

## Visitors Perception to the Management Of Mahawu Mountain Tourism Attraction in Tomohon City

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Article History	Abstract
Accepted: 07 June 2024 Revised: 15 June 2024 Published: 30 June 2024	<p><i>Tomohon is a city located in North Sulawesi Province, which is unique in that it has no ocean but is flanked by two volcanic mountains, Mount Lokon and Mahawu Mount. Both mountains are still active, but are considered to provide fertility for agriculture and plantations for local residents. Mahawu Mount has been designated as a special interest tourist attraction, where infrastructure and facilities have been arranged by the local government. However, the availability of existing facilities does not guarantee good management of the area, there are still many things that need attention. The purpose of this study was to examine visitor perceptions of the management of Mahawu Mount tourist attraction facilities in Tomohon City. This research method uses a survey method conducted on 100 respondents who visit tourist sites. The research instruments used were questionnaires and observations. The Likert scale is used to categorize each question as well as the use of score interpretation to facilitate answers to respondents' assessments. The analysis used is descriptive using tables and percentages.</i></p> <p><b>Keywords: Management, Mahawu Mount, Tourism Attraction, Tomohon</b></p>



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### INTRODUCTION

Tourism has now become Indonesia's prima donna to bring in foreign exchange, in improving the welfare of the people. The availability of potential natural resources and supported by a diverse social and cultural environment is the main capital for the development of tourism in Indonesia. Especially for natural resources, the fact cannot be denied that Indonesia has ± 13,600 islands, thus placing marine tourism as the main capital, and a magnet for many foreign tourists to visit this country. To the end of 2017, tourist interest is more interested in marine tourism as the main factor of coming to Indonesia, the reason is because in marine tourism all attraction product packages can be diversified and developed.

Specifically for the development and management of volcanic / geopark areas as an alternative tourist attraction, there are several things that must be considered, among others: (1) Security, this factor is very required to be available in tourist areas that prioritize volcanic attractions, a basic example is the access road that will be traversed, must be safe, warning signs are available, for certain sites should not be approached, do not litter and so on. (2) Tour guides, this factor is also absolutely provided in volcanic areas, tour guides not only deliver tourists, but they must also master the existence of these locations ranging from alternative roads when danger occurs, the location of evacuation routes and even master scientifically; where they are able to explain the geological aspects of the area. (3) Coordination of management, usually the management of tourism potential is not only managed by the tourism sector but also involves other sectors such as the geological environment and even forestry. The function of tourism is only in attraction-based management while other sectors are supporting that must be available when the potential will be used as a volcanic area. (Davis, 2013 and Wang, 2014).

In addition to these factors, the pattern of development and management approach should also pay attention to elements such as (1) The physical spatial approach where the tradition of geographic land use, development strategies based on planning through spatial principles. (2) The community approach, which emphasizes the importance of maximum involvement of local communities in the process of tourism development. And (3) Sustainable approach, sustainable approach and concerned about the long future as well as the resources and the effects of economic development on the environment that may cause cultural and social disturbances that solidify patterns of life and individual lifestyles. (Page, 1995 in Sukarsa, 1999: 60-62). In many areas the availability and organization of attractions is of little concern.

The concept of tourism development can be interpreted as a process of change that will be carried out by humans in a planned manner so that a certain tourism condition from not yet organized, and directed to a certain tourism condition that is better or more desirable. (Sunaryo, 2013). Furthermore, Amerta, (2017), states that in tourism development is considered a development process carried out by the community through clear plans and directions, to achieve better than before. To achieve optimal tourism development goals, tourism experts are constantly trying to find and explore to find out the meaning of goals and strategies to achieve tourism conditions that are considered better and more valuable. (Astawa. et al (2017) & Perdue. et al, 1990).

Paradigm, intellectuals have understood as a way of looking at oneself and the environment that will influence thinking acting and behaving on a particular phenomenon. (Crompton, & Mc Kay, 1997; Buhalis, 1998). On the other side of the meaning boundary, the development paradigm can also mean a set of assumptions, concepts, values, and strategies implemented to see and anticipate the phenomenon of community reality in the same perspective, especially in certain disciplines. From the understanding of the development paradigm, when associated with tourism development, the tourism development paradigm

can be interpreted as a set of assumptions, concepts, values, and practices of the strategies adopted in tourism development. In other words, the tourism development paradigm is a framework or model of thought used to underline the overall planning of tourism development in a society, within a certain period of time. (Suryasa, 2015). The implementation model and planning of development strategies in the field of tourism also never escape the monitoring and evaluation of observers and thinkers of tourism development. (Brohman, 1996). In relation to the development and management of tourist attractions in the end, a clear concept is needed which is not only in the arrangement, but also has a sustainable value. The involvement of stake holders, including the community and tourists or visitors, is needed to evaluate the extent to which the management of the tourist attraction provides long-term benefits. (Towoliu, & Takaendengan, 2015; Towoliu, et al. 2018).

