A new decade for social changes
Green tourism in education and research to build Bali State Polytechnic’s brand image and loyalty

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Abstract. The purpose of the study was to analyze the application of green tourism integration in education and research to build Bali State Polytechnic’s (BSP) brand image and its impacts on stakeholders' loyalty. The concern of academics and practitioners for the environment and the inclusion of green tourism in campus management is important. However, in the context of integrating green tourism in education and research to build a brand image of educational institutions and stakeholder loyalty, further investigation is needed. The number of research respondents is 60 representatives of study programs, alumni, and users. Determination of respondents is done by purposive sampling. Data collection techniques by observation, interviews, questionnaires, and documentation. Interviews were conducted in a semi-structured manner using an interview guide. The statistical method used is Partial Least Square with SmartPLS 3.3.9 program. The results showed that the application of green tourism integration in education and research positively and significantly affected the brand image of BSP. In addition, the brand image of BSP affects the Willingness to Pay More. This study is based on a way to encourage stakeholders to engage with tuition fees per semester. BSP's brand image also influences Willing to Support BSP. This means that the higher the brand image formed, the higher the Willingness to Support studying at BSP. Furthermore, BSP's brand image has a positive and significant effect on the Willingness to Recommend BSP.

Keywords. green tourism; education; research; brand image; stakeholders' loyalty

1. Introduction

Education is one of the means to create quality and competitive human resources. The development of education in the world indirectly helps change the economic order in a country. Through education, people can be well educated, especially in the various skills needed to be able to compete in the face of increasingly fierce competition [1].

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Market competition is no longer limited to providing functional attributes of the product itself but has been associated with a brand that can create a special image for its use, especially in the service industry, including educational institutions. A strong brand in a competitive market is the main goal of many institutions because it allows the creation of various benefits for the institution including reduced risk, greater benefits, collaboration with other parties, and brand extension opportunities [2].

The question that arises is what aspects lead to the strength of the brand. This question is a fundamental problem and has become a major observation in brand studies at least in the last two decades, which ultimately resulted in a stronger paradigm for further examining brand image on the intention to recommend brands, endorse, and willingness to pay more. Brands are also considered to contribute to maintaining competitiveness because brands are usually associated with certain images that can create certain associations in the minds of consumers. Pujadi argues that the creation of a unique brand is the starting point for creating marketing characteristics that can strengthen an organization's brand image [3].

This research is based on the fact that in real terms, vocational education such as BSP cannot be separated from competition among universities, both public and private. The success of higher education in each country is seen from various assessment sectors in terms of resources, infrastructure, quality, and output. Output expectations are in the form of quality graduates and research results, while outcome expectations include international reputation and realizing a world-class university. An Indonesian outstanding expert in marketing management Hermawan Kartajaya believes that universities that have a competitive advantage in the future need to start looking for new and creative ways to attract, retain and build strong relationships with students [4]. From this explanation, it can be interpreted that the success of the study and the increase in student participants will have a good impact on the sustainability of BSP in the future.

Management of educational institutions is increasingly required to work harder and innovatively to overcome the problem of diversity in the abilities of students and lecturers, meeting the need to achieve related learning objectives, alignment with graduate users with curriculum implementation and development, training, practical teaching, and fieldwork practices that are more environmentally friendly. Green tourism-oriented educational institutions are good models that can have an impact on sustainable tourism development because students during the study period have studied and practiced the basics of sustainable development [5]. The concern of academics and practitioners toward the environment and the inclusion of green tourism in campus management is important [6].

The development of green tourism at BSP is in line with the Bali Green Growth 2050 roadmap [7] which reorganizes Bali tourism following the demands of sustainable tourism development internationally, as well as the demands of local culture. So far, the implementation of integrated education and research-oriented green tourism has become BSP’s commitment to seeking the formation of higher vocational education ideals that can produce a skilled, trained, and green-skilled workforce that is in line with the needs of the tourism business and related stakeholders. An integrated approach to education and research whose outputs can enrich and deepen teaching materials at BSP is a solution to build public trust in the enthusiasm of enthusiasts and strengthen BSP’s branding. However, in the context of the integration of green tourism in education and research to build the brand image of educational institutions, further research is needed.

