

Public Perception about Virtual Tourism for Conservation Area Promotion

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Abstract

The Covid-19 pandemic has drastically reduced the number of tourist visits. The tourism management uses this condition to stabilize the economy by holding virtual tours, both as tourism programs and promotion of tourist destinations. Public perceptions of virtual tourism in tourism management and promotion illustrate how much improvement is needed in tourism management. This study aims to identify the characteristics of respondents, their perceptions of virtual tourism, and the relationship between respondents' characteristics and their perceptions of virtual tourism. The data collection method used is an online survey. The sampling technique applied was non-probability sampling with the convenience sampling method and used quantitative descriptive analysis. This research shows that most respondents understand well the meaning of virtual tourism, virtual tourism as alternative tourism, and the importance of virtual tourism in the management and promotion of conservation areas. Respondents' perceptions tend to consider virtual tourism important for the promotion of conservation areas so that respondents' perceptions are in line with expectations.

Keywords: *Characteristics, Perception, Promotion, Virtual tourism*



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INTRODUCTION

The development of digital technology has changed the role of the tourism industry into a new form, namely virtual tourism (Voronkova, 2018). The existence of virtual tourism is important in the tourism industry because virtual tourism is a valuable asset in tourism marketing through promotional activities (Rainoldi et al., 2018). The existence of virtual tourism is very important in the conditions of the Covid-19 pandemic. The Covid-19 pandemic has drastically reduced the number of tourist visits (Sugihamretha, 2020). This condition is used by the tourism management to stabilize the economy by holding virtual tours, both as tourism programs and promotion of tourist destinations (Chirisa, 2020).

People's perceptions of traveling can determine promotional strategies and describe how much support the community provides for the success of tourism development (Brahmantyo et al., 2017; Dwiputra, 2013; Matulesy et al., 2018; Nisa et al., 2014). The perception of tourists and the

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public regarding tourist areas has been widely studied (Matulesy et al., 2018; Nisa et al., 2014; Pauwah et al., 2013), but the public's perception of virtual tourism has not been studied.

The promotion of ecotourism in Indonesia's conservation areas has not been optimal, both to increase visits and community environmental awareness (Astutik & Najib, 2017). One of the promotions describes how much information related to virtual tours can be received by certain community characteristics (Davaki, 2016). The public's perception of virtual tourism as alternative tourism can describe how big the tendency of certain community characteristics is in traveling during the Covid-19 pandemic (Amriani et al., 2015). Public perceptions of the importance of virtual tourism in tourism management and promotion illustrate how much improvement is needed in tourism management (Omar et al., 2014) and the determination of appropriate promotional strategies for certain community characteristics (Siregar, 2018). Therefore, this study answers the **questions:** 1) What are the characteristics of the respondents?; 2) What are their perceptions of virtual tourism?; and 3) What is the relationship between respondents' characteristics and their perceptions of virtual tourism?.

LITERATURE REVIEW

Virtual Tourism as Promotion Tool

Virtual is a modification of the real world. Like the real world, virtuality is also interpreted in various forms, such as aspects of reality that are ideal and real or as if real (virtual). Virtual is also conceptualized as something that is contrary to "actual" but not completely opposed to "real". Virtual can be said to be real, for example, between virtual identity and real identity (Lehdonvirta, 2010). A person has not only one "real" identity, but many identities, depending on whom they are dealing with (personal or group). In the virtual world, a person can duplicate their identity, so the virtual world is easier than the physical world (Girvan, 2018). A more general definition of virtual is virtual in a philosophical style of expression: "unreal but pseudo-real" (Novak, 2017).

Virtual tourism is a web presence that reviews sound, text, and images of data in the physical world that allows tourists to get an indirect travel experience (Yeganegi, 2020). A lot of research related to virtual tourism has been carried out in Indonesia. Some of them researched Virtual Reality (VR) as a tourism promotion tool (Sukoco, 2004), tourism promotion applications (Ningrum & Kuswardani, 2017), 360o videos (Thomas et al., 2018), videos on social media (Fahrudin et al., 2020), and animation on a video compact disc (Setiadi, 2015). Research related to virtual tourism is carried out to optimize promotional activities for a tourist destination so that it is related to the community or potential visitors (Respatiningsih & Kurniawan, 2020; Wolah, 2016). However, the diversity of research subjects makes the results of these studies irrelevant for certain community characteristics. Therefore, research is needed on the perception of the Indonesian people in general regarding virtual tourism for promotion.

