendix F provides an overview of marginal utilities. Effect marginals for sound reveal that the highest marginal utility of .536 is given to music. The lowest marginal utility of -.536 thus goes to a monologue, suggesting that Dutch consumers prefer music in travel-influencer videos. Based on previous research it was expected that consumers would prefer the presence of music, which therefore is in line with results. As regards the quality of the video, the highest marginal utility of .713 is given to an enhanced video quality, followed by .365 for a standard video quality. The lowest marginal utility of -1.079 goes to a low video quality. Consequently, Dutch consumers favour an enhanced video quality over a standard and low video quality, respectively. As it was expected that consumers would prefer an enhanced video quality, results are in line with expectations.

Moreover, the highest marginal utility of .971 for colour is given to the use of vibrant colours, followed by .534 for normal colours. The lowest marginal utility of -1.506 goes to the use of black-and-white, suggesting that Dutch consumers prefer vibrant colours over normal colours and black-and-white, respectively. Based on previous research, it was expected that consumers would favour colour over black-and-white. Also, it was expected that given KLM's (and most other airlines') mission to create excitement, consumers would prefer vibrant colours over normal colours and black-and-white. Results are therefore in line with expectations. Effect marginals for the length of the video reveal that the highest marginal utility of .219 is given to a video of 45 seconds, followed by -.091 for a 60-second video. The lowest marginal utility of -.128 goes to a video of 30 seconds, suggesting that Dutch consumers prefer a 45-second video

followed by a 60-second video and a 30-second video. However, based on previous research it was expected that consumers would mostly favour a 60-second video, and results are therefore not in line with expectations.

Furthermore, as regards the sponsorship compensation justification, the highest marginal utility of .147 is given to the presence of such a justification. Consequently, the lowest marginal utility of -.147 is given to its absence, suggesting that the presence of such a justification is mostly favoured. This was expected based on previous research, meaning that results are in line with expectations. Finally, effect marginals for the accuracy of video content show that the highest marginal utility of .450 is given to a good accuracy. The lowest marginal utility of -.450 consequently goes to an average accuracy, suggesting that Dutch consumers favour a good accuracy of video content. Based on pre-test results, this was also expected.

These analyses reveal that the best travel-influencer video for Dutch consumers is equal to a 45-second video with music, an enhanced video quality, vibrant colours, a sponsorship compensation justification, and a good accuracy of video content. Hypothesis 2.3 is therefore partially supported, as the length of the video is different from expectations. Finally, it must be stressed that not all attributes show significance.

5.7 Study two: utility profilers

The best video may, however, differ for men and women in terms of attribute levels. The research design provides 216 different attribute level combinations. Out of 216 possible travel-influencer videos, the best video for women is equal to a 45-second video with music, an enhanced video quality, vibrant colours, a sponsorship compensation justification, and a good accuracy of video content. This is based on a utility of 2.639 and is equal to the earlier discussed most preferred video. For men, the best video is equal to that of women with the only difference being the video length, as a 60-second video is preferred. This is based on a utility of 3.052. Yet, the second-best video for men is entirely equal to that of women with a utility of 3.024, which thus comes very close to men's number one video.

5.8 Study two: demographic and psychographic factors

To analyse whether gender, age, annual net income and social media activity moderate the relationship between video attributes and Dutch consumer preferences for travel-influencer

video content, likelihood ratio tests are used. According to hypothesis 2.4, gender moderates the relationship between a sponsorship compensation justification and travel-influencer video preferences. Analyses reveal that the effect of a sponsorship compensation justification on video preferences is not significantly different for Dutch men and women (Table 3 Appendix F). Consequently, there is insufficient evidence to suggest that gender moderates the relationship between a sponsorship compensation justification and travel-influencer video preferences. As it was expected that particularly females would prefer a sponsorship compensation justification, this is not in line with expectations and leads to a rejection of hypothesis 2.4. Moreover, results show that the effect of the video quality on video preferences is weakly, significantly different for Dutch men and women, χ^2 (2, N = 278) = 5.836, $p < .10$ (Table 3 Appendix F). Gender therefore moderates this relationship. Finally, and as expected, the effect of the other video attributes on consumer preferences for videos is not significantly different for Dutch men and women.

Moreover, hypothesis 2.5 states that age moderates the relationship between video attributes and travel-influencer video preferences. Likelihood ratio tests reveal that the effect of colour on video preferences is strongly, significantly different for Dutch people aged below 20, people aged 20-39 and aged 40 or older, χ^2 (4, N = 278) = 18.294, $p < .01$ (Table 4 Appendix F). Moreover, the effect of the length of the video on Dutch consumer preferences for travel-influencer videos is significantly different for the three stated age groups, χ^2 (4, N = 278) = 10.573, $p < .05$. Age therefore moderates these relationships. Yet, the effect of the other video attributes on Dutch consumer preferences for videos is not significantly different for the different age groups. As a result, there is not enough evidence to suggest that age moderates the relationship between these other video attributes and video preferences. Nonetheless, results show that age significantly affects consumer preferences for travel-influencer videos in terms of colour and video length, which is in line with expectations and supports hypothesis 2.5.

Besides, according to hypothesis 2.6, annual net income moderates the relationship between video attributes and travel-influencer video preferences. Analyses reveal that the effect of colour on video preferences is strongly, significantly different for Dutch people with annual net incomes of € 0-20.000, € 20.001-40.000, € 40.001-60.000 and above € 60.000, χ^2 (6, N = 278) = 20.771, $p < .01$ (Table 5 Appendix F). Furthermore, the effect of video length on Dutch consumer preferences for videos is significantly different for the four stated annual net incomes, χ^2 (6, N = 278) = 14.457, $p < .05$. Annual net income therefore moderates these relationships.

However, the effect of the other video attributes on Dutch consumer preferences for videos is not significantly different for the different annual net incomes. As a result, there is not enough evidence to suggest that annual net income moderates the relationship between these attributes and video preferences. Despite this, results reveal that annual net income significantly affects consumer preferences for travel-influencer videos in terms of colour and video length, which is in line with expectations and supports hypothesis 2.6.

Finally, hypothesis 2.7 states that the extent of social media activity moderates the relationship between video attributes and travel-influencer video preferences. Likelihood ratio tests show that the effect of video quality on video preferences is weakly, significantly different for Dutch people who, for example, never use social media compared to Dutch people who use it several times a day, χ^2 (12, N = 278) = 18.588, $p < .10$ (Table 6 Appendix F). Moreover, the effect of colour on video preferences is strongly, significantly different for the different gradations of social media activity, χ^2 (12, N = 278) = 28.754, $p < .01$. Social media activity therefore moderates these relationships. However, the effect of the other video attributes on video preferences is not significantly different for Dutch people with different gradations of social media activity. Consequently, there is not enough evidence to suggest that social media activity moderates the relationship between these other video attributes and video preferences. Yet, results show that social media activity significantly affects consumer preferences for travel-influencer videos in terms of video quality and colour, which is in line with expectations and supports hypothesis 2.7. Table 7 Appendix F provides an overview of hypotheses of study two.

6. Discussion and conclusion

This chapter provides a discussion of results, a conclusion on the research question and implications for both studies, followed by limitations and suggestions for future research.

6.1 Study one: discussion and conclusion

The research question imposed in this paper is *what is the impact of a travel-influencer video content strategy on Dutch consumer preferences/brand attitudes towards KLM and which video attributes drive the success of travel-influencer video content?* The first study focuses on the first part of this question and investigates whether KLM with a travel-influencer video content strategy is more preferred to Dutch consumers than KLM without such a strategy or competitors, next to information on airline attributes.

The first sub question concerns which airline attributes significantly affect Dutch consumer preferences. Likelihood ratio tests reveal that in choice behaviour regarding airlines, Dutch consumers are significantly influenced by cabin cleanliness. Moreover, the eco friendliness of an airline has a strong, significant influence on preferences, and in-flight service and airfare have a weak, significant effect on Dutch consumer choices. Yet, there is not enough evidence to suggest that flight comfort, flight/luggage safety and whether an airline has travel-influencer marketing significantly affect airline preferences. Based on previous research and the pre-test it was however expected that all attributes would have a significant impact, meaning that hypothesis 1.1 is partially supported. These counter-intuitive results can be explained by the fact that respondents are currently severely influenced by the Covid-19 pandemic, resulting in an extensive focus on hygiene and less focus on factors such as safety, comfort, and marketing. Moreover, as plane crashes are reasonably absent in Europe and safety standards are often met, Dutch consumers may focus less on this aspect. Finally, the strong, significant effect of eco friendliness can be explained by the fact that a majority of 67.63% of respondents consider themselves to be reasonable environmentally conscious, which consequently has a strong, significant influence on the relationship between eco friendliness and airline preferences.

The second sub question asks which attribute is most important to Dutch consumers when choosing airlines. Effect marginals show that cabin cleanliness is most important, followed by in-flight service, airfare, eco friendliness, flight comfort, travel-influencer marketing, and flight/luggage safety. These results are partially in line with earlier analyses on attribute

significance as they show that travel-influencer marketing and flight/luggage safety are of lesser importance. Also, results support the assumption that respondents likely focus extensively on hygiene due to Covid-19, as this is the most important factor. These external influences also lead to counter-intuitive results, however, as it was expected based on previous research and the pre-test that in-flight service would be most important, followed by airfare, flight comfort, cabin cleanliness, flight/luggage safety, eco friendliness and travel-influencer marketing. Therefore, hypothesis 1.2 is rejected.

