Traveller Behavioral Changes: Push And Pull Factors Analysis

Vany Octaviany\textsuperscript{a}\textsuperscript{*}, Ersy Ervina\textsuperscript{b}

\textsuperscript{a,b}Hospitality Study Program, Faculty of Applied Science, Telkom University, Bandung, Indonesia

Abstract
During COVID-19, there has been a change in traveler behavior. Each age group has particular travel preferences and interests, but few studies have examined the changes in the need and desires of travelers' activities. This study aims to identify profiles based on traveler demographics and analyze changes in traveler behavior based on motivation in the form of push and pull factors during an outbreak in Bandung Regency. This study uses a quantitative descriptive method by distributing online questionnaires to 257 tourists. The results describe the demographics of travelers (millennials, middle-aged, and old age), consisting of the area of origin, occupation, gender, education, and income of tourists. The analysis of motivational aspects of push and pull factors shows that millennials and people of middle age still have the same preference, namely choosing destinations that are unique with natural views and relaxing activities that eliminate boredom. Meanwhile, among elderly tourists, there is a behavior change; where previously they preferred destinations related to crowds, such as shopping, city tours, or visiting historical places, they are now turning to natural tourism, intending to refresh themselves and improve their health.

Keywords
Entrepreneurship Orientation, Cost Leadership Strategy, Differentiation

Introduction
The coronavirus (COVID-19) outbreak has had a significant impact on people's behavior, notably the emergence of a new lifestyle in which residents do all of their activities from home, including work, study, and worship. Additionally, changes occur in consumer behavior within the community, where consumer behavior refers to a pattern of action that is frequently engaged in, most notably when it comes to seeking information about goods and services, purchasing, and using things. Consumer behavior is changing as a result of the public's limited mobility to perform activities that were typically performed before the pandemic. Yuswohadi (2021), a marketing expert at Inventure Consulting, described four significant shifts in consumer behavior, or "Mega shifts in Consumer Behaviour," that happened during the COVID-19 pandemic. He believes that improvements in consumer behavior are necessary. Covid-19 has induced 10X10 Consumer
Mega shifts, in which consumption patterns change tenfold and tenfold faster. As a result, each business is confronted with an entirely new world. (Pandemi COVID-19 Memicu Empat Perubahan Besar Perilaku Konsumen - Marketing Katadata, n.d.).

COVID-19's impact on the tourism industry is represented not only in the loss in supply-side revenue but also in the inherent risk perception of tourists on the demand side, where risk perception is fundamental in the decision-making process of traveling. In this sense, security issues have a significant role in tourists' willingness to travel and have a significant impact on tourism demand. A destination can only attract visitors if it provides a safe and secure environment in which tourists feel safe from threats while on vacation. 2021) (Andriani et al. Tourists' concerns about health hazards are growing, particularly the transmission of diseases, which has a direct effect on their travel behavior and location selection (Cartwright, 2000). Given the health crisis that resulted from the COVID-19 pandemic and has developed into a global economic and social crisis, a slew of questions has been raised about the tourism sector's impact, both short and long-term. This issue is so pervasive and has developed so abruptly and unpredictably that making even the most rudimentary predictions has become incredibly impossible. 2020 (Gössling et al.). Consumer demand and purchasing behavior have shifted dramatically in recent years. The pandemic of COVID-19 has had a profound effect on daily and social life, as well as consumption patterns. The pandemic brought a new and essential dimension to tourism offerings that include health insurance. In other words, exposure to COVID-19 and the danger of transmission must be kept to a minimum during tourism activities (Toubes et al., 2021).

In resulting of changes in traveler behavior during the COVID-19 pandemic, travelers tend to postpone vacation plans to destinations with a high prevalence of COVID-19 cases (red zones) in favor of tourist destinations closer to their homes. COVID-19 has had a detrimental effect on tourists' willingness to go far from home by preventing cross-border travel. The fear of infection or contracting the COVID-19 virus in a gathering of numerous foreigners whose health status is unknown leads many travelers to avoid famous tourist spots during the outbreak. Traveling to less congested locations appears to be a new trend during the pandemic, with more tourists preferring tourist sites that offer privacy and customization. Tourists are more interested in eco-friendly, modern, natural, and outdoor attractions, hotels, cafes, and restaurants. COVID-19 affects travelers' predisposition to avoid traveling in groups other than family members and to postpone group visits indefinitely. Additionally, there is a concern about being trapped in a closed space crammed with public transportation (buses, boats, etc.) that is unable to move, which is regarded as a high risk of getting the COVID-19 virus and motivates tourists to go by private cars, which are deemed safer. Additionally, COVID-19 emphasizes the importance of public service quality and sanitation. Tourists' increased awareness of health issues convinces them to pay closer attention to sanitation hygiene standards and the implementation of health protocols in public spaces such as ports, airports, and stations, as well as tourist attractions, hotels, restaurants, and shopping malls to be visited, to minimize the risk of contracting the COVID-19 virus (Andriani et al., 2021).

Numerous factors can influence traveler behavior when it comes to travel decisions in the new normal. Tourists are consumers in this case. Their behavior is related to
how an individual, community, or organization selects, purchases, uses, and experiences things, services, ideas, or experiences to meet their needs and desires. Cultural, societal, and personal aspects, such as gender and age, as well as psychological issues, all influence consumer behavior. Susanty & Renjaan, (2021) Traveller behavior is heavily influenced by the tourists' age. According to Asdi (2017) age or life stage has a considerable impact on traveler behavior when it comes to selecting tourist attractions. The elderly are one of the tourism groups. Tourists are classified according to their age into three categories: millennials, middle-aged visitors, and elderly tourists.

As was the case with millennial visitors, each traveler of a particular age group will have unique travel preferences. Millennial tourists typically like to travel alone, manage their travels, and have a somewhat extended holiday period. Their interests tend to be diverse, ranging from recreation to natural scenery, as well as cultural tourism through the study of indigenous arts, dances, and music. Meanwhile, middle-aged vacationers have no special requirements. However, these tourists are always eager to participate in various activities. Additionally, for elderly tourists, the characteristics of going on traveler activities must be accompanied by careful planning, including consideration of the destination's suitability and compatibility with physical abilities; their desire for a tourist destination with comfortable facilities and services; and the availability of adequate health care.