Socio-demographic Characteristics

Community characteristics can be viewed from socio-demographic characteristics (Dwiputra, 2013). Socio-demographic characteristics try to answer the question "who wants what". The division based on these characteristics is most often done for the purposes of tourism analysis, planning, and marketing because it is very clearly defined and relatively easy to divide. Socio-demographic characteristics include gender, age, marital status, education level, occupation, social class, family size, or the number of family members and others elaborated on these characteristics (Tunjungsari, 2018). Socio-demographic characteristics also relate to one another indirectly. For example, a person's education level with his occupation and income level, as well as age with marital status and family size. The division of tourists based on socio-demographic characteristics is most clearly related to their travel patterns. Gender and age group, for example, relate to the

choice of the type of tourism undertaken. The type of person's work and type of family will affect the free time that person has, and furthermore on his "ability" to travel (Jayadi et al., 2017).

Public Perception

Perception is the process of human sense selecting, organizing, and interpreting stimuli obtained from their environment (Fuady et al., 2017; Hanafi et al., 2015; Hartono, 2016; Qiong, 2017). Based on general terminology, perception is defined in the Longman Dictionary of Contemporary English as the way a person thinks about a thing and/or idea about an object, the way a person perceives an object with his senses, and a person's natural ability to perceive or pay attention to an object quickly. Perception is also influenced by attention, stimulus, personal factors, and situational factor (Pinaryo, 2016). Based on these definitions, perception is the way humans perceive, interpret, conclude, and react to an object obtained through the process of sensing, selecting, organizing, and interpreting objects that are influenced by internal and external factors.

There are three main factors that influence people's perceptions, namely the perceptual actor (individual), the target or object (stimulus), and the situation (Robbins & Judge, 2015). These factors can be grouped into two, namely internal factors (functional) and external factors (structural). Internal factors that influence perception include physical factors, knowledge, interests, needs, and one's mood, while external factors that influence perception are stimuli and situations (Durmaz & Dıyabakirlioğlu, 2011; Pinaryo, 2016). This proves that individuals with different experiences and environmental situations have different perceptions, especially perceptions of virtual tourism. Differences in people's perceptions affect their needs and interests (preferences) for virtual tourism (Backman & McGuire, 2011). External factors that influence perception are stimulus and situation (Durmaz & Dıyabakirlioğlu, 2011; Pinaryo, 2016). Stimulus is a variety of stimuli given to individuals. In virtual tourism, there are at least two variables that are taken into account, namely the type of virtual tourism activity and the form of virtual tourism media (Yeganegi, 2020). The forms of virtual tourism media include text, sound, visual, and video (visual, sound, and movement). Situations that affect individual perceptions include time, atmosphere, and the place where the stimulus is given. Therefore, each individual gives meaning to the stimulus differently even though the object is the same. The way an individual sees a situation is often more important than the situation itself (Pinaryo, 2016).

RESEARCH METHOD

This research was conducted online in February 2021 using research instruments in Google forms and several social media, such as Whatsapp, Line, Instagram, Facebook, and Telegram. The data collection method used was an online survey. Online surveys are usually created as web forms with a database to store answers. Online surveys are becoming the preferred way to collect written perceptions from respondents (Harlow, 2010; Vaske, 2011). Respondents are Indonesians who have an active email account and are aged 18-65 years. To represent the Indonesian population, the number of respondents involved in the study must be more than 385 people with a 95% confidence level and 5% margin of error, according to Qualtrics.com. The deadline for filling out the online survey is 30 days from the first time the online survey link is shared. The sampling technique applied was non-probability sampling with the convenience sampling method. This method was chosen based on accessibility, convenience, proximity, and the respondent's relationship with the researcher (Wardhani et al., 2016). Researchers spread online survey links that respondents can fill out via social media.