The third sub question concerns what the best airline is for Dutch consumers, for which effect marginals were used. Analyses reveal that Dutch consumers prefer low-cost carriers over premium carriers. Yet, even though the law of supply and demand indicates that a higher price generally yields a lower willingness to pay (Gale, 1955), previous research has shown that the willingness to pay for in-flight service and comfort is relatively high (Balcombe et al., 2009). As it was therefore expected that respondents would overall prefer premium carriers, these results are counter intuitive. Also, Dutch consumers mostly favour an excellent in-flight service, followed by a good, average, and below average in-flight service. This is in line with expectations, as previous research has shown the importance of service quality in consumer preferences for carriers (Proussaloglou & Koppelman, 1999; Kim & Park, 2017). Finally, Balcombe et al. (2009) revealed that passengers are willing to pay a reasonable amount for in-flight services, which is thus reimbursed by the results of this study.

Furthermore, analyses reveal that Dutch consumers prefer an average comfort in airplanes, followed by a high and low comfort, respectively. Yet, previous research has shown that despite the competitiveness in the aviation market due to low-cost carriers, consumers' willingness to pay for flight comfort is relatively high (Balcombe et al., 2009). As it was therefore expected that respondents would overall prefer a high level of comfort, results are counter intuitive. Effect marginals for cabin cleanliness reveal that Dutch consumers prefer a good hygiene, followed by an average hygiene and a dirty airplane. This is in line with expectations, as previous research indicates the importance of hygiene in consumers' choices (Danaher, 1997; Kim & Park, 2017; Chen & Chao, 2015). Also, analyses by Skytrax reveal that cabin hygiene is becoming important in customer experiences (Skytrax, 2016), which is thus reimbursed by this paper. Finally, these results are in accordance with earlier discussed assumptions that respondents likely focus on having a good hygiene due to Covid-19.

Besides, as regards eco friendliness, Dutch consumers mostly favour a reasonably eco-friendly airline, followed by a very eco-friendly airline and a non-eco-friendly airline. However, previous research indicates that an increasing number of consumers are willing to pay more for eco-friendly services (Szmigin & Piacentini, 2018). Also, analyses done by Unilever reveal that two out of three consumers report choosing a brand based on its stand on social issues such as climate change (Unilever, 2019). As it was therefore expected that consumers would mostly favour very eco-friendly carriers, results are not in line with expectations. Moreover, effect marginals for travel-influencer marketing reveal that Dutch consumers favour the presence of travel-influencer marketing campaigns. This is in line with expectations, as previous research indicates the importance of marketing in consumers' choices (Kim & Park, 2017). Also, it has been proved that purchase intention is higher when search goods or products are promoted through sponsored blog posts (Lu et al., 2014), and influencer marketing is positively associated with brand engagement, expected brand value and purchase intention (Jiménez-Castillo & Sánchez-Fernández, 2019). This is reimbursed by results. Finally, analyses reveal that surprisingly, Dutch consumers prefer an average safety over an excellent safety. As it was expected that consumers would prefer an excellent safety, results are not in line with expectations. Again, this result can be explained by the possibility that respondents assume that safety standards are met and therefore pay less attention to this factor.

The best airline for Dutch consumers is thus equal to a reasonably eco-friendly, low-cost carrier with an excellent in-flight service, average comfort, good hygiene, a travel-influencer video content strategy and an average safety. This shows multiple contradictions with existing literature, which could be explained by the limitations of this paper, such as a relatively small sample size. As a result, hypothesis 1.3 is partially supported. Finally, results must be interpreted with caution as analyses reveal that some attributes lack significance.

The fourth sub question asks what the share of preference of KLM with a travel-influencer video content strategy is compared to the current KLM. Despite the earlier discussed best airline for Dutch consumers, utility profilers reveal that the best airline differs for men and women in terms of attribute levels. For Dutch women, this is a reasonably eco-friendly, low-cost carrier with an excellent service, average comfort, good hygiene, average safety, and the presence of travel-influencer marketing. This is equal to the earlier discussed best airline for Dutch consumers, which is not surprising given that most respondents are female. For Dutch men, the best airline is equal to that of women but with a high comfort. Yet, the second-best airline for

men is equal to that of women and comes close to the best airline for men in terms of utility, therefore indicating that their preferences are similar.

Moreover, a market simulation based on Table 3.6.1 reveals that for women, KLM with a travel-influencer marketing strategy is ranked 236th out of 864 possible airlines with a utility of 1.147. This results in KLM with a travel-influencer marketing strategy being the second-most preferred airline, with the top position taken by Emirates and the 3rd to 6th position owned by EasyJet, Lufthansa, the current KLM, and Ryanair, respectively. That Emirates is nonetheless most preferred is not surprising, as this airline is superior in terms of service and comfort. Consistent with hypothesis 1.4, women thus prefer KLM with a travel-influencer marketing strategy over the current KLM. For men, the new KLM is ranked 327th out of 864 with a utility of .572. Surprisingly, this utility is considerably lower compared to women, resulting in the new KLM being ranked 3rd for the six selected airlines. Emirates is again most preferred followed by EasyJet, and Lufthansa, the current KLM and Ryanair come 4th to 6th, respectively. Surprisingly, men prefer EasyJet over the new KLM even though the latter is superior in important attributes such as service, hygiene and eco friendliness. Moreover, this is especially surprising as there is insufficient evidence to suggest that gender moderates the relationship between airline attributes and preferences. Despite these findings, men also prefer KLM with travel-influencer marketing over the current KLM, therefore supporting hypothesis 1.4.

This evidence is supported statistically by choice probabilities of the multinomial logit model. The probability that the Dutch female population chooses to fly with the current KLM (when they can choose between the five selected airlines) is equal to 18.28%, compared to 20.50% for KLM with a travel-influencer marketing strategy. It is thus evident that if KLM decides to implement such a campaign its market share increases significantly, which could consequently boost sales. The probability that the Dutch male population chooses to fly with the current KLM (when they can choose between the five selected airlines) is 11.86%, compared to 14.76% for KLM with travel-influencer marketing. These shares of preference are considerably lower compared to women, which can be explained by the fact that overall, men give a significantly lower utility to the new KLM, Lufthansa, the current KLM, and Ryanair than women. Nonetheless, the implementation of a travel-influencer marketing campaign for KLM holds a larger increase in market share in terms of percentage points for men and could boost sales.

In conclusion, the share of preference of KLM with a travel-influencer video content strategy is higher compared to the current KLM for both men and women. This is in line with expectations, as it was expected that travel-influencer marketing would be favoured based on the praise of this type of marketing in previous studies and the effectiveness for other airlines. Hypothesis 1.4 is therefore supported. Yet, this analysis is subject to limitations and must be interpreted with caution, as the aviation industry comprises of more than the five selected airlines and some attributes lack significance. Nonetheless, this utility analysis reveals that a travel-influencer marketing strategy for KLM could be effective, as it is reasonable to suggest that the Dutch population would favour this aspect.

The fifth sub question asks which demographic and psychographic factors moderate the relationship between airline attributes and Dutch consumer preferences for airlines, for which likelihood ratio tests were used. Analyses show that the effect of travel-influencer marketing on airline preferences is not significantly different for Dutch men and women, meaning there is insufficient evidence to suggest that gender moderates this relationship. Yet, previous research has shown that Instagram celebrities particularly influence the buying behaviour of females aged 18-30, and that females are more affected by social influence than their male counterparts (Djafarova & Rushworth, 2017). Consequently, women have shown to adhere more to social opinions and to be more affected by influencer marketing than men (Wilcox & Stephen, 2013). Finally, especially females are active on social media platforms that are highly used by influencers (Sheldon & Bryant, 2016), leading to the expectation that particularly females would prefer the existence of a travel-influencer strategy for airlines. Therefore, the results of this paper are counter intuitive, resulting in a rejection of hypothesis 1.5.

Furthermore, likelihood ratio tests show that the effect of travel-influencer marketing, eco friendliness and airfare on airline preferences is not significantly different for Dutch people aged below 20, aged 20-39 and aged 40 or older. Consequently, there is not enough evidence to suggest that age moderates the relationship between these attributes and airline preferences. However, previous studies have shown that generation Y, also known as millennials or people aged 20-39, highly contribute, share, and consume data through social media, are more likely to value the opinion of others on social media, and 96% of Dutch citizens aged 18-35 use such platforms daily (Bolton et al., 2013; SocialConcept, 2019). Consequently, it was expected that generation Y would be more exposed to and would prefer the existence of a travel-influencer video content strategy. Also, millennials are generally more concerned with environmental

issues and have a higher willingness to pay for green products (The Nielsen Company, 2014; Deloitte, 2019), leading to the expectation that especially millennials would prefer very eco-friendly airlines. Finally, research has shown that millennials are price sensitive (Atallah & El-Mawardy, 2018), making it likely that they would favour low-cost carriers over premium carriers. These expectations do not follow from results, meaning hypothesis 1.6 is rejected.