Tomohon is a city that has its own unique city in North Sulawesi Province, located in the mountains, does not have an ocean area and is guarded adjacent to Mount Lokon and Mahawu Mount. Especially the Mahawu Mount area has now been organized, by the government by providing roads, lodging and various other equipment for the convenience of tourists or visitors to the location. However, there are several writings that highlight the empowerment of the tourist attraction of Mahawu Mount, among others: Sondakh, (2016) which examines the problems of service, security and attractiveness affecting the interest of tourists visiting the natural attractions of Mahawu Mount. While Kalangi, et. al, (2016), examines the effect of infrastructure management layout on the tourist attraction of Mahawu Mount in Tomohon City. The results are also the same that the variable layout of facilities and infrastructure affects the tourist attraction of Mahawu Mount. Of the two studies have shown that each independent good variable stated by the researchers affects both interest and the tourist attraction. This means that the free variable gives a positive emphasis on the development of the tourist attraction of Mahawu Mount. Then the two studies used quantitative descriptive methods.

The tourist attraction of Mahawu Mount, from the results of researchers' observations, found that there was already an arrangement, where there were trekking trails, lodging and various other complete amenities for the convenience of tourists or visitors. However, it has not been maximally managed properly. Several things were found, that this management was not optimal, which is estimated in the long term when conditions are left it is not impossible that this tourist attraction will be abandoned. A simple example can be seen when first entering the area, the management of the guard post is not well organized, the registration of entrance tickets is still traditional, the lodging house is not maintained. Then public facilities for the benefit of tourists are so dirty, trekking trails and roads leading to the top of the mountain crater are damaged, on critical paths there are no signs (signs) indicating that tourists should be careful when passing through the path because the danger is not listed. In essence, there are still many things and far from expectations, when the place has been declared a tourist attraction. At the time of observation with the same conditions there

were several buses (tourist) groups that were at that location. The question becomes what happens to this tourist attraction when the conditions of existence are not managed properly, what is the perception of tourists when they see the management of tourist attractions like this. From these problems, the purpose is to examine visitor perceptions of the facilities management of the tourist attraction of Mahawu Mount.

## **RESEARCH METHOD**

This research approach is qualitative supported by quantitative data. Data collection techniques using survey methods conducted on 100 respondents who visited tourist sites. As for determining the sample size (respondents) there is no firm size about the sample size required for a study of the available population. However, respondents in this study are required to meet one of the following criteria (a) have knowledge of tourism, (b) have knowledge of the general condition of the location/research area in the Mahawu Mount area, and (c) have in-depth knowledge of local community life including customs, culture and are directly involved in it. Antara (2009) states that the sample size in tourism research is determined by information considerations.

To limit the scope of the research problem, the operational variables in this study can be explained as follows: Attraction management in this study is the institutional managerial ability in exploring and designing all the potential of the object in the form of uniqueness, safety, comfort. While visitor perceptions are tourist expectations of all availability owned by tourist attractions. The data collection technique using purposive sampling method, with consideration; that the respondent has knowledge about tourism, understands the general condition of the location/research area and has in-depth knowledge about the social culture of the local community. The data analysis method used emphasizes the use of a qualitative approach with interpretative descriptive methods, with the measuring instrument used to analyze the data, namely the Likert scale; namely by weighting the score as follows: strongly agree (5), agree 4, neutral 3, disagree 2 and strongly disagree 1 (Riduwan, 2009). The description of the research results was carried out with a percentage table

## **RESULT AND DISCUSSION**

Mahawu Mount has a crater depth of 140 meters and has an altitude of 1,311 m above sea level. Geographically, this is a stratovolcano volcano, located in the east of Lokon Mount and Empung Mount volcanoes in North Sulawesi. Access to area tourists will be presented with views of horticultural plantations that are no less beautiful. The green color of vegetables combined with the brown color of fertile soil becomes a combination of stunning beauty. On the slopes of Mahawu, you can find settlements, forests, and also rice fields. In the surrounding area there are many honey birds which are endemic to Sulawesi. The local people do many activities at the foothills of Mahawu Mount, including working as farmers who grow various vegetables up to the middle of the mountain.