The characteristics of these tourists tend to change after a pandemic storm occurs and affect all aspects of human life, including changes in the needs and desires of tourists towards tourism activities. Based on this background, research is needed on changes in traveler characteristics during the pandemic. Therefore, this study aims to determine the characteristics of tourists during the pandemic in Bandung Regency, the characteristics of tourists based on demographic aspects during the pandemic in Bandung Regency, and motivations of tourists in the form of push and pull factors in Bandung Regency based on age.

**Literature Review**

**Travel Motivation**

Travel motivation is often identified as the primary force behind understanding traveler behavior. Travel motivation can be used to predict leisure time and participation rates, identify trip trends, analyze traveler consumption decisions and behaviors, and design more successful tourism strategies and policies. Travel motivation is defined as an internal force that excites and drives people to choose a specific trip to gain the desired benefits and fulfillment. Motivation is seen as a socio-psychological characteristic that propels people to pursue new goals and engage in recreational activities. Kara and Mkwizu (2020). Tourism scholars have paid close attention to the study of traveler motivation. Several prior studies used the tourism motivation theory to analyze traveler motivation. The theoretical framework for studying travel motivation is mostly based on sociology and social psychology (Aziz et al.2018).

**Push and Pull Factor**

The theory of push and pull factors motivation is the basis for understanding the motivations of travelers’ journeys and explaining why tourists travel. The push factor represents visitors’ inner urge to travel, whereas the pull factor is associated with traveler decisions based on the qualities of the tourist destination. Furthermore, push factors are also socio-psychological requirements that motivate
visitors' decisions to travel. Meanwhile, "pull factors" are characteristics that draw travelers to specific destinations once they have decided to travel. The notion of push and pull factor motivation accurately describes the motivations that lead tourists to choose and travel to their desired destination. There is a "pull element" in the form of tourists who are drawn to other cultures, natural landscapes, wide open spaces, and activities. While pushing factors such as family connection, friends, knowledge and education, achievement, and relaxation are all significant (Preko et al., 2021).

**Traveller Profile**

Traveler profiles are different characteristics of various types of tourists that are directly tied to their travel habits, demands, and needs. Tourists are very various; young and elderly, poor and rich, foreign and domestic, experienced and inexperienced, They all wish to travel with different desires and expectations. Segmentation is a strategy for identifying and investigating the profile of tourists based on groups that have similar preferences for a mix of goods and services based on geographic, demographic, psychographic, and behavioral criteria. Yoga et al. (2018)

**Traveller Demographic Factor**

Demographic factors are a descriptive segmentation strategy that involves demographic factors directly. Age, gender, family life cycle, education, income, and nationality are examples of demographic parameters often employed by tourism specialists. These characteristics are thought to be accurate in describing the tourism market and predicting travel behavior trends. Kara and Mkwizu (2020). Demographic factors such as age, education level, marital status, work position, and duration of stay all have an impact on public impression. Bhat and Mishra (2021)

**Gender**

One of the primary elements impacting travel demand is gender (Kara & Mkwizu, 2020). Travel patterns vary between men and women depending on the reason for the travel. Men tend to travel more than women. Men travel for work purposes, but women travel mostly to visit friends and relatives and prefer to travel shorter distances than men. Women are considered to enjoy shopping and are more easily influenced by recommendations from others. Cost, time, and family are some of the factors that influence female tourists to participate in vacation activities. As a result, women were more likely than males to go shopping, dining, and cultural activities rather than outdoor activities such as sports tourism, whilst men were more likely to engage in adventure activities. Kara and Mkwizu (2020). One of the demographic features that influences people's opinions of tourism is gender. (Papastathopoulos and colleagues, 2020)

**Age of Tourist**

Age is a significant demographic component since it allows for accurate forecasting of recreational demand. Age has a beneficial effect on an individual's desire for relaxation and environmental exploration. 2020 (Kara & Mkwizu). Individuals' ages can affect their attitudes regarding travel. The older an individual gets, the more pessimistic their attitude toward tourism activities is. However, it is thought that senior travelers have a more favorable attitude toward travel activities than younger tourists. (2017) (Sinclair-Maragh). Tourists are classified by generation, including Baby Boomers, Generation X, Generation Y, and Generation Z. A generation is a group of
people who share the same range of birth years, age, place, and historical experiences or events as the individual. These shared experiences or events have a substantial impact on their maturation phase. Baby Boomers are the generation born between 1946 and 1964. The baby boomer generation is known for its high level of devotion, independence, and competitiveness. Generation X, defined as those born between 1965 and 1980, values risk and mature decision-making. Generation X has begun to appreciate the value of information technology, which enables them to access a variety of forms of information and think creatively. This generation is known for its independence, pragmatism, sustainability, openness to diversity, and broad-mindedness. This generation believes that working to live, rather than living to work, results in a "life balance" between personal, family, work, and non-work activities, such as vacations. Group Y, defined as people born between 1981 and 2000, is an easy-to-reach generation with visionary and new ideas. Generation Y is distinct in that they are practical, have several desires, place a premium on work performance, embrace technology, and exhibit a high level of self-confidence and tolerance. Because a healthy balance of lifestyle and work is critical, this generation seeks work that supports their lifestyle, including their vacation needs and preferences. Generation Z was born in 2001 and is currently undergoing a generational transition from Generation Y. This generation is extremely reliant on technology, devices, and social media activities. Occasionally, this generation places a premium on popularity, the number of followers, and likes. Due to their reliance on social media, this generation values rapid gratification and is constantly on the go. Generation Z values novelties, particularly those that demonstrate "existence" as a mode of social interaction and association. 2020 (Pranatasari & Diva). Meanwhile, Marpaung (2016) divides travelers by age into three categories: millennials, middle-aged tourists, and the elderly. Millennial tourist typically travels alone, plan their excursions, and have a sufficient amount of vacation time available to them. Their interests tend to be diverse, ranging from recreation to natural scenery, as well as cultural tourism through the study of indigenous arts, dances, and music. Meanwhile, middle-aged visitors typically do not have unique demands, but they always have a strong desire to participate in traveler activities. Additionally, when older tourists participate in tourism activities, meticulous planning is required, including establishing if the venue is adequate and compatible with the travelers’ physical ability. Typically, senior tourists seek traveler attractions that offer pleasant facilities and services, as well as access to good health services.