Moreover, analyses reveal that the effect of airfare and in-flight service on airline preferences is strongly, significantly different, and significantly different, respectively, for Dutch people with annual net incomes of € 0-20.000, € 20.001-40.000, € 40.001-60.000, and above € 60.000. Annual net income therefore moderates these relationships. However, the effect of other airline attributes on airline preferences is not significantly different for Dutch people with different annual net incomes, meaning there is insufficient evidence to suggest that annual net income moderates these relationships. Previous research has shown a positive relationship between income and price sensitivity, meaning that high income passengers are often more price sensitive. Also, a higher income is associated with more environmental sensitivity (Brons et al., 2002; Straughan & Roberts, 1999), and is likely to affect preferences for travel-influencer marketing as well. Finally, different price sensitivities lead to different preferences for airfares, which are associated with different levels of service, comfort, sustainability efforts, hygiene, and safety. Based on this, it was expected that annual net income would significantly affect all relationships. The results of this paper only partially resemble these expectations. Nonetheless, annual net income significantly affects airline preferences in terms of airfare and in-flight service, therefore partially supporting hypothesis 1.7.

Besides, test show that the effect of eco friendliness on airline preferences is strongly, significantly different for Dutch people who consider themselves as not environmentally conscious, reasonably environmentally conscious, and very environmentally conscious. Environmental consciousness therefore moderates this relationship. Previous studies have shown that mindful and green consumption are emerging because of climate change, resulting in a reduction of harmful purchases and a sales maximization of products with a low environmental footprint (Sheth et al., 2011). Finally, research has shown that stronger green consumption values result in a higher preference for eco-friendly products (Haws et al., 2014). Therefore, it was expected that perceived environmental consciousness would moderate the relationship between eco friendliness and airline preferences. These expectations also follow from results, meaning that hypothesis 1.8 is supported. Surprisingly, results also reveal that the

effect of in-flight service on airline preferences is significantly different for people with different perceptions of environmental consciousness. Environmental consciousness therefore moderates this relationship as well.

Also, likelihood ratio tests show that the effect of travel-influencer marketing on airline preferences is not significantly different for people with different levels of social media usage, meaning that there is insufficient evidence to suggest that social media activity moderates the relationship between this attribute and preferences. However, previous research has shown that social media enables the wider spread and reach of influencer content, leading to an increase in influencers leveraging these platforms to reach consumers and to promote products and services (Brown & Hayes, 2008; Sammis et al., 2016). These results and the fact that consumers increasingly use social media to justify purchasing habits led to the expectation that active social media users would favour the presence of a travel-influencer video content strategy for airlines more than less active social media users (Erkan & Evans, 2016). Therefore, the results of this paper are counter intuitive, leading to a rejection of hypothesis 1.9.

In addition, analyses show that the effect of none of the airline attributes on airline preferences is significantly different for Dutch people with different frequencies of flying, meaning there is not enough evidence to suggest that the frequency of flying moderates the relationship between airline attributes and preferences. Yet, it was expected that more frequent flyers would be more concerned about the environmental friendliness and safety of airlines, would devote more money (and thus airfare) to legroom, hygiene and service, and would especially prefer the existence of travel-influencer marketing. Therefore, the results of this paper do not reflect expectations, resulting in a rejection of hypothesis 1.10.

Finally, likelihood ratio tests reveal that the effect of airfare, in-flight service, flight comfort, cabin cleanliness and travel-influencer marketing on airline preferences is not significantly different for different travelling purposes. There is thus insufficient evidence to suggest that travelling purpose moderates the relationship between these attributes and Dutch consumer preferences for airlines. However, previous studies have shown that leisure travellers are generally more price sensitive. Also, the willingness to pay for a higher class and consequently service and comfort is higher for business travellers (Brons et al., 2002; Proussaloglou & Koppelman, 1999), which may be true for hygiene as well. Besides, it was expected that especially leisure travellers would favour travel-influencer marketing. These studies therefore

led to the expectation that travelling purpose would moderate the relationship between these attributes and airline preferences. Yet, the results of this paper do not reflect these expectations, resulting in a rejection of hypothesis 1.11. Many moderators have shown contradictory results, which can be explained by several limitations as discussed in Section 6.5.

This thorough discussion leads to the conclusion that, despite limitations and the insignificance of travel-influencer marketing as an attribute, a travel-influencer video content strategy would slightly impact Dutch consumer preferences and brand attitudes towards KLM in a favourable way. KLM would be able to capture a higher Dutch market share compared to most of its competitors and its current position, which could boost sales and could strengthen its position in the market. This is not only important in the light of flight shaming and the rising popularity of different modes of transportation, but also in the light of changing dynamics in competition and the Covid-19 pandemic that currently terrorizes the planet. KLM, with many other airlines and businesses, enters a daunting period of uncertainty, and the use of a travel-influencer marketing strategy could potentially be effective in helping them fight the crisis they are facing.

6.2 Study one: implications

Many studies have been conducted on both influencer marketing and consumer behaviour towards airline characteristics. This paper has delivered a new contribution to this existing literature by investigating the effectiveness of travel-influencer marketing for airlines. Through a choice-based conjoint analysis, the impact of a travel-influencer video content strategy on Dutch consumer preferences towards Royal Dutch Airlines KLM has been revealed, in addition to information on consumer behaviour towards other airline attributes. As seen before, the results of this paper are sometimes in accordance with existing literature but prove to be in contradiction with previous studies as well. As this paper is not free of limitations, additional research must be done to further support and verify these contradictions, which will be discussed in Section 6.5.

In addition, this paper provides for several practical implications. It has become evident that despite limitations, a travel-influencer video content strategy could slightly impact Dutch consumer preferences towards KLM favourably. This may not only lead to an increase in sales but could consequently result in a higher Dutch market share and a stronger position in the market. This is vital given the rising threat of flight shaming, constantly evolving competition,

and the Covid-19 pandemic. As the importance exists for Dutch airlines to keep sales at least stable, the use of a travel-influencer marketing strategy could be an effective method to retain existing passengers and to acquire new customers. Such influencer marketing may therefore be the right course of action for airline (KLM) managers that operate in the Dutch aviation industry.

Moreover, this paper has shown that Dutch consumers find hygiene most important in a flight experience, followed by in-flight service, airfare, eco friendliness, flight comfort, travel-influencer marketing, and flight/luggage safety. The importance of hygiene may follow from the current Covid-19 events and will potentially be an ongoing essential element for airlines. Even though none of these factors may be dismissed, it is therefore beneficial that marketing managers emphasize, for example, the airline's outstanding hygiene, service and (low-cost) airfare. Of course, these marketing statements must also resemble reality. In addition, if an airline experience lacks superiority in, for example, hygiene or service, the results of this paper suggest that an improvement in these important factors is a correct strategy to be more competitive. Also, results show that the best airline for Dutch female consumers is equal to a reasonably eco-friendly, low-cost carrier with an excellent in-flight service, average comfort, good hygiene, a travel-influencer video content strategy and an average safety. This is the second-best airline for men, for which the best airline only differs in terms of a high comfort. Their preferences are thus very similar. When targeting Dutch consumers, this therefore gives airline (KLM) managers information on the ideal airline, which may help in developing the right marketing and overall company strategy.

Furthermore, results reveal that women mostly favour Emirates, followed by KLM with travel-influencer marketing, EasyJet, Lufthansa, KLM without travel-influencer marketing, and Ryanair. Men also mostly favour Emirates, followed by EasyJet, KLM with travel-influencer marketing, Lufthansa, KLM without travel-influencer marketing and Ryanair. This does not only show that the implementation of travel-influencer marketing would be effective in terms of competition and market share, but also reveals that especially Emirates and EasyJet are big competitors in the Dutch aviation market. It is thus important for KLM to keep a close eye on these giants.

Finally, this paper has shown that annual net income moderates the relationship between airfare and airline preferences, as well as in-flight service and airline preferences. Besides,

environmental consciousness of consumers appears to moderate the relationship between the eco friendliness of an airline and airline preferences, as well as the relationship between in-flight service and airline preferences. When targeting potential customers based on airfare, in-flight service or eco friendliness, it is therefore important to take the effects of these demographics and psychographics into account. By targeting the right customers, marketing strategies will prove to be more effective.

This paper therefore entails numerous practical implications not only for Dutch airline KLM, but also other airlines operating in the Dutch aviation industry. However, the above must be interpreted with caution, as this paper is subject to limitations. For example, the attributes flight comfort, flight/luggage safety and travel-influencer marketing lack significance, and this research does not present a full picture of the entire aviation industry and its competitors.

6.3 Study two: discussion and conclusion

The research question imposed in this paper is *what is the impact of a travel-influencer video content strategy on Dutch consumer preferences/brand attitudes towards KLM and which video attributes drive the success of travel-influencer video content?* The second study, which focuses on the second part of the research question, dives deeper into travel-influencer videos and establishes which video attributes drive the success of travel-influencer marketing. Even though sufficient evidence lacks to suggest that travel-influencer marketing significantly affects Dutch consumer preferences for airlines, information on this is still relevant.

The first sub question concerns which video attributes significantly affect Dutch consumer preferences for travel-influencer videos. Likelihood ratio tests reveal that in choice behaviour regarding travel-influencer videos, Dutch consumers are strongly, significantly influenced by video quality and the colours used. Moreover, the accuracy of video content has a weak, significant effect on travel-influencer video preferences. Yet, sufficient evidence lacks to suggest that the sound of the video, the presence of a sponsorship compensation justification and the video length significantly affect video preferences. These results are rather surprising, as based on previous literature and the pre-test it was expected that all video attributes would have a significant impact. Consequently, hypothesis 2.1 is only partially supported. These counter-intuitive findings can possibly be explained by the fact that respondents are not presented actual videos, and therefore cannot articulate their preferences accurately. In other

words, as people may not be fully aware of their preferences, the lack of actual videos may lead them to report answers that not exactly entail what they prefer. Also, the relatively small sample size may be problematic, in addition to other limitations that are discussed in Section 6.5. Further investigation is needed to support these contradictions.