Figure 1. Mount of Mahawu crater that has dried up  
Source: research data

The following respondent data was taken by researchers using a survey method of 100 visitors who visited the Mahawu Mount tourist location. The distribution of respondents, with a percentage of men totaling 57% and women totaling 43% (Figure 2). From this data it can also be assumed that the interest in traveling to the mountains is almost balanced between men and women.

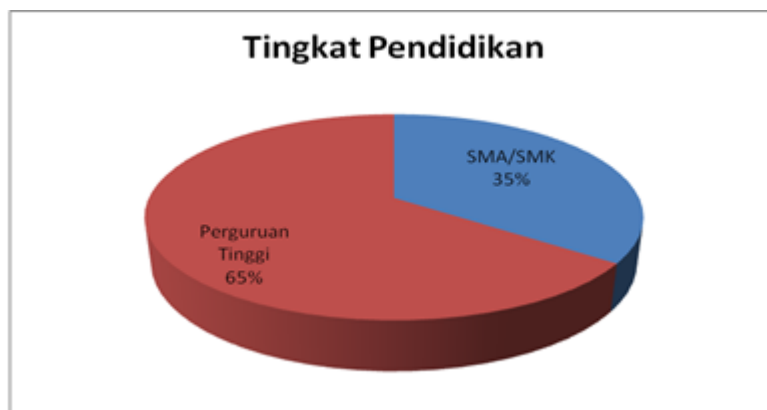


Figure 2. Pie Chart of Gender (Source: research data)

Meanwhile, the age composition shows the dominance of 15 to 20 years old, totaling 51%; 21 to 30 years old, totaling 18%; 31 to 40 years old, totaling 21%; and above 41 years old, totaling 10%. (Figure 3). The data shows that the age range of 15 to 20 years dominates interest in mountain tourism. Indeed, trekking tours to the mountains do require strong stamina so it is very natural that this tourism interest is so much dominated by young people.

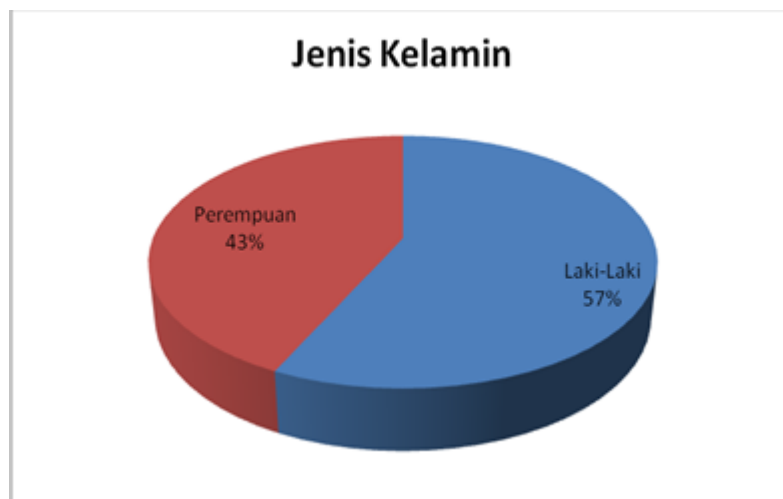


Figure 4. Education level

Source: research data

Here is 65% versus 35%. The 65% are dominated by those with a university education while the 35% have a high school education and the equivalent.

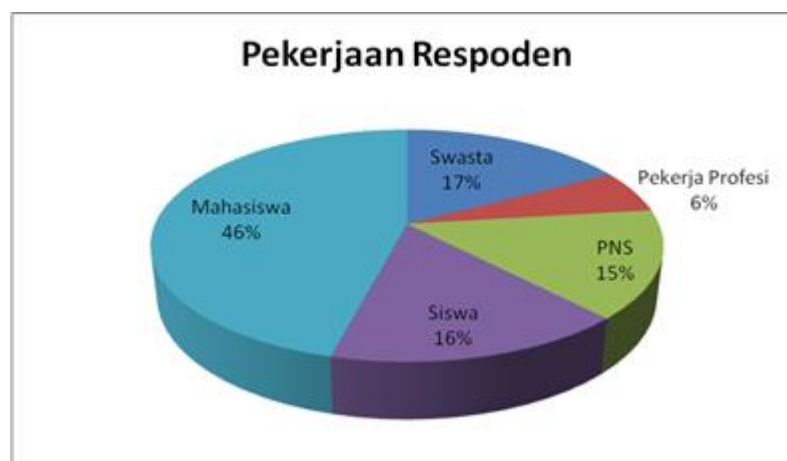


Figure 5: Type of Respondent's Occupation

Source: research data

Figure 5 shows the types of occupations of respondents who have an interest in mountain tourism. It is very clear that, who work as students 46%, private 17%, students 16%, civil servants, 15% and professional workers 6%. The data shows that mountain tourism is preferred by young people who work as students and students, or from young people. Figure 5.6 also shows evidence that some of the activities of young people in the location of Mahawu Mount.