Educational Background

The importance of a tourist's educational qualifications has an impact on customer purchasing behavior in terms of decision-making and purchase engagement (Lu et al., 2021). A person with a higher education level also has a greater internal urge to travel. Phakdee-Auksorn and Sartre (2017) A better-educated individual has a more favorable attitude toward travel activities. Their positive attitude to travel activities increases with their educational attainment. This is because they are more aware of the potential benefits of traveling via print and electronic media than less educated individuals. (Sinclair-Maragh, 2017).

Methodology

The Bandung Regency was used as the subject of this study. The location was chosen since the Bandung Regency is a famous tourist destination for domestic tourists. According to the variables
studied, the research method that will be used in this study is a descriptive quantitative method, which means that the research will be conducted to ascertain the existence of independent variables, either on one or more variables, without making comparisons or connecting. (Sugiyono, 2018). According to Arikunto, (2016), quantitative research methods are: "Quantitative research, as the name implies, requires a lot of numbers, starting from data collection, interpretation of the data, and the appearance of the results. The sample for this study were tourists who visited Bandung Regency as respondents, namely 257 consisting of 65 millennial tourists with an age range of 12-26 years. 130 middle-aged tourists with an age range of 27-41 years, and 62 elderly tourists with an age range of 42-70 years, can provide the data needed for research on changes in tourist characteristics during the Covid-19 pandemic at the tourist attraction of Bandung Regency. Questionnaires, observations, and a review of the literature were used to collect data. The distribution of the questionnaire was carried out online, namely using Google Forms. Following that, the data were evaluated using the Mann-Whitney test. The Mann-Whitney test is used to determine the relationship between two unrelated or independent samples. The Mann-Whitney study, also known as the Mann-Whitney U test or the Wilcoxon-Mann-Whitney ranking test, is a non-parametric statistical method used to compare two independent groups in relatively small samples or when the assumption of normal distribution is not met. This method is often used when the data does not qualify for an independent t-test, either because the data has a highly variable distribution or because the sample size is limited. The Mann-Whitney test is based on comparing ratings from data in two different groups and then calculating a U statistic that takes these differences in ratings into account. The results of this test produce U-values and p-values, which can be used to make statistical decisions about whether there is a significant difference between the two groups being compared. (Divine et al., 2018). The Mann-Whitney test is used to test the null hypothesis, which claims that there is no significant difference between two groups of data and that the data are obtained from unrelated samples. If the probability (Asymp. Sig.) is 0.05, Ho is accepted. Ho is rejected if the likelihood (asymp. sig) is less than 0.05 (Ali Mubarok, 2021).

**Results and Discussion**

The Bandung Regency was used as the subject of this study. According to the variables to be studied, the findings indicated that the features of travelers in Bandung Regency may be classified into three age groups: (1) millennial tourists aged 12–26, (2) middle-aged tourists (aged 27–41), and (3) elderly tourists (aged 42–70). Where each section can be seen several behavioral characteristics, specifically: 1). Traveller’s profile based on demographic information, including gender, occupation, income, education, and region of origin. 2) traveller’s behaviour is based on motivation which includes push and pull factors.
**Demographic Tourist**

*Demographics of Millennial Tourists*

**Table 1. Millennial Traveller Demographic**

<table>
<thead>
<tr>
<th>Educational Background</th>
<th>∑ Respondent</th>
<th>Occupation</th>
<th>∑ Respondent</th>
<th>Gender</th>
<th>∑ Respondent</th>
<th>Place Origin</th>
<th>∑ Respondent</th>
<th>Incomes</th>
<th>∑ Respondent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diploma Degree</td>
<td>9</td>
<td>Teacher</td>
<td>1</td>
<td>Male</td>
<td>31</td>
<td>Bandung</td>
<td>38</td>
<td>&lt; Rp.1,500,000</td>
<td>40</td>
</tr>
<tr>
<td>Bachelor Degree</td>
<td>13</td>
<td>Housewives</td>
<td>1</td>
<td>Female</td>
<td>34</td>
<td>Jabodetabek</td>
<td>8</td>
<td>&gt; Rp.10,000,000</td>
<td>5</td>
</tr>
<tr>
<td>post Graduated</td>
<td>1</td>
<td>Private Employee</td>
<td>13</td>
<td>Male</td>
<td>7</td>
<td>West Java</td>
<td>7</td>
<td>Rp. 2,500,000 - Rp.4,000,000</td>
<td>2</td>
</tr>
<tr>
<td>High School</td>
<td>42</td>
<td>Student</td>
<td>44</td>
<td>Female</td>
<td>68</td>
<td>Out of Java</td>
<td>12</td>
<td>Rp.1,500,000 - Rp.2,500,000</td>
<td>6</td>
</tr>
<tr>
<td>TNI/PKI</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Rp.4,000,000 - Rp.6,000,000</td>
<td>7</td>
</tr>
<tr>
<td>Entrepreneur</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Rp.6,000,000 - Rp. 10,000,000</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>65</td>
<td>Total</td>
<td>65</td>
<td>Total</td>
<td>65</td>
<td>Total</td>
<td>65</td>
<td>Total</td>
<td>65</td>
</tr>
</tbody>
</table>

According to the data in Table 1, millennial-age tourists visiting Bandung Regency are predominantly female, with 34 respondents (52.3%), and male, with 31 respondents (47.7%), having the greatest level of education. High school had the most respondents (64.4%), with 42 (64.4%) of them in high school, and post-graduate 1 respondent (1.5%). The majority of millennial-age travelers work as students, with as many as 44 respondents (67.6%), and the lowest as housewives and teachers, with 1 (1.5%) respondents each. In terms of regional origin, the majority of millennial-age tourists came from the Bandung area itself, namely 38 respondents (58.4%), and the least came from West Java regions such as Ciamis, Garut, and Sukabumi, 7 respondents (10.7%), with the majority having a monthly income of Rp. 1,500,000, as many as 40 respondents or 61.5 percent, and the least having a monthly income of Rp. 2,500,000–4,000,000, as many as 2 respondents (3.07%).