The second sub question asks which attribute is most important to Dutch consumers when watching travel-influencer videos. Effect marginals reveal that colours are most important, followed by video quality, the sound, accuracy of video content, video length and whether a sponsorship compensation justification is present. The importance of colour and video quality follows from the fact that consumers highly detest black-and-white videos and a low video quality. Also, given the relatively high ranges of marginal utility for the first four factors, especially these attributes seem to drive the success of travel-influencer video content. The video length and a sponsorship compensation justification are less important to Dutch consumers, which is in accordance with pre-test results and earlier analyses on attribute significance. Surprisingly however, sound seems to be important even though significance lacked in earlier analyses. Besides, it was expected based on previous research and the pre-test that video length would be most important, followed by the accuracy of video content, video quality, the sound, colours and whether a sponsorship compensation justification is present. Consequently, results are not in line with expectations, leading to hypothesis 2.2 being rejected.

The third sub question concerns what the best travel-influencer video is for Dutch consumers, for which effect marginals and utility profilers were used. Analyses show that Dutch consumers prefer music over a monologue in travel-influencer videos. This is in line with expectations, as previous literature shows that most commercials heavily rely on music due its effectiveness for brand recognition, improving brand identity and message processing (Craton & Lantos, 2011; Raja et al., 2018; Macinnis & Whan Park, 1991). Finally, these results reimburse the finding that advertisement music can enhance commercial recognition and recall and can serve as a catalyst (Craton & Lantos, 2011; Raja et al., 2018). As regards the quality of the video, Dutch consumers prefer an enhanced video quality, followed by a standard and low video quality. This is as expected, as previous research by Bracken (2006) indicates that media users find local news more credible when watching it in enhanced video quality. Moreover, a better video quality may increase message impact, which is thus in line with the result that Dutch consumers favour an enhanced video quality.

Furthermore, effect marginals reveal that Dutch consumers mostly prefer vibrant colours, followed by normal colours and black-and-white colours. This is consistent with expectations, as previous research indicates that colours are important in consumer decisions. They contribute to brand recognition and image, and influence consumer moods and evaluations. Besides, high saturation colours (vibrant colours) stimulate excitement and as KLM's mission is to move passengers' worlds and thus to create excitement, it was expected that passengers would favour vibrant colours (Labrecque et al., 2013; Royal Dutch Airlines KLM, 2019a). Also, Dutch consumers mostly favour a 45-second video, followed by a 60-second video and a 30-second video. Yet, previous research has shown that online advertisement length is positively related to recall and is negatively associated with annoyance. Therefore, the longer the video, the less intrusive it is and the better the brand attitude and purchase likelihood. These findings can be explained by the fact that longer advertisements better present information and emotions (Goodrich et al., 2015). As it was therefore expected that respondents would prefer 60-second videos, these results are counter intuitive.

Besides, Dutch consumers favour the presence of a sponsorship compensation justification over its absence. This is in line with expectations, as previous research states that many social media users do not enjoy the subtility of sponsored posts, which could ultimately lead to a negative impact on brand attitudes (Uzunoğlu & Kip, 2014). A sponsorship compensation justification rather than simply disclosing sponsorships proves to be effective in this matter (Stubb & Nyström, 2019), which is reimbursed by results. Finally, effect marginals show that Dutch consumers prefer a good accuracy of video content over an average accuracy. As the pre-test results show that consumers value a good impression of the destination and a video that is true to reality, this was also expected.

Therefore, the best travel-influencer video for Dutch consumers is equal to a 45-second video with music, an enhanced video quality, vibrant colours, a sponsorship compensation justification, and a good accuracy of video content. As the preferred length of the video is different from expectations, hypothesis 2.3 is partially supported. This contradiction with existing literature could be explained by the limitations of this paper, such as a relatively small sample size. It must also be stressed that not all attributes are significant, meaning results must be interpreted with caution.

In addition to the previous conclusions, utility profilers reveal that the best video differs for men and women in terms of attribute levels. For women, the best travel-influencer video is equal to the earlier discussed most preferred video. This is again not surprising, as most respondents are female. For men, the best video is equal to that of women but with a 60-second length. The second-best video for men is, however, equal to that of women and comes close to men's number one video in terms of utility, which indicates that preferences of men and women are similar.

The fourth sub question asks which demographic and psychographic factors moderate the relationship between video attributes and Dutch consumer preferences for travel-influencer videos. To investigate this, likelihood ratio tests were used. Analyses show that the effect of a sponsorship compensation justification on video preferences is not significantly different for Dutch men and women, meaning there is insufficient evidence to suggest that gender moderates this relationship. However, trust and credibility are important for the effectiveness of influencer marketing. As previous research has shown that a sponsorship compensation justification enhances this and given that women are more likely to be influenced by this type of marketing, it was expected that particularly females would prefer the existence of a sponsorship compensation justification in travel-influencer video content (Stubb & Nyström, 2019; Wilcox & Stephen, 2013). This expectation is not mirrored in results, leading to a rejection of hypothesis 2.4. This can be explained by several limitations discussed in Section 6.5, such as the relatively small sample size. Surprisingly, tests reveal that the effect of video quality on video preferences is weakly, significantly different for men and women. Gender therefore moderates this relationship.

Furthermore, the effect of colour and video length on video preferences is strongly, significantly different, and significantly different, respectively, for Dutch people aged below 20, people aged 20-39 and aged 40 or older. Age therefore moderates these relationships. Nonetheless, the effect of the other video attributes on video preferences is not significantly different for the different age groups, meaning that there is not enough evidence to suggest that age moderates the relationship between these attributes and video preferences. Previous research reveals that especially millennials have a high exposure to social media platforms and highly rely on technology for entertainment, social interaction, and emotional regulation (Bolton et al., 2013; SocialConcept, 2019). Moreover, people aged 18-34 are more likely to value the opinion of others on social media, and the buying behaviour of females aged 18-30 is significantly

influenced by Instagram celebrities (Bolton et al., 2013; Djafarova & Rushworth, 2017). Based on the presence of millennials on social media and their high exposure to content, it was expected that age would significantly affect several aspects of video preferences. As results resemble these expectations and show that age significantly affects video preferences in terms of colour and video length, hypothesis 2.5 is supported.

In addition, tests show that the effect of colour and video length on video preferences is strongly, significantly different, and significantly different, respectively, for Dutch people with annual net incomes of € 0-20.000, € 20.001-40.000, € 40.001-60.000, and above € 60.000. Annual net income therefore moderates these relationships. Yet, the effect of the other video attributes on video preferences is not significantly different for different annual net incomes, meaning there is not enough evidence to suggest that annual net income moderates the relationship between these attributes and video preferences. As it was expected that annual net income would moderate the relationship for some video attributes, results reimburse this expectation, thus supporting hypothesis 2.6.

Finally, the effect of video quality and colour on video preferences is weakly, significantly different, and strongly, significantly different, respectively, for people with different gradations of social media activity. Social media activity therefore moderates these relationships. However, the effect of other video attributes on video preferences is not significantly different for people with different intensities of social media activity, meaning there is not enough evidence to suggest that social media activity moderates the relationship between these attributes and video preferences. Previous research states that consumers increasingly use social media to justify purchasing habits (Erkan & Evans, 2016), and social media can be seen as the new influence enabler that allows the wider spread and reach of influencer content (Brown & Hayes, 2008). Because active social media users are more likely to be exposed to travel-influencer video content, it was expected that social media activity would moderate the relationship between some video attributes and video preferences. This is reimbursed by results, therefore supporting hypothesis 2.7.

To conclude, despite limitations and the insignificance of some attributes, colour, video quality, sound and the accuracy of video content mainly drive the success of travel-influencer video content. Given the relatively high marginal utilities of colour and video quality, especially these factors are essential. This contrasts with the video length and a sponsorship compensation

justification, which seem to be less important to Dutch consumers. By focusing on the four essential factors, influencers can improve their content to be more effective in their marketing. Moreover, the best travel-influencer video for Dutch consumers is equal to a 45-second video (for females, 60-second video for men) with music, an enhanced video quality, vibrant colours, a sponsorship compensation justification and a good accuracy of video content. Influencers can create an ideal travel-influencer video for both men and women by using this information, which ultimately helps to develop a winning content strategy. This not only gives influencers crucial information on how to best influence followers and potential customers, but it also helps airline managers and managers of companies alike to effectively target prospects.

6.4 Study two: implications

Several papers have been written on influencer marketing and factors that drive the success of influencer marketing in online brand engagement. This second study has, however, delivered a new contribution to existing literature by doing specific research on which attributes of travel-influencer video content drive its success, next to information on video attributes through a choice-based conjoint analysis. Again, the results of study two are sometimes in accordance with existing literature but show deviations as well. To verify these contradictions, additional research is necessary.

Furthermore, the second study provides for several practical implications. Despite limitations, this paper has shown that Dutch consumers find colours most important, followed by video quality, the sound, accuracy of video content, video length and whether a sponsorship compensation justification is present. Given the relatively high ranges of marginal utility for the first four attributes and especially colour and video quality, these factors mainly drive the success of travel-influencer video content. Moreover, analyses show that the best video for Dutch females is equal to a 45-second video with music, an enhanced video quality, vibrant colours, a sponsorship compensation justification, and a good accuracy of video content. This is the second-best video for men, for which the best video only differs from that of women in terms of a 60-second length. Their preferences are therefore very similar. By especially focussing on colours, video quality, sound, and the accuracy of video content, and by closely following the aspects of ideal travel-influencer videos for Dutch consumers, influencers can more accurately produce content to better reach their audience. In addition, this is beneficial for (airline) managers who work closely together with influencers to produce content.