The purpose of this study is to identify and analyze the effect of green tourism implementation in education and research on the brand image at BSP and to identify and analyze
the mediating role of brand image in the relationship between green tourism integration in education and research and stakeholders’ loyalty.

2. Literature Review

2.1. Integration of Green Tourism in Education and Research

At the higher education level, the problem of learning outcomes can be seen in the low number of graduates working in higher vocational education. The low quality and competitiveness of universities can be seen, among others, in the low ranking of Indonesian universities in the Quacquarelli Symonds (QS) World University Ranking [8]. The curriculum cycle runs to produce graduates following the learning achievements of graduates of the established study program.

The curriculum at BSP is a program to produce quality vocational graduates who have the attitudes, knowledge, skills, integrity, and environmental, socio-culturally, and spiritually friendly. To produce such graduates, BSP needs to integrate various aspects of activities, both learning activities, research, and community service as well as student activities [5], [8]. The concept that has been developed by the Directorate General of Higher Education so far in compiling the curriculum begins with determining the profile of graduates and then formulating their abilities/competencies. With the Indonesian National Qualifications Framework (KKNI), the formulation of the "competence" of graduates needs to be reviewed against the descriptions and qualification levels set out in the KKNI.

2.2. Green Tourism

Green tourism is a term that refers to sustainable tourism practices that can be used to predict shared desires related to ecology and the environment, local communities, business people, and tourists themselves [9]. With this reference, stakeholders can outline the framework of management and development activities for now and in the future. This green tourism strategy aims to further streamline regional governance mechanisms to reduce the negative environmental and social impacts of tourism activities in rural or urban areas in any country.

The integration of environmental activities into the broader development framework is at the core of the Sustainable Development Goals (SDGs 2016-2030) to achieve environmental sustainability which is guided by 5 basic principles that balance the economic, social, and environmental dimensions, known as the 5 Ps, namely people (humans), planet (earth), profit, peace, and partnership [10]. In addition to the principles of environmental, economic, social sustainability, and cultural sustainability is an important issue, especially when tourism practices in a particular area are based on local culture and traditions or local customs. Sustainability tourism is critical to current and future economic, ecological and socio-cultural well-being and must be integrated with community economics, conservation with equity, and the integration of the environment with the economy.

The integration of social goals (community benefits, participation, education, health, capacity development, and visitor satisfaction) with economic goals (economic benefits to local and other stakeholders and economically visible industry) is identified as community-based economics. Integration of social goals with the environment and resource goals (resource benefits, efficient resource utilization, acceptance of resource values, matching of supply and demand) is identified as conservation with equity. The integration of economic goals with the environment and resource goals is identified as the integration of the environment with the economy.

The student-centered learning process (SCL) and the lecturer's applied research activities involving students make students and lecturers active actors in the teaching-learning
process on campus. The education approach which is supported by green tourism indicates an expectation that learning and research are complementary and mutually reinforcing. The integration approach of education and research has the potential to be beneficial for the development of both towards progress. H1: Integration of green tourism in education has a positive and significant effect on BSP's brand image. H2: Integration of green tourism in research has a positive and significant effect on BSP's brand image.

2.3. Relationship between brand image, educational institution, and stakeholder loyalty

2.3.1 Understanding the Brand Image of Educational Institutions

The American Marketing Association defines brand image as "A brand is a name, term, design, symbol, or any other feature that identifies one seller's goods or services as distinct from those of other sellers". Its meaning is that a design, symbol, or other feature is embodied in a physical form to distinguish it from competing products. Furthermore, the ISO brand standards add that a brand is an intangible asset that is intended to create a unique image and association in the minds of stakeholders, thereby generating economic benefits/value [11]. In the context of education, brand image has a strategic position to market educational institutions to outsiders so that they are interested in the services offered and persist in using them [12].

Brand image can be understood as a consumer activity in assessing a certain product based on the service experience that has been provided to form an impression that remains in the memory of consumers when hearing or remembering the product [13]. Brand image as a whole is an introduction to all aspects of a particular product that can provide direct benefits to consumers and become an assessment of consumption interest so that it can indicate a product based on the level of satisfaction with the services provided and create a culture of loyalty in using the product [14].