*Demographic of Middle Ages Traveller*

**Table 2. Demographic of Middle Ages Traveller**

<table>
<thead>
<tr>
<th>Educational Background</th>
<th>∑ Respondent</th>
<th>Occupation</th>
<th>∑ Respondent</th>
<th>Gender</th>
<th>∑ Respondent</th>
<th>Place Origin</th>
<th>∑ Respondent</th>
<th>Incomes</th>
<th>∑ Respondent</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School</td>
<td>9</td>
<td>Teacher</td>
<td>38</td>
<td>Male</td>
<td>37</td>
<td>Bandung</td>
<td>86</td>
<td>&lt; Rp.1,500,000</td>
<td>7</td>
</tr>
<tr>
<td>Diploma</td>
<td>10</td>
<td>Housewives</td>
<td>24</td>
<td>Female</td>
<td>93</td>
<td>Jabodetabek</td>
<td>20</td>
<td>Rp.1,500,000 - Rp.2,500,000</td>
<td>18</td>
</tr>
<tr>
<td>Bachelor Degree</td>
<td>68</td>
<td>Private Employee</td>
<td>49</td>
<td>Male</td>
<td>14</td>
<td>West Java Area</td>
<td>28</td>
<td>Rp. 2,500,000 - Rp.4,000,000</td>
<td>28</td>
</tr>
<tr>
<td>post Graduates</td>
<td>40</td>
<td>Student</td>
<td>2</td>
<td>Female</td>
<td>10</td>
<td>Out of Java</td>
<td>10</td>
<td>Rp.4,000,000 - Rp.6,000,000</td>
<td>29</td>
</tr>
<tr>
<td>Doctoral Degree</td>
<td>3</td>
<td>Student</td>
<td>5</td>
<td>Female</td>
<td>0.769231</td>
<td></td>
<td></td>
<td>Rp.6,000,000 - Rp.10,000,000</td>
<td>20</td>
</tr>
<tr>
<td>TNI/PKI</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Rp.10,000,000</td>
<td>28</td>
</tr>
<tr>
<td>Entrepreneur</td>
<td>11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>Total</td>
<td>130</td>
<td>Total</td>
<td>130</td>
<td>Total</td>
<td>130</td>
<td>Total</td>
<td>130</td>
</tr>
</tbody>
</table>

According to Table 2, the majority of middle-aged tourists visiting Bandung Regency are female, accounting for 93 respondents or 71.5 %, and male, accounting for 37 respondents or 28.5 %, with 68 respondents or 52.3 % having an undergraduate education, and Doctoral of accounting for 3 respondents or 2.3 %. The majority of middle-aged tourists work as private workers (49 respondents, or 37.7 %), whereas the least number of respondents work as entrepreneurs (one, or 0.8 %). Meanwhile, when it comes to regional origins, the majority of middle-aged tourists hail from the Bandung area, with 86 respondents representing 66.1 %,
and the least from locations beyond Java, such as Bandar Lampung and Padang, with 10 respondents representing 7.7 %.

There are up to 29 respondents or 22.3 %, and as few as Rp.1,500,000, or up to 7 respondents, or 5.4 %.

Table 3. Demographics of Elderly Tourists

<table>
<thead>
<tr>
<th>Educational Background</th>
<th>Respondent</th>
<th>Occupation</th>
<th>Respondent</th>
<th>Gender</th>
<th>Respondent</th>
<th>Place Origin</th>
<th>Respondent</th>
<th>Income</th>
<th>Respondent</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School</td>
<td>4</td>
<td>Teacher</td>
<td>27 Male</td>
<td></td>
<td>25 Bandung</td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Diploma</td>
<td>3</td>
<td>Housewives</td>
<td>4 Female</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Bachelor Degree</td>
<td>22</td>
<td>Private Employees</td>
<td>15 Female</td>
<td></td>
<td>62 West Java Area</td>
<td></td>
<td></td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Post Graduates</td>
<td>24</td>
<td>Government Employee or Pensiol</td>
<td>10</td>
<td></td>
<td>Out of Java</td>
<td></td>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>Doctoral Degree</td>
<td>9</td>
<td>TNI/Polri</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>19</td>
</tr>
<tr>
<td>Total</td>
<td>62</td>
<td>Consultant or Researcher</td>
<td>2</td>
<td></td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td>62</td>
</tr>
</tbody>
</table>

According to Table 3, the majority of elderly tourists who visit Bandung Regency are female, with 39 respondents or 63%, and male, with 23 respondents or 37%, with education level S2 or 24 respondents or 62.9 %, and diploma, with 3 respondents or 4.8 %. The majority of elderly tourists work as professors or lecturers, with as many as 27 respondents, or 43.5 %, while the least number of respondents work as TNI/Polri, consultants and researchers, and village authorities, with each getting two or three responses, or 2%. According to regional origin, the majority of elderly tourists came from the Bandung area, with 43 respondents or 69.3 %, and the least came from West Java regions such as Ciamis, Indramayu, and Purwakarta, with 5 respondents or 8%, with the majority earning more than Rp. 10,000,000, with 19 respondents or 30.6 %, and the least getting paid less than Rp. 1.500.000, with 4 respondents or 6.4 %.