Besides, this paper has shown that gender moderates the relationship between video quality and video preferences. Also, age and annual net income moderate the relationship between colour and video preferences, as well as the relationship between video length and video preferences. Finally, social media activity moderates the relationship between video quality and video preferences, and colour and video preferences. When targeting existing customers and prospects based on video quality, colour, and video length, it is therefore vital to take the effects of these demographics and psychographics into account. This is not only important for influencers who wish to provide the right content to the correct audience, but also for airline managers and managers of companies alike to provide for effective marketing strategies.

Consequently, this second study has various practical implications for both influencers and (airline) marketing managers. However, these implications must be interpreted with caution as this paper is not without limitations, sufficient evidence lacks to suggest that travel-influencer marketing significantly affects Dutch consumer preferences for airlines and the attributes sound, a sponsorship compensation justification and video length do not show significance.

6.5 Limitations and suggestions for future research

As emphasized, this paper is subject to limitations concerning external and internal validity. As regards external validity, which relates to the generalizability of findings, the number and descriptive statistics of respondents is worrying (Schram, 2006). 278 respondents were used, and 52.88% are aged 20-39 years. Most respondents are thus likely to be students and millennials. Consequently, the dominating annual net income is € 0-20.000 (53.24%), 60.79% are active on social media several times a day and 67.63% consider themselves as reasonably environmentally conscious. As this does not represent a normal distribution of Dutch demographics and as 278 respondents is relatively little for the Dutch population as a target group, this causes problems for the representativeness of the sample. A suggestion for future research is thus to investigate on a larger scale and with a more accurate distribution of factors such as age and income. Besides, the Dutch aviation and influencer industry are the sole focus of this research. Yet, these industries have a much more global scope. Therefore, to effectively research the effects, global potential, and factors of travel-influencer content for KLM and airlines alike, research must be done on a more international scale.

Internal validity concerns the extent to which a paper establishes a trustworthy cause-and-effect relationship (Schram, 2006). The research design of this paper is subject to several limitations in this regard. Although the survey questions within the two studies were randomized, the order of the two studies themselves were not, meaning learning effects could be problematic. Respondents can get familiar with the context after the first study and give untruthful answers or might find the second study too burdensome. Randomizing studies is therefore recommended in future papers. Moreover, no risk or payment was involved, and awareness of participation and a lack of pressure to be honest could mean that respondents state different preferences than their actual behaviour would reveal. For that reason, additional observational data would be beneficial. Especially for study two, the fact that respondents are not presented actual videos could also be problematic. Respondents may not be fully aware of their preferences, and the lack of actual videos may lead them to report answers that not accurately entail what they prefer. The incorporation of actual travel-influencer videos in future studies could thus help respondents to better articulate preferences. Besides, caution is necessary as regards the research design. Although the conjoint analyses of both studies contain positive insights, it cannot be known for sure that people will also find travel-influencer marketing on social media. Additional research is necessary to understand the reach and target audience of travel-influencer marketing on social media and the consequences of this for marketing strategies of, for example, KLM.

Furthermore, several analysis-related limitations are present as regards internal validity. Five airlines were used to provide for a market simulation of the Dutch aviation industry. Yet, this industry comprises of more than just these five airlines. Therefore, to provide for a more accurate representation of the industry and the effects of travel-influencer marketing for KLM, more airlines should be included in the competitive analysis. In addition, other factors of airlines and travel-influencer videos could be included to provide for a more thorough analysis. Also, as regards moderators, a major limitation is the inability to measure anything but significance. The limited software license prevents analyses of directions of effects, which would be useful information for future studies. Finally, several airline attributes, video attributes and moderators show insignificance in contradiction with existing literature. To verify these contradictions, future research is needed on a bigger scale.

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Appendix A – Tables and figures of the Theoretical framework

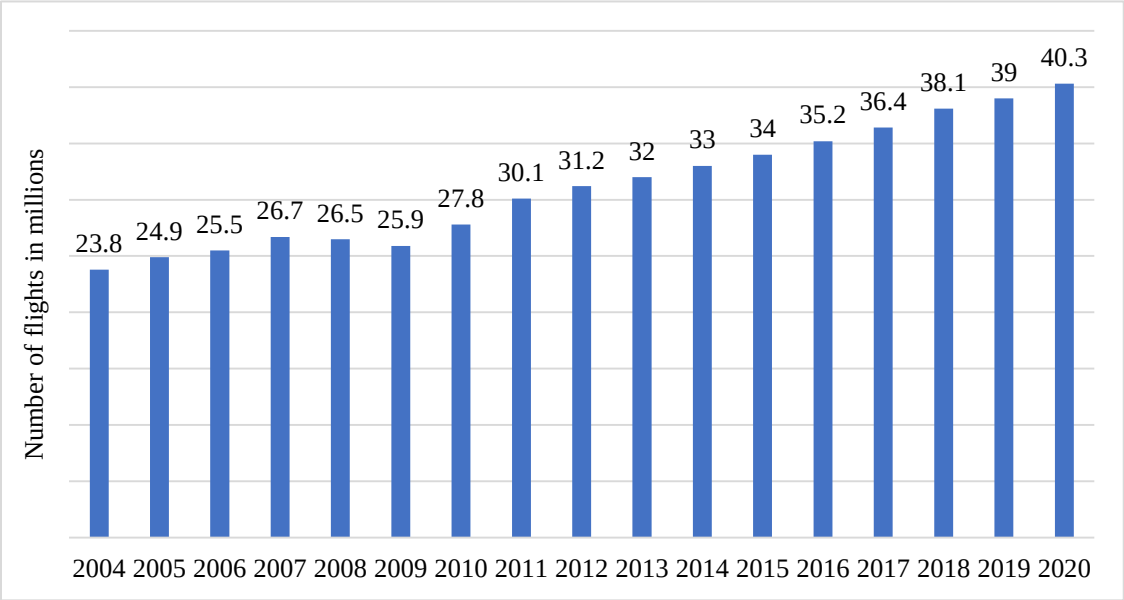

Figure 1. Number of worldwide flights in millions with 2020 as expected number of flights.

Adapted source: Mazareanu, 2019a.

Table 1

The largest airlines in 2018

Airlines	**Sales in billion U.S. dollars**
Delta Air Lines (U.S.)	44.9
American Airlines Group (U.S.)	44.5
Deutsche Lufthansa (Germany)	42.3
United Continental Holdings	41.9
Air France-KLM (France)	31.3
International Airlines (UK)	28.8
Southwest Airlines (U.S.)	22
China Southern Airlines (China)	21.7
All Nippon Airways (Japan)	18.6
China Eastern Airlines (China)	17.3

Note. The ranking is based on worldwide sales in 2018.

Adapted source: Mazareanu, 2019c.

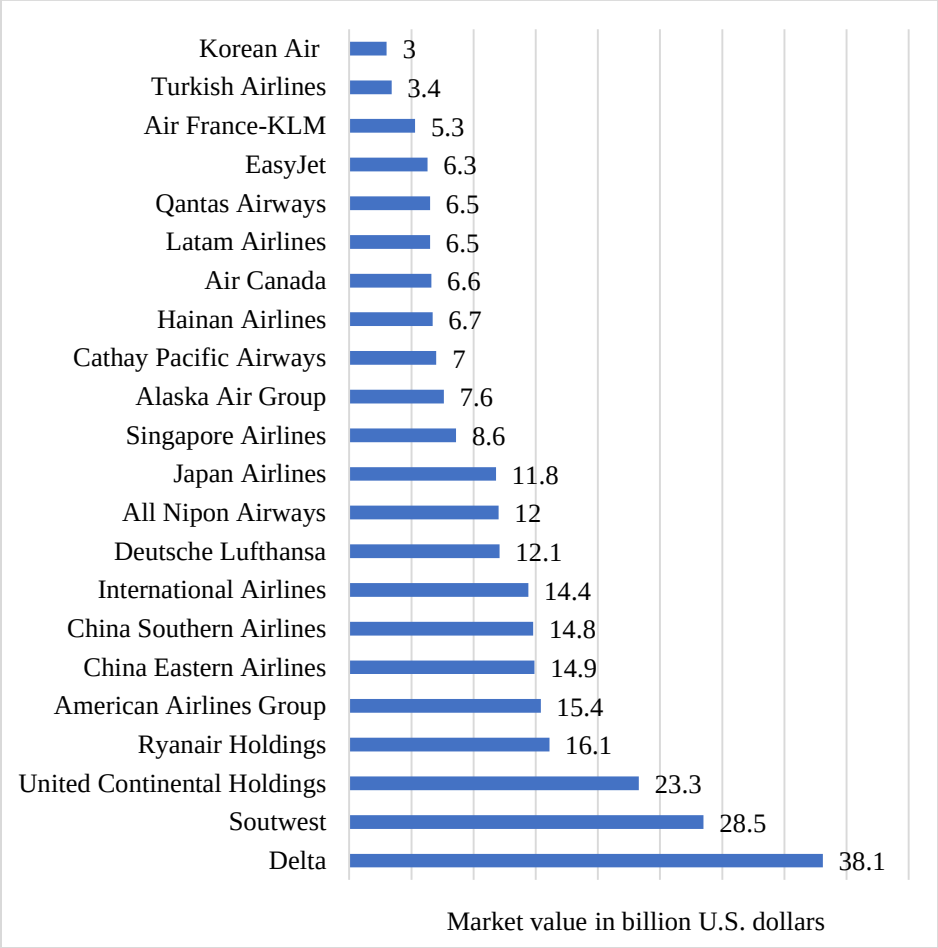

Figure 2. 2019 market value of airlines in billion U.S. dollars.