The types of data used in this study are primary and secondary data. The primary data sources collected were respondent characteristics and perceptions, while the secondary data sources collected were previous literature related to virtual tourism, community characteristics, and perceptions, as described in Table 1.

Table 1. Type of collected data

| No | Collected Data | Information |
|----|---|---|
| 1 | Socio-Demography Characteristics | Gender, Age group, Last education, Place of Residence, Marital status, Main occupation, Income/month |
| 2 | Public Perception | The meaning of virtual tourism, virtual tourism as alternative tourism, the importance of virtual tourism in tourism management and promotion |

This research used quantitative descriptive analysis. Quantitative descriptive research is research that provides an in-depth description of the current situation and is a preliminary study that can be used as information for descriptive research (Nurdin & Hartati, 2019). In quantitative research, the data analysis technique in this quantitative study uses descriptive statistics. Descriptive statistics are statistics used to analyze data by describing or describing the data that has been collected as it is without intending to make conclusions that apply to the public or generalizations (Siyoto & Sodik, 2015). Descriptive statistics can also be used to describe sample data and do not want to make conclusions that apply to the population from which the sample is drawn.

The quantitative method involves frequency analysis and cross-tabulation on the SPSS application, while the research results will be described descriptively. To identify the characteristics of the respondents, an analysis was conducted using the frequency method to see how big the percentage of the number of respondents was on certain characteristics. Then look at the representativeness of the sample characteristic data (respondents) with the population (Indonesian people). If the characteristic data is representative, it means that the research conclusions can apply to the population. To identify respondents' perceptions, an analysis was conducted using the frequency method and cross-tabulation. The frequency method was used to describe the percentage of their perceptions related to virtual tourism. If the percentage of their perception is dominant in answering "agree", it means that the respondent has a good perception regarding virtual tourism. The cross-tabulation method was used to see the relationship between respondents' perceptions and their characteristics. The significance of the relationship between respondents' perceptions is seen based on the chi-square value and confidence interval. The value of chi-square <0.05 means that it has a significant effect, while the value of chi-square <0.01 means that it has a very significant effect. The confidence interval applied is 95%, so it is believed that 95% of the samples taken will contain the original parameter values. The results of the study can show the perception of certain community characteristics related to virtual tours for the promotion of conservation areas.

FINDINGS AND DISCUSSION

Respondents Characteristics

The socio-demographic characteristics of the community are seen by gender, age group, last education, place of residence, main occupation, marital status, income/month. Research respondents who filled out the online survey were 623 people with various characteristics. As many as 61% of research respondents are female. Most of the research respondents were in the 18-25 year age class (77%). The most recent senior high school education is owned by the respondents, which is 70%. Most of the respondents' main occupations are students (70,31%). The majority of respondents' marital status is unmarried, which is 80%. Most respondents' income/month is in the income range <1.5 million per month (61%).

Table 1. Socio-demographic data of research respondents

| Characteristics | Number | Percentage |
|---------------------------|--------|------------|
| Gender | | |
| Male | 242 | 39% |
| Female | 381 | 61% |
| Age Group | | |
| 18 – 25 years | 482 | 77% |
| 26 – 35 years | 42 | 7% |
| 36 – 45 years | 55 | 9% |
| 46 – 65 years | 44 | 7% |
| Last Education | | |
| Junior High School | 6 | 1% |
| Senior High School | 435 | 70% |
| Vocational Education | 17 | 3% |
| Bachelor | 131 | 20% |
| Magister | 29 | 5% |
| Doctorate | 5 | 1% |
| Marital Status | | |
| Not married yet | 498 | 80% |
| Married | 121 | 19% |
| Widower/ Widow | 4 | 1% |
| Income per month | | |
| < 1,5 million rupiahs | 381 | 61% |
| 1,5 – 2,5 million rupiahs | 95 | 15% |
| 2,5 – 3,5 million rupiahs | 28 | 4% |
| > 3,5 million rupiahs | 119 | 19% |

Based on Badan Pusat Statistik Indonesia (2021), the majority of Indonesia's population is male, age group 46-65 years old, last education is high school, residence in West Java, marital status is married, and income/month <1.5 million rupiahs. Therefore, the characteristics of respondents who represent the Indonesian population are only high school education and income/month. The un-representation of the data is caused by several factors, namely the tendency of respondents' activities, internet network accessibility, and sampling techniques.