In general, from the previous definition, it can be concluded that the brand image of educational institutions to market educational services in building a positive assessment of educational institutions based on the quality of services provided so that they can meet the expectations (needs and wants) of students and the public so that they are interested in services offered and remain loyal in using the service. A good impression can appear if the brand has a unique advantage, is recognizable, has good credibility, can be trusted, and has a willingness to provide the best service.

2.3.2 Educational institution brand image indicator

The brand image of an educational institution is used to influence people's expectations so that they have confidence in the services offered and finally determine their choice to join the educational institution. So, when the activity of marketing a superior service is carried out, it must be able to penetrate the public's mind so that it sympathizes and creates meaning in the hearts of consumers [15].

In the activity of building the brand image of an educational institution, instructions are needed to facilitate the process of achieving its goals. Brand image indicators include a corporate image, product image, and user image [16].

1. Corporate image is a person's view of a particular institution that offers educational services produced through the capture of the five senses to form thoughts and supported by his experience in obtaining information about the educational institution.

2. Product image is a person's view of the educational services offered by a particular educational institution that is produced through the capture of the five senses to form a thought and is supported by his experience in obtaining information about the services offered by the educational institution.
3. User image is a person's view of people who use educational services from a particular institution that is produced through the capture of the five senses to form a thought and is supported by his experience in obtaining information about users of educational services from the educational institution.

The purpose of holding this brand image activity is to create a positive impression for users of educational services which is described in their level of satisfaction in receiving educational services that have been provided to them. This level of customer satisfaction is relative, meaning that it is adjusted to the needs and wants of educational customers [17].

2.3.3 Elements of an educational institution's brand image

To create customer satisfaction with the services provided by the institution, several elements are needed that can be used to satisfy educational customers. There are seven main elements in the application of educational marketing which are popularly known as the 7Ps, namely product, price, place, promotion, people, process, and physical evidence [18].

1. Product is a service offered by the institution to the customer as a basic consideration in their purchase interest. There are several levels in the product, namely what benefits can be taken from the product (core benefit), an overview of the product (basic product), product supporting components (expected product), and product advantages that distinguish it from other products (augmented product), and the purpose of the product for the long-term product (potential product).

2. Price (tariff) is a standard price set by the institution following the guarantees and services provided to customers. The better the quality of the institution, the higher the price to be paid by the customer and vice versa.

3. Place/location is the determination of the location of the school based on several factors such as the ease of getting to the location, affirmation of the physical presence of the institution, stability of traffic conditions, providing parking space for vehicle safety, paying attention to the condition of competitors' locations and obeying government regulations.

4. Promotion is an activity to inform, invite, and convince customers to know the existence of the products offered so that they are interested in buying and continue to use them through advertising, personal selling, product introduction (sales promotion), and publication. in various print media (publicity).

5. People are the ability of stakeholders in influencing the quality of services provided to customers.

6. Process, the integration of all elements in the application of educational marketing as a reference in improving service quality and becomes an evaluation material in improving institutional management to influence the growth of the number of students.

7. Physical evidence is various supporting attributes in the form of physical forms of institutional services such as facilities and infrastructure that support the creation of an educational marketing process.

2.4. Education stakeholder loyalty

In short, stakeholders are often expressed as stakeholder parties or parties related to an issue or a plan. Freeman defines stakeholders as "any group or individual who can affect or be affected by the achievement of an organization's objective." From this, it shows that stakeholders are groups or individuals who can influence or be influenced by the process of achieving the goals of an organization [19]. Stakeholders in this study are education customers (parents) who wish to entrust their children to an educational institution, alumni, employees from the business and industry world (DUDI), and management of related educational institutions.
In line with the understanding of education customer loyalty, according to Durianto [20], customer loyalty is a measure of customer attachment to a brand. This measure can provide an idea of whether a customer can switch to another product brand, if the product brand is found to have changed, both in terms of price and other attributes. Tjiptono [21] states, that customer loyalty is a customer's commitment to a brand, store, or supplier based on very positive characteristics in long-term purchases. Customer loyalty shows the activity of repeat purchases for a product and service. Lovelock [22] added the notion of loyalty as a customer's progress to continue to support the company in the long term, buy and use products and services based on exclusive preferences and voluntarily recommend the company's products to friends and family. Customer loyalty is also defined as the possibility of customers repurchasing and their willingness to become partners as buyers of products or services for the company in greater numbers, provide positive recommendations, and are willing to notify the company if there is an error in the service or product [23].