Adapted source: Mazareanu, 2019d.

Figure 3. An example of the colour attribute; black-and-white, normal colours, and vibrant colours.

Adapted source: Goodman, 2019.

Appendix B – Qualtrics pre-test and results

Thank you for participating in this survey! By answering this questionnaire, you are helping me to write my master thesis in Marketing at the Erasmus University Rotterdam. The objective of this research is to investigate choice behaviour regarding airlines, and you are asked to answer two short questions.

1. Imagine that you are looking for summer 2020 flights from Amsterdam to your holiday destination in Hawaii. When considering several airlines, which features of your flight experience do you find important? Name at least 4.

   […]

   […]

   […]

   […]

   …

2. Imagine that you are looking for summer 2020 flights from Amsterdam to your holiday destination in Hawaii. On social media/YouTube, you come across an influencer video that promotes Hawaii in combination with an airline. When looking at this content, which features of the video do you find important? Name at least 4.

   […]

   […]

   […]

   […]

   …

Table 1

Pre-test results of question one on airline attributes

Attribute	**Responses out of 239**	**% of responses**
In-flight service	50	20.92
Airfare	45	18.83
Flight comfort	37	15.48
Cabin cleanliness	13	5.44
Direct/indirect	13	5.44
Flight duration	12	5.02
Departure/arrival times	11	4.60
Safety (of flight and luggage)	9	3.77
Airline reputation	6	2.51
Reliability	5	2.09
Location of airport	4	1.67
Baggage allowance	4	1.67
Eco friendliness	4	1.67
Type of aircraft	4	1.67
Reviews of passengers	3	1.26
Duration of layover	3	1.26
Transfer time	2	.84
Number of crashes in the past	2	.84
Child friendliness	2	.84
Marketing (can be travel-influencer)	2	.84
Quality of aircraft	2	.84
Cancellation option	1	.42
Wi-Fi availability	1	.42
Seat choice	1	.42
Skytrax star rating	1	.42
Online check-in	1	.42
Ease of booking	1	.42

Note. 51 respondents answered the pre-test, of which one was removed due to inaccuracy of answers. Participants were asked to provide a minimum of 4 answers, hence 239 results. Percentages do not add up to 100% due to rounding to the second decimal place.

Table 2

Pre-test results of question two on video attributes

Attribute	Responses out of 163	% of responses
Video attributes		
Length of video	35	21.47
Video quality	31	19.02
Sound	17	10.43
Good impression and information of destination	17	10.43
Video is true to reality	15	9.20
Colour	13	7.98
Sponsorship compensation justification	4	2.45
Authenticity of video	2	1.23
Recency of the video	1	.61
Popularity of the video	1	.61
Vibe of the video	1	.61
Airline attributes		
Reputation of airline	3	1.84
Link to airline website	1	.61
Images of aircraft	1	.61
Influencer attributes		
Trustworthiness	9	5.52
Popularity/reputation	4	2.45
Appeal of influencer	4	2.45
Honesty of influencer	3	1.84
Number of followers	1	.61
Not too obvious that the video is sponsored	1	.61

Note. 51 respondents answered the pre-test, of which one was removed due to inaccuracy of answers. Participants were asked to provide a minimum of 4 answers. However, some participants provided partially inaccurate answers, hence 163 results. Percentages do not add up to 100% due to rounding to the second decimal place.

Appendix C – Tables of Data and methodology

Table 1

Prior mean in JMP for airline attribute levels of study one

Attribute levels	Prior mean
Airfare	
Premium carrier	*Reference level*
Low-cost carrier	-1.00
In-flight service	
Excellent in-flight service	*Reference level*
Good in-flight service	- .33
Average in-flight service	- .33
Below average in-flight service	- .33
Flight comfort	
High comfort	*Reference level*
Average comfort	- .50
Low comfort	- .50
Cabin cleanliness	
Good hygiene	*Reference level*
Average hygiene	- .50
Dirty	- .50
Eco friendliness	
Very eco-friendly	*Reference level*
Reasonably eco-friendly	- .50
Non-eco-friendly	- .50
Travel-influencer marketing	
Present	*Reference level*
Not present	-1.00
Flight/luggage safety	
Excellent safety	*Reference level*
Average safety	-1.00

Table 2

Prior mean in JMP for video attribute levels of study two

Attribute levels	Prior mean
Sound	
Music	*Reference level*
Monologue	-1.00
Video quality	
Enhanced video quality	*Reference level*
Standard video quality	- .50
Low video quality	- .50
Colour	
Vibrant colours	*Reference level*
Normal colours	- .50
Black-and-white	- .50
Length of video	
60 seconds	*Reference level*
45 seconds	- .50
30 seconds	- .50
Sponsorship compensation justification	
Present	*Reference level*
Not present	-1.00
Accuracy of video content	
Good accuracy	*Reference level*
Average accuracy	-1.00

Table 3

Choice sets of study one

Choice set	Airfare	In-flight service	Flight comfort	Cabin cleanliness	Eco friendliness	Travel-influencer marketing	Flight/ luggage safety
1	Low-cost carrier	Good service	Low comfort	Avg. hygiene	Reasonably eco-friendly	Not present	Avg. safety
1	Low-cost carrier	Good service	High comfort	Dirty	Reasonably eco-friendly	Not present	Avg. safety
2	Premium carrier	Good service	High comfort	Avg. hygiene	Reasonably eco-friendly	Not present	Avg. safety
2	Low-cost carrier	Below avg. service	High comfort	Dirty	Non-eco-friendly	Present	Avg. safety
3	Premium carrier	Avg. service	Low comfort	Good hygiene	Very eco-friendly	Not present	Excellent safety
3	Premium carrier	Below avg. service	Avg. comfort	Avg. hygiene	Very eco-friendly	Present	Excellent safety
4	Premium carrier	Below avg. service	High comfort	Good hygiene	Reasonably eco-friendly	Not present	Excellent safety
4	Premium carrier	Good service	High comfort	Good hygiene	Non-eco-friendly	Not present	Excellent safety
5	Premium carrier	Below avg. service	Low comfort	Good hygiene	Very eco-friendly	Present	Avg. safety
5	Premium carrier	Avg. service	Avg. comfort	Dirty	Very eco-friendly	Present	Avg. safety
6	Premium carrier	Excellent service	Avg. comfort	Avg. hygiene	Non-eco-friendly	Present	Excellent safety
6	Premium carrier	Good service	Low comfort	Dirty	Non-eco-friendly	Present	Excellent safety
7	Premium carrier	Avg. service	Avg. comfort	Dirty	Non-eco-friendly	Not present	Avg. safety
7	Low-cost carrier	Avg. service	High comfort	Avg. hygiene	Non-eco-friendly	Not present	Avg. safety

8	Premium carrier	Below avg. service	Avg. comfort	Good hygiene	Non-eco-friendly	Not present	Avg. safety
8	Low-cost carrier	Good service	Avg. comfort	Good hygiene	Reasonably eco-friendly	Not present	Excellent safety
9	Low-cost carrier	Excellent service	High comfort	Avg. hygiene	Very eco-friendly	Present	Avg. safety
9	Low-cost carrier	Excellent service	High comfort	Avg. hygiene	Non-eco-friendly	Not present	Excellent safety
10	Low-cost carrier	Avg. service	Avg. comfort	Good hygiene	Reasonably eco-friendly	Present	Excellent safety
10	Low-cost carrier	Below avg. service	Avg. comfort	Good hygiene	Very eco-friendly	Not present	Excellent safety
11	Low-cost carrier	Avg. service	Low comfort	Avg. hygiene	Reasonably eco-friendly	Present	Excellent safety
11	Low-cost carrier	Good service	Avg. comfort	Good hygiene	Reasonably eco-friendly	Present	Avg. safety
12	Low-cost carrier	Avg. service	Avg. comfort	Good hygiene	Very eco-friendly	Not present	Avg. safety
12	Low-cost carrier	Excellent service	Low comfort	Dirty	Very eco-friendly	Not present	Avg. safety

Note. Avg. stands for average.