The tendency of respondents' activities to influence their decision-making (Maharani, 2014). The relatively large number of female respondents in this study was due to women's low physical activity in their spare time; respondents had a greater chance of filling out online surveys (Al-Sobayel et al., 2015). The Indonesian population in the adolescent age group has the highest percentage of internet users, that is in the 15-19 year age group. The second rank also includes the youth age group (20-24 years) (Haryanto 2019). Therefore, many respondents aged 18-25 years who fill out online surveys are due to their high frequency of internet use. Research respondents with a senior high school education are more because when they study high school, they are used to accessing the internet to do assignments, find information, and fill out surveys (Halim, 2015). Most respondents' marital status is unmarried because unmarried respondents have more free time for themselves, while married respondents spend a lot of time with their families (Anjar et al., 2018). Respondents with income <1.5 million rupiahs per month fill out more online surveys

because the internet expense is cheap and can be accessed by any group (Isdhana, 2011). The number of Indonesian, whose majority income is <1.5 million rupiahs per month, offer many respondents in the same income range to fill out online surveys.

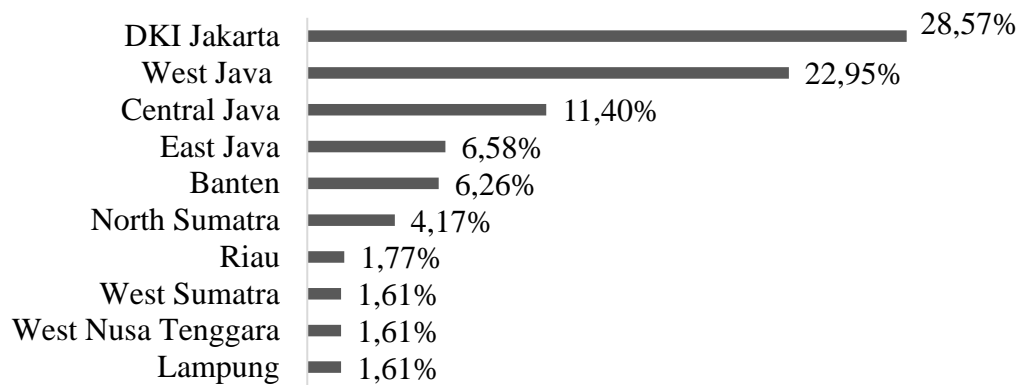


Figure 1 The ten percentages where the most respondents live

The accessibility of internet networks in Indonesia varies in each region (Hadiyat, 2014). Urban communities have better internet infrastructure and communication services than people in remote areas (Subiakto, 2013). Therefore, the number of respondents is influenced by the accessibility of the internet network in their respective areas. Most of the research respondents live in DKI Jakarta (28.57%) (Figure 1). Internet network infrastructure in big cities like Jakarta is better because of the development of education, economy, policies, and awareness of the importance of information technology (Putra, 2009). The number of respondents living in DKI Jakarta does not represent the majority of the Indonesian population living in West Java. The majority of the population of West Java lives in district areas (BPS Jawa Barat, 2021), so the internet network is not as good as in the city.