H3: BSP's brand image has a positive and significant effect on willingness to pay more.
H4: BSP's brand image has a positive and significant effect on willingness to support.
H5: BSP's brand image has a positive and significant effect on willingness to recommend.

3. Research Method

This research was conducted at BSP. The number of research respondents is 60 representatives of study programs, alumni, and users. Determination of respondents is done by purposive sampling. The research was carried out from April to September 2022. The data collection techniques were observation, interviews, questionnaires, and documentation. Interviews were conducted in a semi-structured manner using an interview guide. The statistical method used is Partial Least Square with SmartPLS 3.3.9 program.

Figure 1: Research conceptual framework

4. Results and Discussion

4.1. Outer model measurement

Outer model measurement is beneficial to test the validity and reliability of the research instrument. The validity of the reflective indicator model was tested through convergent validity in terms of the loading factor and Average Variance Extracted (AVE) values, also through discriminant validity, in terms of the Fornell-Larcker value, and from the cross loading value. The reliability was tested through the value of Composite Reliability and Cronbach's Alpha.

The loading factor shows the correlation of indicators to the variables. An instrument is said to be valid if the loading factor value > 0.70 [24]. In Figure 2: Structural Model, the loading factor value which is on the correlation line between indicators and variables, all indicators for
each variable are greater than 0.7. That is, the research instrument used to measure the Integration of Green Tourism in Education, Integration of Green Tourism in Research, BSP's Brand Image, Willingness to Pay More, Willingness to Support, and Willingness to Recommend is valid.

![Figure 2: Structural Model](source: SmartPLS 3.3.9 output. (2022))

Meanwhile, for the AVE value as presented in Table 1, it shows that all the AVE values of the research variables are greater than 0.5. The research instrument used to measure the Integration of Green Tourism in Education, Integration of Green Tourism in Research, PNB's Brand Image, Willingness to Pay More, Willingness to Support, and Willingness to Recommend is valid.

<table>
<thead>
<tr>
<th>Table 1. AVE. value</th>
<th>Average Variance Extracted (AVE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integration of Green Tourism in Education</td>
<td>0.682</td>
</tr>
<tr>
<td>Integration of Green Tourism in Research</td>
<td>0.785</td>
</tr>
<tr>
<td>BSP's Brand Image</td>
<td>0.730</td>
</tr>
<tr>
<td>Willingness to Pay More</td>
<td>0.828</td>
</tr>
<tr>
<td>Willingness to Recommend</td>
<td>0.786</td>
</tr>
<tr>
<td>Willingness to Support</td>
<td>0.837</td>
</tr>
</tbody>
</table>

Source: SmartPLS 3.3.9 Output Data Processed (2022)

The Fornell Lacker test is carried out by comparing the Fornell-Lacker value of each research variable with the correlation value between those variables and other variables that are still related. The research instrument is said to be valid if the Fornell-Lacker value is greater than the correlation value between variables.
Table 2. Score Fornell-Lacker and Correlation Between Variables

<table>
<thead>
<tr>
<th></th>
<th>Integration of Green Tourism in Education</th>
<th>Integration of Green Tourism in Research</th>
<th>BSP's Brand Image</th>
<th>Willingness to Pay More</th>
<th>Willingness to Recommend</th>
<th>Willingness to Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integration of Green</td>
<td>0.826</td>
<td></td>
<td>0.539</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Tourism in Education</td>
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<tr>
<td>Integration of Green</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tourism in Research</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSP's Brand Image</td>
<td></td>
<td></td>
<td>0.854</td>
<td>0.734</td>
<td>0.725</td>
<td>0.761</td>
</tr>
<tr>
<td>Willingness to Pay</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More</td>
<td></td>
<td></td>
<td>0.910</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Willingness to</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Recommend</td>
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<td></td>
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<tr>
<td>Willingness to</td>
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<td></td>
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<tr>
<td>Support</td>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>