Table 4

Choice sets of study two

Choice set	**Sound**	**Video quality**	**Colour**	**Length of video**	**Sponsorship compensation justification**	**Accuracy of video content**
1	Music	Standard video quality	Normal colours	30 seconds	Present	Good accuracy
1	Monologue	Standard video quality	Vibrant colours	45 seconds	Present	Good accuracy
2	Monologue	Standard video quality	Black-and-white	30 seconds	Not present	Good accuracy
2	Monologue	Low video quality	Normal colours	30 seconds	Present	Average accuracy

3	Monologue	Standard video quality	Black-and-white	60 seconds	Not present	Average accuracy
3	Monologue	Low video quality	Vibrant colours	30 seconds	Not present	Good accuracy
4	Monologue	Enhanced video quality	Black-and-white	30 seconds	Not present	Good accuracy
4	Monologue	Standard video quality	Normal colours	45 seconds	Not present	Good accuracy
5	Monologue	Standard video quality	Vibrant colours	30 seconds	Not present	Average accuracy
5	Monologue	Low video quality	Black-and-white	45 seconds	Not present	Good accuracy
6	Monologue	Standard video quality	Normal colours	30 seconds	Present	Good accuracy
6	Music	Low video quality	Black-and-white	45 seconds	Present	Average accuracy
7	Music	Low video quality	Vibrant colours	30 seconds	Not present	Average accuracy
7	Music	Standard video quality	Vibrant colours	45 seconds	Present	Average accuracy
8	Monologue	Low video quality	Black-and-white	60 seconds	Present	Good accuracy
8	Music	Enhanced video quality	Normal colours	45 seconds	Not present	Good accuracy
9	Music	Standard video quality	Black-and-white	30 seconds	Present	Average accuracy
9	Music	Enhanced video quality	Normal colours	60 seconds	Not present	Average accuracy
10	Music	Enhanced video quality	Black-and-white	45 seconds	Present	Good accuracy
10	Music	Standard video quality	Vibrant colours	60 seconds	Present	Good accuracy

Table 5

Descriptive statistics of the research sample

Variable	Options	Amount	% of respondents
Gender	Male	127	45.68
	Female	151	54.32
	Transgender	0	.00
	Feels uncomfortable answering	0	.00
Age	Aged below 20	46	16.55
	20-39 years	147	52.88
	40 or older	85	30.58
Annual net income	€ 0-20.000	148	53.24
	€ 20.001-40.000	65	23.38
	€ 40.001-60.000	51	18.35
	Above € 60.000	14	5.04
Environmental consciousness	Not environmentally conscious	57	20.50
	Reasonably environmentally conscious	188	67.63
	Very environmentally conscious	33	11.87
Social media activity	Never	6	2.16
	Less than once a month	2	.72
	1-3 times a month	6	2.16
	Once a week	5	1.80
	Several times a week	14	5.04
	Every day	76	27.34
	Several times a day	169	60.79
Frequency of flying	Never	3	1.08
	Less than once a year	47	16.91
	Once a year	99	35.61
	2-3 times a year	96	34.53
	4-5 times a year	16	5.76
	More than 5 times a year	17	6.12
Travelling purpose	Mainly leisure purposes	261	94.91
	Mainly business purposes	14	5.09

Note. Only 275 respondents stated whether they travel mainly for leisure purposes or for business purposes, as 3 respondents never flew at all. Not all percentages add up to 100% due to rounding to the second decimal place.

Appendix D – Questionnaire design

If you prefer to answer this survey in Dutch, you can switch the language in the top right corner (U kunt de taal wijzigen bovenin het scherm).

Thank you for participating in this experiment on choice behaviour regarding airlines. Your input helps me to write my master thesis in Marketing as well as graduate from the Erasmus School of Economics at the Erasmus University in Rotterdam.

Your participation should not take longer than 10 minutes. There is no right or wrong, and every question must be answered to complete the survey. Your answers remain confidential and are not used for purposes other than this research.

In case you have any questions, feel free to contact me!
Michelle van de Kamp, master student Marketing
michellevandekamp@live.nl

Imagine that you are looking for summer 2021 flights from Amsterdam to your holiday destination in Hawaii. Also, try to imagine that fortunately, Covid-19 is over. In the following 12 questions, you will compare 2 airlines and choose the one of your preference. Each airline provides a different combination of features. These features are as follows:

1. Airfare: the price paid by passengers. Airlines are divided in low-cost carriers and premium carriers, for which the latter are more expensive.
2. In-flight service: the menu and quality of meals, entertainment such as movies and music, and professionalism and friendliness of staff.
3. Flight comfort: legroom, blankets, headrests, and arm/shoulder room.
4. Cabin cleanliness: the level of cabin hygiene.
5. Eco friendliness: the extent to which an airline has sustainable activities.
6. Flight/luggage safety: the level of airline safety.
7. Travel-influencer marketing: whether the airline uses travel-influencer marketing. An influencer is a person who influences potential buyers of a product or service by promoting or recommending the items on social media.

The 7th feature spoke of travel-influencer marketing. In short, this means that the airline pays influencers to promote their airline and holiday destinations. The following video serves as an illustration. Please watch this video, as it is necessary to answer further questions. *Viewing on a mobile phone? Rotate your screen!

https://www.youtube.com/watch?v=SszwAmnz87I&t=48s (0:50-2:12 were shown).

In addition to this footage, the video would start or end with the visualization of an airline to promote the company in combination with its destination. All rights for the video are reserved to Marie Fe and Jake Snow.

In question 1-12 respondents are presented with the 12 choice sets of Table 3 Appendix C. An example is given below.

Which airline would you choose?

	Airline A	Airline B
Airfare	Premium carrier	Premium carrier
In-flight service	Average service	Below average service
Flight comfort	Low comfort	Average comfort
Cabin cleanliness	Good hygiene	Average hygiene
Eco friendliness	Very eco-friendly	Very eco-friendly
Travel-influencer marketing	Not present	Present
Flight/luggage safety	Excellent safety	Excellent safety

I would choose... (Please choose airline A/B as much as possible instead of none)
[Airline A]
[Airline B]
[None]

In the following 10 questions, you will compare two travel-influencer videos similar to the video you have watched at the beginning of this experiment. Therefore, imagine that you are

looking for summer 2021 flights from Amsterdam to your holiday destination in Hawaii and come across such a video on the Internet. Fortunately, Covid-19 is also over. Each video provides a different combination of features. These features are as follows:

1. Sound: whether the video has music or a monologue.
2. Video quality: this reflects the image quality.
3. Colour: whether the video is black-and-white, has normal colours or vibrant colours.
4. Length of video: this reflects how long the video is.
5. Sponsorship compensation justification: whether the video includes elaborate reasoning on why the collaboration between the influencer and the airline is justified. This is therefore more than just the sign #ad in, for example, the caption.
6. Accuracy of video content: whether the video gives a good impression of the holiday destination and therefore whether it is true to reality.

In question 13-22 respondents are presented with the 10 choice sets of Table 4 Appendix C. An example is given below.

Which video would you choose?

	Video A	Video B
Sound	Monologue	Music
Video quality	Low quality	Enhanced quality
Colour	Black-and-white	Normal colours
Length of video	60 seconds	45 seconds
Sponsorship justification	Present	Not present
Accuracy of video content	Good accuracy	Good accuracy

I would choose... (Please choose video A/B as much as possible instead of none)

[Video A]

[Video B]

[None]

23. What is your gender?

[Male]

[Female]

[Transgender]

[I do not feel comfortable answering this question]

24. What is your age?

[Aged below 20]

[20-39 years]

[40 or older]

25. What is your annual net income?

[€ 0-20.000]

[€ 20.001-40.000]

[€ 40.001-60.000]

[Above € 60.000]

26. How environmentally conscious do you consider yourself?

[Not environmentally conscious]

[Reasonably environmentally conscious]

[Very environmentally conscious]

27. How often do you use social media? (For example, Facebook, Instagram, YouTube, Snapchat, etc.)

[Never]

[Less than once a month]

[1-3 times a month]

[Once a week]

[Several times a week]

[Every day]

[Several times a day]

28. How often do you fly on average?

[Never]

[Less than once a year]

[Once a year]

[2-3 times a year]

[4-5 times a year]

[More than 5 times a year]

29. What is your main travel purpose?

[Mainly leisure purposes, such as holidays]

[Mainly business purposes]

Appendix E – Tables of Results study one

Table 1

Likelihood ratio test results for airline attributes of study one

Attribute	**L-R χ^2**	**DF**	***p***
Airfare	2.724	1	.099*
In-flight service	6.378	3	.095*
Flight comfort	.000	2	1.000
Cabin cleanliness	7.797	2	.020**
Eco friendliness	10.740	2	.005***
Travel-influencer marketing	.000	1	1.000
Flight/luggage safety	.000	1	1.000

Note. * $p < .10$. ** $p < .05$. *** $p < .01$.

Table 2

Marginal utilities for attribute levels of study one based on effect marginals

Attribute levels	Marginal utility
Airfare	
Low-cost carrier	.704
Premium carrier	-.704
In-flight service	
Excellent in-flight service	1.262
Good in-flight service	.018
Average in-flight service	-.128
Below average in-flight service	-1.151
Flight comfort	
Average comfort	.364
High comfort	.089
Low comfort	-.453
Cabin cleanliness	
Good hygiene	1.134
Average hygiene	.579
Dirty	-1.714
Eco friendliness	
Reasonably eco-friendly	.302
Very eco-friendly	.271
Non-eco-friendly	-.573
Travel-influencer marketing	
Present	.185
Not present	-.185
Flight/luggage safety	
Average safety	.036
Excellent safety	-.036

Table 3

Likelihood ratio test results for moderator Gender of study one

Interaction	**L-R χ^2**	**DF**	***p***
Gender*Airfare	.000	1	1.000
Gender*In-flight service	.424	3	.935
Gender*Flight comfort	.332	2	.847
Gender*Cabin cleanliness	.847	2	.655
Gender*Eco friendliness	.000	2	1.000
Gender*Travel-influencer marketing	.135	1	.714
Gender*Flight/luggage safety	.000	1	1.000

Note. * $p < .10$. ** $p < .05$. *** $p < .01$.

Table 4

Likelihood ratio test results for moderator Age of study one

Interaction	**L-R χ^2**	**DF**	***p***
Age*Airfare	2.834	2	.242
Age*In-flight service	1.136	6	.980
Age*Flight comfort	.000	4	1.000
Age*Cabin cleanliness	.723	4	.949
Age*Eco friendliness	.000	4	1.000
Age*Travel-influencer marketing	.000	2	1.000
Age*Flight/luggage safety	.000	2	1.000

Note. * $p < .10$. ** $p < .05$. *** $p < .01$.