Attraction management shows managerial ability in maximizing the tourism potential of Mahawu Mount, with sub-indicators namely the uniqueness of attractions, and accessibility and ambience (pointing to the condition of the situation around the tourist attraction). From the results of the questionnaire distributed to visitors who enjoy the tourist



attractions of Mahawu Mount, the results of their perceptions of the management of these tourist attractions are as follows:

Table 1. Availability of information on danger signs around the area

Remarks	Frequency	Percentages
Strongly Disagree	7	7.0
Disagree	35	35.0
Neutral	23	23.0
Agree	10	10.0
Strongly Agree	25	25.0
Total	100	100.0

Source: research data

The availability of information on danger signs around the area on Mahawu Mount, shows that there are several perceptions of respondents who consider it necessary not to provide information showing the availability of this information. Respondents who answered strongly agree 25%, agree 10%, hesitate (neutral) 23%, disagree 35%, and strongly disagree 7%. From the results of deepening the neutral respondents obtained the answer that generally they do not really understand the importance of such information in a volcanic area, while the answers of respondents who disagree, and strongly disagree with the existence of danger sign information are more due to, reducing, challenges in trekking, as well as too easy or pampering visitors in the area of the area. The implication refers to the management of mountain tourism that is safe for tourists, the manager needs to provide security and safety signs for visitors. Managers also need to educate visitors, considering that tours like this are very dangerous and there is no need to hesitate in setting safety operational standards for visitors.

Table 2. The surroundings of the crater are clean and comfortable.

Remarks	Frequency	Percentages
Strongly Disagree	11	11.0
Disagree	12	12.0
Neutral	33	33.0
Agree	15	15.0
Strongly Agree	29	29.0
Total	100	100.0

Source: research data

In the statement pointing to the need for the crater around the mountain to be organized cleanly and comfortably. Answers from respondents differed from one another: strongly agree 29%, agree 15%, neutral 33%, disagree 12% and strongly disagree 11%. From neutral answers it is understood that respondents are not too concerned about whether or not it is necessary around the crater arranged cleanly and comfortably for visitors, while from respondents who answered disagree and strongly disagree obtained the answer that the authenticity (originality) of the area will be lost when it is too clean and comfortable, they prefer the area to be left as it is. The implication for the manager is that the manager must prioritize cleanliness around the mountain crater because from observations it is also found that not only organic waste in this case grass and wood branches, but also non-organic waste

such as plastic is scattered around. It is also necessary for managers to provide certain warnings or signs to visitors to always maintain cleanliness.

Table 3. Information about tourist attractions that visitors need.

Remarks	Frequency	Percentages
Strongly Disagree	2	2.0
Disagree	11	11.0
Neutral	15	15.0
Agree	53	53.0
Strongly Agree	19	19.0
Total	100	100.0

Source: research data

In table 3. states the need for a variety of information in general about the state of tourist attractions. Respondents answered strongly agree 19%, agree 53%, neutral 15%, disagree 11% and strongly disagree 2%. From the results of a deeper examination of the neutral answer, it was found that they did not really think about whether or not the information was necessary, while respondents who disagreed and strongly disagreed stated that there was no need for detailed information on the condition of the location, they prioritized general information only. The implication is that managers need to provide specific notice or information on the condition of certain spots, so that visitors / tourists understand the details of the resources or soil minerals around the location.

Table 4. Safety factors for visitors are well organized

Remarks	Frequency	Percentages
Strongly Disagree	3	3.0
Disagree	14	14.0
Neutral	36	36.0
Agree	18	18.0
Strongly Agree	29	29.0
Total	100	100.0

Source: research data

The existence of safety factors for visitors is well regulated, in table 5.10 according to the respondents' answers, strongly agree 29%, agree 18%, neutral 36%, disagree 14% and strongly disagree. From the results of the deepening of respondents who answered neutral, they said that the current security at the Mahawu Mountain location was sufficient, while from the answers of respondents who disagreed and strongly disagreed they said that if the security factor was too well organized, the originality of the location would be lost, so it was no more than a public location and had no challenge to pass. Visitors are said to need to be challenged to visit the location. The implication should be that in the introduction of tourism products, managers must be able to create alternative trails that can divide certain spots into adventure, middle and leisurely tracking spots. So that mountaineering tourism products can reach all age segments.