Source: SmartPLS 3.3.9 Output Data Processed (2022)

Based on Table 2, the Fornell-Lacker Integration of Green Tourism in Education value is 0.826, which is greater than the correlation value with BSP's Brand Image which is 0.539. The Fornell-Lacker Integration of Green Tourism in Research value of 0.886 is also greater than the correlation value with BSP's Brand Image 0.383. Fornell-Lacker BSP's Brand Image value of 0.854 is also greater than its correlation value with the Willingness to Pay More 0.734; also, greater than the correlation value with the Willingness to Recommend which is 0.725; also, greater than the correlation value with the Willingness to Support which is 0.761. The Fornell-Lacker willingness to pay more value of 0.910 is greater than the correlation value with BSP's Brand Image which is 0.734. The Fornell-Lacker Willingness to Recommend the value of 0.887 is greater than the correlation with BSP's Brand Image of 0.725. The Fornell-Lacker Willingness to Support a value of 0.915 is greater than the correlation with BSP's Brand Image of 0.761. So that the research instrument that measures each research variable is valid.

The validity test through cross loading is done by comparing the cross loading value on the intended variable with the other constructs. The research instrument is said to be valid if the cross loading value on the intended variable is greater than the other constructs.

Table 3. Cross Loading Value

<table>
<thead>
<tr>
<th></th>
<th>Integration of Green Tourism in Education</th>
<th>Integration of Green Tourism in Research</th>
<th>BSP's Brand Image</th>
<th>Willingness to Pay More</th>
<th>Willingness to Recommend</th>
<th>Willingness to Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>B11</td>
<td>0.620</td>
<td></td>
<td>0.625</td>
<td>0.827</td>
<td>0.561</td>
<td>0.539</td>
</tr>
<tr>
<td>B12</td>
<td>0.735</td>
<td></td>
<td>0.627</td>
<td>0.895</td>
<td>0.756</td>
<td>0.713</td>
</tr>
<tr>
<td>B13</td>
<td>0.561</td>
<td></td>
<td>0.502</td>
<td>0.839</td>
<td>0.538</td>
<td>0.587</td>
</tr>
</tbody>
</table>
Based on Table 3. Cross loading value, it is known that all cross loading values are indicators of the Integration of Green Tourism in Education (IGE1, IGE2, IGE3) the target variable is greater than the cross loading value of the other variables. Likewise, in all cross loading values of the Integration of Green Tourism in Research indicators (IGR1, IGR2, IGR3) the target variable is greater than the cross loading value of the other variables. For all cross loading values of BSP's Brand Image indicators (BI1, BI2, BI3) the target variable is greater than the cross loading value of the other variables. Likewise, all cross loading values of the Willingness to Pay More (WP1, WP2) indicators for the targeted variables are greater than the cross loading values for other latent variables. All cross loading values of the Willingness to Recommend indicators (WR1, WR2) on the targeted variables are greater than the cross loading values of other latent variables. All of the cross loading values of the Willingness to Support (WS1, WS2) indicators for the targeted variables are greater than the cross loading values of other latent variables.

Table 4. Cronbach's Alpha and Composite Reliability Value

<table>
<thead>
<tr>
<th></th>
<th>Cronbach's Alpha</th>
<th>Composite Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integration of Green Tourism in Education</td>
<td>0.766</td>
<td>0.865</td>
</tr>
<tr>
<td>Integration of Green Tourism in Research</td>
<td>0.864</td>
<td>0.916</td>
</tr>
<tr>
<td>BSP's Brand Image</td>
<td>0.815</td>
<td>0.890</td>
</tr>
<tr>
<td>Willingness to Pay More</td>
<td>0.793</td>
<td>0.906</td>
</tr>
<tr>
<td>Willingness to Recommend</td>
<td>0.732</td>
<td>0.880</td>
</tr>
<tr>
<td>Willingness to Support</td>
<td>0.805</td>
<td>0.911</td>
</tr>
</tbody>
</table>