Table 5

Likelihood ratio test results for moderator Annual net income of study one

Interaction	**L-R χ^2**	**DF**	***p***
Annual net income*Airfare	12.438	3	.006***
Annual net income*In-flight service	21.671	9	.010**
Annual net income*Flight comfort	1.044	6	.984
Annual net income*Cabin cleanliness	.000	6	1.000
Annual net income*Eco friendliness	2.845	6	.828
Annual net income*Travel-influencer marketing	.000	3	1.000
Annual net income*Flight/luggage safety	.000	3	1.000

Note. * $p < .10$. ** $p < .05$. *** $p < .01$.

Table 6

Likelihood ratio test results for moderator Environmental consciousness of study one

Interaction	**L-R χ^2**	**DF**	***p***
Environmental consciousness*Airfare	1.625	2	.444
Environmental consciousness*In-flight service	16.709	6	.010**
Environmental consciousness*Flight comfort	.000	4	1.000
Environmental consciousness*Cabin cleanliness	.255	4	.993
Environmental consciousness*Eco friendliness	29.310	4	.000***
Environmental consciousness*Travel-influencer marketing	4.165	2	.125
Environmental consciousness*Flight/luggage safety	.226	2	.893

Note. * $p < .10$. ** $p < .05$. *** $p < .01$.

Table 7

Likelihood ratio test results for moderator Social media activity of study one

Interaction	**L-R χ^2**	**DF**	***p***
Social media activity*Airfare	.506	6	.998
Social media activity*In-flight service	9.136	18	.957
Social media activity*Flight comfort	.000	12	1.000
Social media activity*Cabin cleanliness	.000	12	1.000
Social media activity*Eco friendliness	4.439	12	.974
Social media activity*Travel-influencer marketing	.707	6	.994
Social media activity*Flight/luggage safety	.435	6	.999

Note. * $p < .10$. ** $p < .05$. *** $p < .01$.

Table 8

Likelihood ratio test results for moderator Frequency of flying of study one

Interaction	**L-R χ^2**	**DF**	***p***
Frequency of flying*Airfare	.381	5	.996
Frequency of flying*In-flight service	10.799	15	.767
Frequency of flying*Flight comfort	6.484	10	.773
Frequency of flying*Cabin cleanliness	7.219	10	.705
Frequency of flying*Eco friendliness	.000	10	1.000
Frequency of flying*Travel-influencer marketing	.816	5	.976
Frequency of flying*Flight/luggage safety	.000	5	1.000

Note. * $p < .10$. ** $p < .05$. *** $p < .01$.

Table 9

Likelihood ratio test results for moderator Travelling purpose of study one

Interaction	**L-R χ^2**	**DF**	***p***
Travelling purpose*Airfare	.113	1	.736
Travelling purpose*In-flight service	.264	3	.967
Travelling purpose*Flight comfort	.000	2	1.000
Travelling purpose*Cabin cleanliness	.000	2	1.000
Travelling purpose*Eco friendliness	1.419	2	.492
Travelling purpose*Travel-influencer marketing	.000	1	1.000
Travelling purpose*Flight/luggage safety	.000	1	1.000

Note. * $p < .10$. ** $p < .05$. *** $p < .01$.

Table 10

Overview of hypotheses of study one

Hypothesis	**Supported/Rejected**
Hypothesis 1.1: airfare, in-flight service, flight comfort, cabin cleanliness, eco friendliness, travel-influencer marketing and flight/luggage safety have a significant effect on Dutch consumer preferences for airlines.	Partially supported
Hypothesis 1.2: in-flight service is most important to Dutch consumers when choosing airlines, followed by airfare, flight comfort, cabin cleanliness, flight/luggage safety, eco friendliness and travel-influencer marketing.	Rejected
Hypothesis 1.3: the best airline for Dutch consumers is a very eco-friendly, premium carrier with an excellent in-flight service, high comfort, good hygiene, a travel-influencer video content strategy and an excellent safety.	Partially supported
Hypothesis 1.4: the share of preference of KLM with a travel-influencer video content strategy is higher compared to the current KLM.	Supported
Hypothesis 1.5: gender moderates the relationship between travel-influencer marketing and airline preferences.	Rejected
Hypothesis 1.6: age moderates the relationship between travel-influencer marketing and airline preferences, eco friendliness and airline preferences, as well as the relationship between airfare and airline preferences.	Rejected
Hypothesis 1.7: annual net income moderates the relationship between all airline attributes and airline preferences.	Partially supported
Hypothesis 1.8: environmental consciousness moderates the relationship between eco friendliness and airline preferences.	Supported
Hypothesis 1.9: the extent of social media activity moderates the relationship between travel-influencer marketing and airline preferences.	Rejected
Hypothesis 1.10: the frequency of flying moderates the relationship between all airline attributes and airline preferences.	Rejected
Hypothesis 1.11: the purpose of travelling moderates the relationship between airfare and airline preferences, in-flight service and airline preferences, flight comfort and airline preferences, cabin cleanliness and airline preferences, as well as travel-influencer marketing and airline preferences.	Rejected

Appendix F – Tables of Results study two

Table 1

Likelihood ratio test results for video attributes of study two

Attribute	**L-R χ^2**	**DF**	***p***
Sound	.000	1	1.000
Video quality	13.170	2	.001***
Colour	79.096	2	.000***
Length of video	.000	2	1.000
Sponsorship compensation justification	.000	1	1.000
Accuracy of video content	2.390	1	.099*

Note. * $p < .10$. ** $p < .05$. *** $p < .01$.

Table 2

Marginal utilities for attribute levels of study two based on effect marginals

Attribute levels	**Marginal utility**
Sound	
Music	.536
Monologue	-.536
Video quality	
Enhanced video quality	.713
Standard video quality	.365
Low video quality	-1.079
Colour	
Vibrant colours	.971
Normal colours	.534
Black-and-white	-1.506
Length of video	
45 seconds	.219
60 seconds	-.091
30 seconds	-.128
Sponsorship compensation justification	
Present	.147
Not present	-.147
Accuracy of video content	
Good accuracy	.450
Average accuracy	-.450

Table 3

Likelihood ratio test results for moderator Gender of study two

Interaction	**L-R χ^2**	**DF**	***p***
Gender*Sound	.411	1	.522
Gender*Video quality	5.836	2	.054*
Gender*Colour	.517	2	.772
Gender*Length of video	.348	2	.840
Gender*Sponsorship comp. justification	1.277	1	.259
Gender*Accuracy of video content	.694	1	.405

Note. * $p < .10$. ** $p < .05$. *** $p < .01$. Comp. stands for compensation.

Table 4

Likelihood ratio test results for moderator Age of study two

Interaction	**L-R χ^2**	**DF**	***p***
Age*Sound	.996	2	.608
Age*Video quality	6.025	4	.197
Age*Colour	18.294	4	.001***
Age*Length of video	10.573	4	.032**
Age*Sponsorship comp. justification	.161	2	.923
Age*Accuracy of video content	1.103	2	.576

Note. * $p < .10$. ** $p < .05$. *** $p < .01$. Comp. stands for compensation.

Table 5

Likelihood ratio test results for moderator Annual net income of study two

Interaction	**L-R χ^2**	**DF**	***p***
Annual net income*Sound	3.575	3	.311
Annual net income*Video quality	1.247	6	.975
Annual net income*Colour	20.771	6	.002***
Annual net income*Length of video	14.457	6	.025**
Annual net income*Sponsorship comp. justification	2.514	3	.473
Annual net income*Accuracy of video content	3.108	3	.375

Note. * $p < .10$. ** $p < .05$. *** $p < .01$. Comp. stands for compensation.

Table 6

Likelihood ratio test results for moderator Social media activity of study two

Interaction	**L-R χ^2**	**DF**	***p***
Social media activity*Sound	1.604	6	.952
Social media activity*Video quality	18.588	12	.099*
Social media activity*Colour	28.754	12	.004***
Social media activity*Length of video	3.578	12	.990
Social media activity*Sponsorship comp. justification	2.185	6	.902
Social media activity*Accuracy of video content	3.619	6	.728

Note. * $p < .10$. ** $p < .05$. *** $p < .01$. Comp. stands for compensation.

Table 7

Overview of hypotheses of study two

Hypothesis	**Supported/Rejected**
Hypothesis 2.1: sound, video quality, colour, length of video, a sponsorship compensation justification and accuracy of video content have a significant effect on Dutch consumer preferences for travel-influencer video content.	Partially supported
Hypothesis 2.2: the length of the video is most important to Dutch consumers when watching travel-influencer video content, followed by the accuracy of video content, video quality, sound, colour and a sponsorship compensation justification.	Rejected
Hypothesis 2.3: the best travel-influencer video for Dutch consumers is a 60-second video with music, enhanced video quality, vibrant colours, a sponsorship compensation justification, and a good accuracy of video content.	Partially supported
Hypothesis 2.4: gender moderates the relationship between a sponsorship compensation justification and travel-influencer video preferences.	Rejected
Hypothesis 2.5: age moderates the relationship between video attributes and travel-influencer video preferences.	Supported
Hypothesis 2.6: annual net income moderates the relationship between video attributes and travel-influencer video preferences.	Supported
Hypothesis 2.7: the extent of social media activity moderates the relationship between video attributes and travel-influencer video preferences.	Supported