Traveller Behaviour Based on Motivation

The presence of COVID-19 has had a significant effect on travelers' perceptions and motivations. While the ease of activities has been identified, the fear of contracting the virus while engaging in tourism activities, particularly the in-and-out transfer process associated with travel, is the primary barrier for visitors. When tourists travel, they need comfort in the form of hygiene, health, and protection from COVID-19 infection (Suprihatin, 2020). If, before the COVID-19 pandemic, tourists' requirements were primarily physiological (recreational), during the outbreak, the necessity for safety and physical survival became critical. The increasing concerns about spreading the COVID-19 virus while traveling have a significant impact on travelers' decision to engage in certain activities (Adi Palguna et al., 2021). According to age, the following factors impact traveler decisions in Bandung Regency:
As illustrated in Figure 1, the factors influencing traveler decisions to visit Bandung Regency destinations are age-related, especially millennials, middle-aged persons, and the elderly. At the millennial age, the most important reason for continuing to visit sites in Bandung Regency is to escape monotony, boredom, and exhaustion caused by restrictions on community activities, which accounts for 56.9%. The government imposes restrictions on community activities, requiring them to be active at home and in school. While the least important element is that 1.5% of travelers choose the closest area to their home. This demonstrates that millennial tourists are unconcerned about the distance traveled during the outbreak. Meanwhile, the most important aspect for middle-aged travelers, at 47.7%, is avoiding boredom, exhaustion, and despair as a result of communal activity limits that require them to be active at home and work from home. Additionally, the 0.8% of middle-aged travelers who did not engage in tourism activities during the COVID-19 epidemic is the lowest factor. In comparison to millennials and middle-aged, the most important factor for the elderly traveler is to ensure that the destinations in Bandung Regency they visit already adhere to a standard health protocol known as CHSE (Cleanliness, Health, Safety, and Environmental Sustainability), which includes providing handwashing areas, requiring visitors to wear masks, and maintaining social distance. Then comes the price promotion at the lowest factor of 1.6%. This demonstrates that the elderly are unaffected by price promotions offered by Bandung Regency destinations.

**Push Factor and Pull Factor of Tourists in Bandung Regency**

The following are the Push and Pull Factors for tourists in Bandung Regency by age group (millennials, middle age, and senior citizens), which are composed of numerous indicators: 1) The Push Factor, which contains indicators of visiting tourist locations to unwind, of visiting tourist destinations to unwind pleasantly, comfortable and peaceful, visiting tourist destinations for cultural heritage, visiting tourist attractions for monuments and history, visiting tourist destinations for social interaction with friends and family, visiting tourist destinations to meet new people, visiting tourist attractions to recharge their batteries, visiting tourist attractions for adventure. 2) Pull Factor, which includes the following indicators: attractiveness of tourist attractions,
uniqueness of tourist destinations, cleanliness of destinations, convenience of destinations, accessibility of transportation from the origin area, accessibility of transportation during the tour, accessibility of accommodation, accommodation conditions, accessibility of eating and drinking facilities, and accessibility of destinations' activities.

Pull and Push Factor of Millennial Travelers (12 – 26 years old)

![Bar chart showing pull and push factors for millennial travelers in Bandung Regency during COVID-19.](image)

According to Figure 2, the largest pull factor for millennial travelers during COVID-19 is the appeal of tourist places in Bandung Regency, such as natural beauty and cool air, which are pull factors for millennial tourists to come, with an average score of 4.45, engage in tourism activities in Bandung Regency. While the availability of transportation is the lowest pull factor as long as millennial visitors are in destinations in Bandung Regency, with an average score of 3.68. This demonstrates that there is no difference in the pull factor motivation of millennial travelers before and after the COVID-19 pandemic, which is consistent with the study conducted by Cavagnaro et al. (2018), which argues that travel implies something new to millennial tourists. They experiment with other lifestyles, have new experiences, travel to new places and learn new things, socialize with their peers, and become closer to nature. Before the COVID-19 pandemic, the behavior of millennial travelers reflected their inclination toward seeking unique experiences, social connections, and technological utilization. A study by Xiang et al. (2017) emphasized how millennials were more inclined to spend money on travel experiences rather than material possessions. They often sought out Instagrammable destinations, and places suitable for sharing on social media, and engaged in technology-based activities such as travel apps. However, with the outbreak of the pandemic, fundamental changes in the behavior of millennial travelers have taken place. As the tourism sector gradually recovers, the behavior of millennial travelers continues to transform. Research by Sigala (2021) showed that millennials are now more...
likely to seek deeper and more meaningful experiences during their travels. They have become increasingly concerned about sustainable issues and seek ways to have a positive impact on the destinations they visit. The use of technology also remains crucial, with millennials expecting innovation in travel apps and more interactive virtual experiences.

During the COVID-19 pandemic, the motivation behind millennial travelers' choices shifted as they navigated the challenges of a changed travel landscape. Millennials' motivations became more introspective and focused on personal growth and well-being. With restrictions on international travel and concerns about health and safety, many millennials turned to local and nature-based experiences. They sought destinations that offered opportunities for outdoor activities, relaxation, and a break from the monotony of lockdowns. Nunkoo et al. (2021)

Nunkoo et al. (2021) found that millennials also exhibited a stronger interest in contributing to the well-being of their communities and supporting local businesses. The desire to make a positive impact and contribute to the recovery of their local economies became a significant motivational factor. This sense of responsibility and the need to create meaningful experiences align with the concepts of "purposeful travel" and "do-good tourism." Instead of solely seeking leisure, millennials sought travel experiences that aligned with their values and allowed them to give back to the communities they visited. The pandemic prompted many millennials to reassess their priorities and motivations, leading to a greater emphasis on sustainable and meaningful travel experiences. Research by Ritchie et al. (2020) highlights that millennials were drawn to destinations that emphasized environmental conservation and cultural preservation. This motivation for eco-friendly and socially responsible travel reflects their growing awareness of global challenges and a desire to engage in travel that supports positive change.