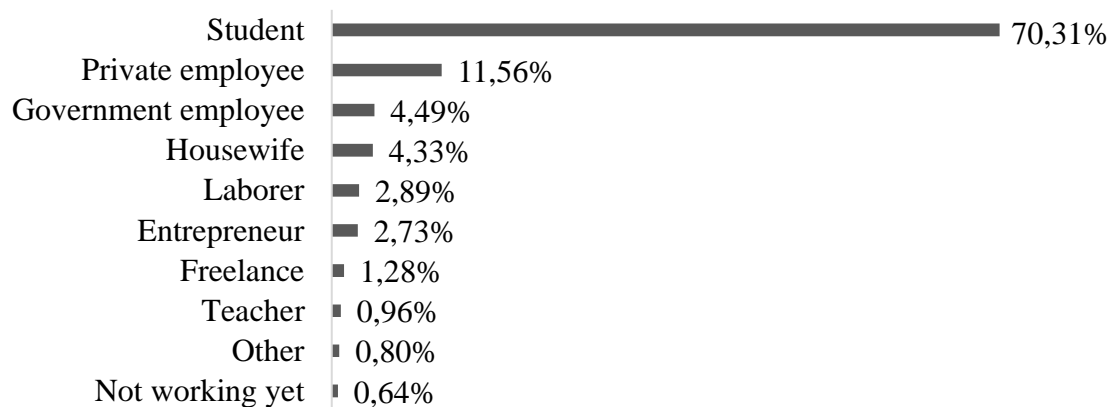


Figure 2 Percentage of respondents by the main occupation

Most of the research respondents were students (70.31%) (Figure 2). The dominant activity of the students is studying and seeking information. Searching for information to fulfill assignments from their school or campus is done by accessing the internet so that students are familiar with

online surveys (Ekayana, 2011). The number of respondents in the age group 18-25 years (teenagers) and is students is influenced by the method of distributing questionnaires. In addition, respondents who have the status of students prove that there is a feeling of the same fate so that respondents feel empathy to help (Astuti & Hartati, 2013).

Public Perception

Based on data analysis, the perception of research respondents is good about virtual tourism. As many as 74.70% of respondents know the meaning of virtual tourism, 87.50% agree that virtual tourism is important in managing tourist destinations, and 95.80% of respondents agree that virtual tourism is important in the promotion of tourist destinations (Table 3). It is proven that the majority of research respondents support the promotion of conservation areas by using virtual tourism (Koranti et al., 2017; Setiawan, 2017).

Table 2. Respondents' perceptions and the characteristics that influence them

| No | Statement | Percentage of answers | | | Meet characteristics |
|----|---|-----------------------|--------|---------------|----------------------|
| | | Disagree | Doubt | Agree | |
| | Perception: Knowledge | | | | |
| 1 | I know the meaning of virtual tourism | 4.80% | 20.50% | 74.70% | G, AG, LE, MI |
| 2 | Virtual tourism is one of the alternative tours during the Covid-19 pandemic due to limited mobility in traveling | 3.80% | 8.70% | 87.50% | G |
| 3 | In my opinion, virtual tourism is important in managing tourist destinations | 2.10% | 11.20% | 86.70% | G |
| 4 | In my opinion, virtual tourism is important in the promotion of tourist destinations | 0.30% | 3.90% | 95.80% | G |

G (Gender), AG (Age Group), LE (Last Education), R (Residence), MS (Marital Status), MO (Main Occupation), MI (Monthly Income)

In the first statement about the meaning of virtual tourism, the characteristics that influence respondents' perceptions are gender, age group, last education, and monthly income. Respondents who know the most about the meaning of virtual tourism are female respondents, aged 18-25 years, their last education is high school, and monthly income <1.5 million rupiahs. Women know more about the meaning of virtual tourism (65.70%) because teenage girls tend to have more free time, so they often spend their free time learning new things (Davaki, 2016). Respondents in the 18-25 year age group know more about the meaning of virtual tourism (53.30%) due to the high use of the internet by teenagers to access information about virtual tourism (Haryanto 2019). Respondents with a high school education (72.40%) and income <1.5 million rupiahs per month (62.30%) know more about the meaning of virtual tourism (72.40%) because the majority of them are still students (not the workforce), so they often access information via the internet to study (Halim, 2015).