Table 5. Access road to the crater is well organized

Remarks	Frequency	Percentages
Strongly Disagree	10	10.0
Disagree	31	31.0
Neutral	21	21.0
Agree	13	13.0
Strongly Agree	25	25.0
Total	100	100.0

Source: research data

In table 5, respondents were given a statement about the state of road access to the crater was well organized. Respondents' answers were: strongly agree 25%, agree 13%, neutral 21%, disagree 31% and strongly disagree 10%. In deepening the researcher's answer, respondents agreed on the importance of structuring the road to and around the mountain crater because the road in the area was already covered with grass and weeds. Respondents answered neutral because they did not really think about the state of the road. Meanwhile, respondents who answered disagree and strongly disagree, they gave an assessment that with too much arrangement, the authenticity and beauty of the mountain will be lost, as well as increasingly making it a public tourist attraction and too easy to visit. The implication is that the manager must maintain what has been done.

In table 6, the statement of the guard's readiness to secure the safety of visitors while at the location, the respondents' answers: strongly agree 18%, agree 4%, neutral 38%, disagree 27% and strongly disagree 13%.

Table 6. Guard readiness in securing visitors' safety

Remarks	Frequency	Percentages
Strongly Disagree	13	13.0
Disagree	27	27.0
Neutral	38	38.0
Agree	4	4.0
Strongly Agree	18	18.0
Total	100	100.0

Source: research data

From these answers, it shows a far difference in perception, with some agreeing and many disagreeing. From the results of the in-depth study of respondents who agreed, they explained that as a tourist location, there should already be guards who are prepared to secure the area when unwanted things happen to visitors. Meanwhile, respondents who disagree explain that it is not necessary to guard the area, just give signs or information about certain points that should not be approached or passed and when there are things that are dangerous such as the smell of marbles that exceed normal capacity must immediately go down or stay away from that location. The implication is that the manager does not fully have

to guard all points, but only at certain locations, but the most important thing is the need for signs indicating accident/disaster prone points.

Table 7. Well-organized entrance ticket management

Remarks	Frequency	Percentages
Strongly Disagree	10	10.0
Disagree	11	11.0
Neutral	17	17.0
Agree	44	44.0
Strongly Agree	18	18.0
Total	100	100.0

Source: research data

In table 7. a statement about the management of entrance tickets to the area is well organized, respondents answered strongly agree 18%, agree 44%, neutral 17%, disagree 11% and strongly disagree 10%. The results of the researcher's deepening, it was found that respondents who answered agreed because when they visited, they had to pay for the entrance ticket, while respondents who answered neutral according to them that the area was first regulated and then asked to pay. While respondents who answered disagree and strongly disagree, due to their first experience at the time of entry there was no officer, the second mentioned that there should have been a representative ticket. The implication shows that the management of entrance ticket management must be considered, wherever possible using tickets in the form of coupons, and no longer only manual by writing in a book, using entrance tickets makes it easier, also in terms of financial management data collection.

Table 8. Well-run lodging and Gazebo

Remarks	Frequency	Percentages
Strongly Disagree	11	11.0
Disagree	40	40.0
Neutral	24	24.0
Agree	21	21.0
Strongly Agree	4	4.0
Total	100	100.0

Source: research data

On the statement about well-managed lodges and rest stops, table 8, respondents answered: strongly agree 4%, agree 21%, neutral 24%, disagree 40% and strongly disagree 11%. It can be seen that respondents answered strongly agree and agree less than those who disagree. The results of the in-depth study of respondents who answered in the affirmative mentioned that there was a guesthouse, and the place to rest was good rather than in other places where there was no place to rest. Respondents who answered neutral provided information that whatever the manager provided was good or not, it did not matter what was important they had come. Meanwhile, respondents who agreed more clearly stated that it was a pity that facilities and infrastructure had been built why they were not managed properly, tending to waste funds, in the event that the building was built well. But it is not

functioned and maintained properly. Implications for managers to return to managing properly, organizing and functioning the various facilities that have been available properly.