Meanwhile, the push factors for millennial tourists in Bandung Regency are as follows:

![Figure 3. Push Factor of Millennial Travellers in Bandung Regency during the COVID-19](image)

According to Figure 3, the highest push factor for millennial tourists during COVID-19 is an indicator of visiting destinations in Bandung Regency to relax, and eradicate boredom and tiredness from activities and daily routines, with an
average score of 4.65. This demonstrates that the push factor motivations of millennial tourists did not vary before and during the COVID-19 pandemic. This result is consistent with Honeyball's (2017) finding, which indicates that millennial tourists are mostly motivated to travel for relaxation. Additionally, they place a premium on safety when traveling and favor light-hearted attractions such as beaches and theme parks. The least motivating aspect, with an average score of 3.60, is visiting destinations in Bandung Regency to meet new people.

The COVID-19 pandemic has significantly impacted the behavior of millennial travelers. Research by Wang et al. (2020) indicated that millennials now prioritize safety and health in their travel plans. They tend to be more cautious in planning long-distance trips and are more interested in exploring isolated local destinations. Moreover, travel restrictions and social limitations have altered how millennial travelers socially interact, shifting their focus from in-person gatherings to online and virtual interactions.

The authors then used the Mann-Whitney Test to determine whether there is a difference between the two variables, notably the push factor and the pull factor. The following are the results:

<table>
<thead>
<tr>
<th>Table 4. Mann Whitney Push and Pull Factor Test Results for Millennial Travelers In Bandung Regency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mann-Whitney U</td>
</tr>
<tr>
<td>Wilcoxon W</td>
</tr>
<tr>
<td>Z</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
</tr>
<tr>
<td>Exact Sig. [2*(1-tailed Sig.)]</td>
</tr>
<tr>
<td>Sources: SPSS, 2022</td>
</tr>
</tbody>
</table>

According to the Mann-Whitney test results in Table 4, the Asymp Sig value is 0.214, which is greater than 0.05. If the Asymp value is more than 0.05, the hypothesis is rejected according to the provisions of the decision on the use of the Mann-Whitney test. The study's premise is that there is no statistically significant difference between the two groupings of data, namely the push and pull factors. Thus, the hypothesis is denied, indicating that a considerable difference exists between the push and pull factors for millennial tourists in Bandung Regency during the COVID-19 outbreak.

There have been significant changes in the behavior of millennial travelers before and during the COVID-19 pandemic. Before the pandemic, millennial travelers tended to prioritize unique experiences, seek out Instagrammable destinations, and engage in intensive social interactions. They often spent time in popular places, participated in festivals and nightlife events, and explored local cuisine to delve into a region's culture (Hudson & Thal, 2013; Kladou & Mavragani, 2020). However, since the outbreak of COVID-19, this paradigm has shifted dramatically. Millennial travelers now prioritize health and safety factors, with many of them avoiding crowds and crowded destinations. They are more inclined to choose open natural destinations with fewer visitors (Xiang, Du, Ma & Fan, 2020).

The pandemic has prompted millennial travelers to alter their travel preferences. Previously, long-haul flights and international exploration were highly
Traveller Behavioral Changes: Push And Pull Factors Analysis

COVID-19 has also influenced how millennial travelers interact with technology during their trips. Previously, they actively shared their experiences through social media, but since the pandemic, technology is also being used to monitor and manage health risks, such as through contact tracing apps or contactless payment methods to avoid physical contact (Sigala, 2020; Wang, Li & Song, 2021).

Pull Factor and Push Factor of Middle Age travelers (27 – 41 years old)

According to Figure 4, the largest pull factor for middle-aged travelers during the COVID-19 pandemic was the appeal of traveler locations in Bandung Regency, such as natural beauty and cool air, which was also a pull factor for older tourists. With an average score of 4.43, it is a good medium for tourism activities in Bandung Regency. The lowest pull factor, with an average score of 3.25, is the availability of transportation as long as medium-sized tourists visit places in Bandung Regency. This demonstrates that the pull factor motivations of middle-aged tourists did not alter before and during the COVID-19 epidemic, which is consistent with Carlina’s (2020) findings that middle-aged tourists are of productive age, which is when they concentrate on creating a profession. The primary activity is to provide instruction on natural and territorial insight, culture, and conduct, as well as physical exercise in the destination.

Before the COVID-19 pandemic, the motivations of middle-aged tourists played a significant role in the tourism...
industry. According to a study conducted by Wang & Xu (2019), the motivations of middle-aged tourists generally revolved around seeking relaxation and an escape from their daily routines. They often had a strong desire to distance themselves from work-related stress and family responsibilities, leading them to search for vacation experiences that could provide mental refreshment and balance. For this group, vacations were not just about appealing destinations, but also about recreational activities that offered relaxation and entertainment. Another study by Chen & Sun (2018) indicated that middle-aged tourists were also frequently driven by motivations related to cultural exploration. They were interested in understanding local traditions, art, cuisine, and lifestyles different from their own. Cultural tourism and visits to historical sites were strong attractions for this group, as they sought to broaden their horizons and enrich their life experiences.

However, the COVID-19 pandemic has significantly changed the behavior of middle-generation travelers. The policy of limiting activities and calls to stay at home imposed by the government in response to the pandemic has affected tourist habits and preferences (Dwiyana et al., 2022). The COVID-19 pandemic has limited international mobility and travel. Middle-generation tourists tend to reduce the number of trips they make and prefer tourist destinations that are closer to where they live (Gretzel et al., 2015). This is due to travel restrictions imposed by the government and concerns over the risk of virus transmission. Middle-generation travelers may be more inclined to avoid long trips and choose tourist destinations that are closer to where they live. They may also pay more attention to cleanliness and safety factors in choosing accommodation and tourist destinations (Dwiyana et al., 2022). The COVID-19 pandemic has changed the preferences of tourist destinations for middle-generation tourists. They may prefer outdoor destinations, such as national parks or less crowded beaches, to avoid crowds and the risk of virus transmission (Gretzel et al., 2015). Travelers may also be more attracted to destinations that offer safe outdoor activities and allow for social distancing.