In the second statement about virtual tourism as alternative tourism, the characteristics that influence respondents' perceptions are gender. The respondents who most agreed that virtual tourism was alternative tourism during the Covid-19 pandemic were female respondents. Women tend to need protection and physical conditions are not as strong as men, so as many as 63.80% of female respondents agree that virtual tourism can be alternative tourism during the Covid-19 pandemic (Amriani et al., 2015).

In the third statement about the importance of virtual tourism in management, the characteristic that influences the respondent's perception is gender. Respondents who most agree that virtual tourism is important in tourism management are female respondents. Women tend to need better accommodation services than men, so they demand a lot of tourism management to prioritize safety, comfort, and affordability (Omar et al., 2014).

In the fourth statement about the importance of virtual tourism in promotion, the characteristic that influences the respondent's perception is gender. Respondents who most agree that virtual tourism is important in tourism promotion are female respondents. Women tend to seek more detailed information related to tourist destinations (travel costs, lodging, food, and travel routes) than men (Xie et al., 2006). This trend affects their answers in online surveys so that female respondents have better knowledge about tourism than men.

Based on data analysis, respondents' perceptions are good regarding the meaning of virtual tourism, virtual tourism as alternative tourism, the importance of virtual tourism in the management and promotion of the destinations. Even so, respondents' perceptions regarding the meaning of virtual tourism are lower than other perceptions (74.70%). As many as 20.50% of respondents are doubtful about their perception regarding the meaning of virtual tourism. The opposite happened to respondents' perceptions regarding the importance of virtual tourism in tourism promotion which showed the best perception compared to other perceptions (95.80%). Factors that influence the respondent's perception are related internal factors (physical, knowledge, interest, needs, and one's mood) and external factors (stimulus and situation) (Durmaz & Dıyarbakırlıoğlu, 2011; Pinaryo, 2016).

The respondent's characteristic that most influenced their perception of virtual tourism was gender. Biological different parts of the brain in terms of remembering, feeling emotions, recognizing faces, solving problems, and making decisions (Anwar et al., 2019). Women tend to be able to do many things at the same time (multitasking) because the corpus callosum brain is thicker than men. The Corpus callosum helps humans balance the right and left brain (Suyadi, 2018). Therefore, women have easy access to information from the internet, even though they are busy. Based on Kuswarno's research (2015), most internet users are men (51.50%), so men should have a higher chance of accessing information. The perception of male respondents towards virtual tourism is also influenced by the function of the corpus callosum in their brain. Men tend to have a thinner corpus callosum than women making it more difficult for them to multi-task. Even so, this condition is also beneficial for men because they can be easy to focus on achieving certain goals (Suyadi, 2018).

Male and female perceptions of virtual tourism can be used to determine a promotional approach that is suitable for both male and female customers. The tendency of men who access the internet a lot and have a high level of focus can be used by promoters to advertise their products on social media that are most attractive to male customers. The tendency of women who are able to multi-task with a better level of perception regarding virtual tourism proves that to target female customers, promoters can use various types of social media.

CONCLUSION

The socio-demographic characteristics of respondents that do not yet represent the Indonesian population are the ratio of gender, age group, marital status, and main occupation. Non-representation of the data is caused by several factors; those are the tendency of respondents' activities and the accessibility of the internet network. Most respondents understand well the meaning of virtual tourism, virtual tourism as alternative tourism, and the importance of virtual tourism in the management and promotion of conservation areas. Respondents' perceptions tend to consider virtual tourism important for the promotion of conservation areas so that respondents' perceptions are in line with expectations.

LIMITATION & FURTHER RESEARCH

This research is expected to provide information related to respondents' perceptions that can be used as input in the planning process for the promotion of conservation areas. In addition, this research is expected to be a source of information for institutions or agencies that will promote conservation areas with virtual tourism. Although useful, some limitations were found in this study; those are the accessibility of the internet network in filling out online surveys and the application of the convenience sampling method affecting the percentage of research respondents' characteristics. The implication of this research is that it can open up new opportunities for conservation area managers to develop their tourism promotions, so they are right on target. Therefore, it is necessary to map the target market in accordance with the natural tourist attractions offered and the form of virtual tourism that is in accordance with the characteristics of potential tourists.

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