Table 9. Cleanliness of public facilities such as well-organized bathrooms/toilets with good cleanliness

Remarks	Frequency	Percentages
Strongly Disagree	30	30.0
Disagree	38	38.0
Neutral	18	18.0
Agree	10	10.0
Strongly Agree	4	4.0
Total	100	100.0

Source: research data

On the statement of hygiene management of public facilities such as bathrooms and toilets are well organized and clean, visitors' answers are as in table 9, where they strongly agree 4%, agree 10%, neutral 18%, disagree 38% and strongly disagree 30%. In-depth research of the answers that agreed on the cleanliness of these facilities they mentioned; the important thing is that there is a place for such facilities, but they only saw it and never used these facilities when visiting. Respondents who were undecided or neutral also answered that the important thing is that the facilities will be managed properly by the management. Meanwhile, respondents who answered did not approve, due more to those who visited the location / tourist attraction and had used the facility and they found that the public facilities were not well supported by cleanliness. The implication is that the management of public facilities is not well managed, referring to environmental sanitation, the manager should pay attention to the public facilities provided because the cleanliness of the facilities reflects the quality of the tourism products offered.

Table 10. Water availability for toilets & bathroom needs for visitors is sufficient

Remarks	Frequency	Percentages
Strongly Disagree	23	23.0
Disagree	38	38.0
Neutral	21	21.0
Agree	14	14.0
Strongly Agree	4	4.0
Total	100	100.0

Source: research data

In table 10, the statement that mentions the availability of water for bathing, washing and toilet (mck) needs where respondents answered: strongly agree 4%, agree 14%, neutral or undecided 21%, disagree 38% and strongly disagree 23%. The results of deepening the respondents' answers agreed, they mentioned that they had used these facilities and there was water available but not too much, respondents who were still in doubt said they had never used public facilities at tourist sites so they did not know whether there was water available or not. Meanwhile, respondents who answered disagree and even strongly disagree were respondents who would try to use public facilities and find them unavailable so they

canceled using mck facilities at tourist sites. The implication is that the manager must pay attention to the availability of clean water at tourist sites is needed, because it will have an impact on the tourist attractiveness of Mahawu Mount.

The importance of good management of the tourist attraction of Mahawu Mount can be seen from every answer to the ten questions contained in the questionnaire. The point is that respondents expect improvements to the management of facilities and infrastructure in the area. Setting attractions, accessibility and location ambience is absolutely considered and improved by the manager. The same thing was stated by Sondakh, (2016) which states that service, security and attractiveness affect tourist interest in visiting Mahawu Mount. Meanwhile, Kalangi, A. S. et al (2016) assessed that lay out management of infrastructure facilities has a significant influence on Mahawu mountain tourism objects in Tomohon City.

Aquino, et.al (2019) assess that the factors of people visiting volcanic locations include: escape and relaxation, novelty seeking, socialization, volcano knowledge seeking, dark and activities induced and also volcano attribute driven. In connection with these factors in the future in its development, volcano tourism or geoparks require serious attention, because this type of tourism is special interest tourism, it needs serious handling to be developed, the main example is the safety factor related to the need for important information / announcements and related coordination between sectors involved in the management of volcanic areas (Davis, 2013 and Wang, 2014).

The importance of the assessment of visitor perceptions that results] in this study can have an impact on changes for the management of tourist attractions or tourist objects. Tourist input on the development of a tourist site provides a good signal that tourists care about tourist attractions (Towoliu, Takaendengan 2015; Towoliu, et al, 2021). The influx of Chinese tourists to Manado also provides an opportunity for Gunung Mahawu Object when input from visitors is considered and followed up with improvement efforts by the Tomohon city government, considering that this city relies heavily on land nature as a leading tourist destination.

## **CONCLUSION** (Cambria font 12, Justify, Spacing 1,15)

From the results and discussion, it can be concluded that the respondents' perceptions tend to be positive, but there needs to be an effort to improve the management of the Mahawu Mount tourist attraction. Some basic things that need to be improved fundamentally; availability of security signs for visitors, arrangement, cleanliness, availability of tourist attraction information, security arrangements for visitors, access arrangements, availability of location guards, ticket entry arrangements, revitalization of lodging facilities, cleanliness of public facilities and availability of water for special needs for visitors. The desire of visitors to make improvements to the management of Mahawu Mount tourist attractions. Attraction arrangements, accessibility and location ambience are absolutely considered and improved by the manager. Tourism to the volcano or geopark area requires serious attention, because this type of tourism is special interest tourism, it needs serious handling to be developed.

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