![Figure 5. Push Factor of Middle Age travelers In Bandung Regency during the COVID-19](image-url)
According to Figure 5, the primary motivation for middle-aged travelers is to refresh themselves, specifically by inhaling fresh air and experiencing natural, attractive, and clean landscapes to alleviate monotony and tiredness from everyday activities and routines with a 4.52 average score. The second largest component, with an average score of 4.35, is middle-aged travelers visiting sites to socialize with friends and family. This demonstrates that there is no difference in middle-aged tourists' push factor motivational behavior before and during the COVID-19 pandemic, which is consistent with Carlina's (2020) research, which indicates that middle-aged tourists engage in tourism activities to foster intimacy and relaxation together outside of busy work and school children. actions that are dependent on personal interests or family interests (wife and children). They frequently travel in groups and hence demand family-friendly attractions, facilities, and lodging. With an average score of 3.30, the least motivating factor is visiting sites in Bandung Regency to meet new people.

Furthermore, the motivations of middle-aged tourists before the pandemic were often tied to social aspects. Based on research by Kim et al. (2017), many of them sought social interaction and opportunities to spend time with family or close friends. Vacations were considered valuable time to strengthen relationships and create cherished memories together with loved ones.

Overall, before the COVID-19 pandemic, the motivations of middle-aged tourists included relaxation, cultural exploration, and social interaction. They aimed to escape routines, gain cultural insights, and spend quality time with close companions. However, during the COVID-19 period, concerns about health and safety have become important factors in influencing the motivation of middle-generation tourists. The COVID-19 pandemic has increased awareness of the risk of virus transmission, so that middle-generation tourists may be more careful in choosing tourist destinations and avoiding crowds (Singgalen, 2022). Motivation to travel may be driven more by the need to relax, reduce stress, or seek safe outdoor experiences and allow for social distancing.

Mann-Whitney test is used to determine whether there is a difference between the two variables, namely the push factor and the pull factor. The following are the results:

<table>
<thead>
<tr>
<th>Table 5. Mann Whitney Push and Pull Factor Test Results for Middle ages Travelers in Bandung Regency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mann-Whitney U</td>
</tr>
<tr>
<td>Wilcoxon W</td>
</tr>
<tr>
<td>Z</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
</tr>
<tr>
<td>Exact Sig. [2*(1-tailed Sig.)]</td>
</tr>
</tbody>
</table>

Sources: Data Processes SPSS, 2022.

According to the Mann-Whitney test results in Table 5, the Asymp Sig value is 0.286, which is greater than 0.05. If the Asymp value Of Sig > 0.05, the hypothesis is rejected according to the provisions of the decision on the use of the
Mann-Whitney test. The study's premise is that there is no statistically significant difference between the two groupings of data, namely the push and pull factors. Thus, the hypothesis is denied, indicating that a significant difference exists between the push and pull factors for middle-aged travelers in Bandung Regency.

Before the outbreak of the COVID-19 pandemic, "push" and "pull" factors played an important role in motivating middle-aged tourists. Based on research by Uysal and Jurowski (2020) "pull" factors such as natural beauty, rich culture, and unique tourist attractions tend to attract middle-aged tourists to visit a destination. On the other hand, "push" factors such as the need to escape from daily routines, seek relaxation, and seek new experiences encourage middle-aged tourists to take vacations.

However, with the advent of the COVID-19 pandemic, middle-aged travelers' motivations have undergone a dramatic shift. Research by Santana (2020) shows that the dominant "push" factor is a concern for personal health and safety. Middle-aged tourists are becoming more careful in choosing destinations that have low levels of virus spread and strict health protocols. On the other hand, "pull" factors such as the possibility of visiting more remote or natural places to avoid crowds, as well as flexibility in travel planning, become more important in meeting their needs and preferences.

**Pull and Push Factor Elderly Travellers (42 – 70 years of age)**

According to Figure 6, the most compelling feature for elderly travelers is the appeal of Bandung Regency's tourism spots, such as natural beauty and cool air. These are attractive qualities for older travelers to visit Bandung Regency, with an average score of 4.24. The lowest pull factor, with an average score of 3.47, is the availability of transportation, mostly travelers using their transportation to reach their destinations in Bandung Regency.

The COVID-19 pandemic has brought significant changes in the preferences and behavior of senior travelers. Many of them now tend to prefer tourist destinations that offer clean and natural air. Research by Thompson et al. (2020) revealed that older tourists are more aware
of the importance of health and the environment during a pandemic, so they are more interested in staying away from crowds and looking for open places, such as mountains, beaches, and natural parks. The fresh air and natural environment are thought to help increase endurance and overall well-being. The concept of the importance of clean and natural air in travel also reflects the need to reduce the risk of exposure to viruses in crowded places. Older travelers may be more vulnerable to the serious effects of COVID-19, so they tend to be more careful in choosing safe destinations. Research by Kang et al. (2021) indicates that nature is a safe escape for elderly tourists amid a pandemic because it provides an opportunity to maintain social distancing and avoid crowds. This change is also having a positive impact on the tourism sector which focuses on the natural environment. Destinations that offer fresh air, scenic views, and nature activities are becoming more popular with older travelers. It can also encourage the development of sustainable tourism that prioritizes nature and environmental preservation.

Meanwhile, the following elements contribute to the attraction of elderly travelers to Bandung Regency:

Based on Figure 7, shows that the highest push factor in elderly travelers is visiting destinations in Bandung Regency to refresh themselves, namely by breathing fresh air, and enjoying natural, beautiful, and clean views, to eliminate boredom and fatigue from daily activities and routines, with an average score of 4.42. The lowest push factor is visiting destinations in Bandung Regency to meet new people, with an average score of 3.21. This shows that there is a change in behavior among elderly travelers during the COVID-19, whereas, before the pandemic, elderly travelers are more likely to spend time on individual tourism activities, need to feel freedom, and even choose risky activities as long as they can do. Elderly travelers are more satisfied doing activities related to hobbies, volunteer work, doing activities to keep themselves busy, and making new friends in their circle. The types and activities of leisure or tourism can be focused on activities that are preferred by the elderly group, such as shopping, city tours, visiting historical places, museums, heritage, eating at restaurants, watching television, listening to the radio, social activities, and related activities. Not to mention doing hobbies, and channeling...
talents related to crafts and arts (Main, 2015).

Before the COVID-19 pandemic, the behavior of older tourists tended to be dominated by a spirit of adventure, cultural exploration, and extensive social interaction. They often prefer to travel long distances, visit international destinations, and participate in various tourism activities such as group tours, art exhibitions, and local community meetings. According to research by Smith et al. (2019), motivational factors such as good health and free time after retirement play a role in encouraging older tourists to engage in such trips. However, with the outbreak of the COVID-19 pandemic, there has been a significant change in the behavior of older travelers. Research by Johnson & Chua (2020) reveals that the majority of elderly tourists have decreased interest in traveling long distances due to fears of the risk of infection. Many of them avoid crowded destinations and congregate in large groups. Instead, they tend to prefer local or regional travel which is safer and more controlled. In addition, the pandemic has also affected the social aspect of travel, with many senior travelers feeling uncomfortable with intense interactions and preferring to maintain physical distancing. Adaptation to the pandemic situation also seems to have influenced the activities taken by older tourists. According to research by Chen et al. (2021) elderly tourists tend to prefer individual activities such as walking in nature, cycling, or having picnics, which allow them to maintain social distance while still enjoying time outside the home.

Then the author tested the two variables, namely the push factor and the pull factor using the Mann-Whitney test, which aims to find out whether there is a difference between the two variables. Here are the results:

<table>
<thead>
<tr>
<th>Push and Pull Factor, Elderly Traveller</th>
<th>Mann-Whitney U</th>
<th>Wilcoxon W</th>
<th>Z</th>
<th>Asymp. Sig. (2-tailed)</th>
<th>Exact Sig. [2*(1-tailed Sig.)]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>28.500</td>
<td>83.500</td>
<td>-1.022</td>
<td>.307</td>
<td>.315*</td>
</tr>
</tbody>
</table>

Sources: Data Processes SPSS, 2022.

According to the Mann-Whitney test results in Table 6, the Asymp Sig value is 0.307, and the value is greater than 0.05. If the Asymp value, Sig > 0.05, the hypothesis is rejected according to the provisions of the decision on the use of the Mann-Whitney test. The study hypothesizes that there is no substantial difference between the two groupings of data, namely the push component and the pull factor. As a consequence of the test results, the hypothesis is rejected, indicating that there is a considerable difference between the push and pull factors for elderly travelers in Bandung Regency.

**Conclusion**

This study produced several findings consisting of traveler behavior based on 1) demographic profile and 2) behavior based on push and pull factors in traveling. The demographic profile of travelers is divided into three categories (millennials, middle-
aged, and elderly travelers) and consists of the following: area of origin, occupation, gender, education, and income. The results showed that the majority of millenial tourists visiting Bandung Regency were female, with the highest level of education being senior high schools, the majority of whom were students, and most of them came from the Bandung City Region and its surroundings, with the majority of their monthly income of Rp. 1,500,000. The majority of middle-aged travelers are female, with the majority having college degrees and the majority working as private employees with monthly wages ranging from IDR 4,000,000 to 6,000,000. Most of Middle-aged come from the Bandung area. The majority of elderly travelers are female, with the majority having a postgraduate degree. Most elderly travelers then work as teachers, earning a monthly income of more than 10,000,000. As with other age groups, elderly travelers originate in Bandung and its surroundings.

Changes in traveler behavior based on push and pull factors revealed that the millennial age group maintained the same motivation before and during COVID-19, notably they continued to travel to relax and eradicate boredom, fatigue, and tiredness from their daily routine. Similarly, there is no difference in behavior between the groups in middle age before and during the outbreak. Middle age is a productive stage of life focused on career development. Their main activities are guidance on understanding natural, cultural, and behavioral insights and fostering intimacy and relaxation together outside the daily busyness of activities carried out while traveling, which is strongly influenced by hobbies or family hobbies. The same behavior is carried out during the pandemic. Tourism activities are carried out to find new things or get out of boredom. Before and during the outbreak, there has been a change in how elderly traveler spend their tourism activity. Before COVID-19, elderly travelers were more likely to spend time on their tourism activities, such as shopping, city tours, visiting historical places, museums, heritage, eating at restaurants, social activities, and talent distribution related to the arts. During the COVID-19, elderly tourists chose to travel to enjoy the attractiveness of the destinations, rather than to spend time on their tourism activities. Destination managers can use the findings of this study to improve the destination strategy to get more tourists based on behavioral changes, especially in managing elderly travelers. Furthermore, the government hopes to support the regulation to put high standards in safety and health concerns in tourism activity.

Notes on Contributors

Vany Octaviany is Full-time Lecturer in Hospitality Study Program in Faculty of Applied Science, Telkom University Bandung. Her Research Interest Topic included Marketing of Tourism, Tourism Management and Travel Management.

Ersy Ervina is Full-time Lecturer in Hospitality Study Program in Faculty of Applied Science, Telkom University Bandung. Her research interest topics included tourism and hospitality management, tourism marketing, visitor management and tourism industry risk and Disaster.

References


Ali Mubarok, Sahroni, S. (2021). Mann Whitney Test in Comparing the Students’ Consultation Results of
Entrepreneurial Practice Between Male and Female Lecturers in Economic Faculty of Pamulang University. Procuratio: Jurnal Ilmiah Manajemen Procuratio, 9(1), 9–15.
http://www.amazon.com/dp/B00XKGSJJ
https://doi.org/10.1108/JIMA-03-2016-0016
https://doi.org/10.1002/pa.2179
https://doi.org/10.1108/JTF-12-2017-0058
https://doi.org/10.20473/amnt.v6i3.2022.298-305
https://doi.org/10.1007/s12525-015-0196-8
Hassan, L. M., & Amelung, B. (2020). The role of habit in sustainable tourism: A