The instrument is said to be reliable if the value of Cronbach's Alpha > 0.6 and the value of Composite Reliability > 0.8. Based on the data in Table 4., all Cronbach's Alpha values for each research variable are greater than 0.6 and the Composite Reliability value for each research variable is greater than 0.8 which indicates that the research instrument measuring the Integration of Green Tourism in Education, Integration of Green Tourism in Research, BSP's Brand Image, Willingness to Pay More, Willingness to Support, and Willingness to Recommend reliable.
4.2. Inner Model Measurement

Inner model measurement is useful for determining the feasibility of the model and testing the relationship between research variables. This test is carried out by reviewing the values of R-Square ($R^2$), Effect Size ($f^2$), and GoF. The value of R-Square is the coefficient of determination on the dependent variable. A relationship between variables is said to be strong if it has a minimum R-square value of 0.67 [25], [26].

Based on Figure 2, it is known that the R-Square value at BSP’s Brand Image of 0.669. It means that about 66.9% of BSP’s Brand Image is explained strongly by the Integration of Green Tourism in Education and The Integration of Green Tourism in Research. Meanwhile, the R-Square value in the Willingness to Pay More construct is 0.538. This means that around 53.8% of Willingness to Pay More is explained quite strongly by BSP's Brand Image. The R-Square value in the Willingness to Support construct is 0.579. This means that around 57.9% of Willingness to Support is explained quite strongly by BSP's Brand Image. The R-Square value in the Willingness to Recommend construct is 0.525. This means that around 52.5% of Willingness to Recommend is explained quite strongly by BSP's Brand Image.

The examination of the relationship between variables based on the value of effect size ($f^2$) is known from the data in Table 5.

<table>
<thead>
<tr>
<th>Table 5. Effect Size Value ($f^2$)</th>
<th>BSP’s Brand Image</th>
<th>Willingness to Pay More</th>
<th>Willingness to Recommend</th>
<th>Willingness to Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integration of Green Tourism in Education</td>
<td>0.600</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integration of Green Tourism in Research</td>
<td>0.304</td>
<td>1.167</td>
<td>1.105</td>
<td>1.375</td>
</tr>
</tbody>
</table>

Source: SmartPLS 3.3.9 Output Data Processed (2022)

According to Hair et al. [26], an independent variable is categorized as having a strong effect on the dependent if it has an $f^2$ value of at least 0.35. Based on the $f^2$ value of each relationship between variables in Table 5, it can be seen that the influence of Integration of Green Tourism in Education on BSP's Brand Image is a strong category, the influence of Integration Of Green Tourism in Research on BSP's Brand Image is a strong category, the influence of BSP's Brand Image on Willingness to Pay More is a strong category, the influence of BSP's Brand Image on Willingness to Recommend is a strong category, and the influence of BSP's Brand Image on Willingness to Support is a strong category.

Meanwhile, the Goodness of Fit (GoF) value is calculated manually using the Tenenhaus formula [27] in Hair et al. [26], that is GoF = and is categorized as large if it is at least $0.38 \sqrt{(R^2)}$

GoF BSP’s Brand Image = $\sqrt{(0.730 \times 0.669)} = 0.699$
GoF Willingness to Pay More = $\sqrt{(0.828 \times 0.538)} = 0.667$
GoF Willingness to Recommend = $\sqrt{(0.786 \times 0.525)} = 0.642$
GoF Willingness to Support = $\sqrt{(0.837 \times 0.579)} = 0.696$

Based on the calculation results, it is known that the GoF value of the BSP’s Brand Image, Willingness to Pay More, Willingness to Recommend and Willingness to Support is greater.
than 0.38 which means that the structural model formed meets the goodness of fit or the structural model that is formed is good. So that the structural model can be accepted.

4.3. Hypothesis test

Hypothesis testing is done through the t-test results from Bootstrapping, where if the t-statistics value > 1.96 and p-value < 0.05, it shows a significant effect. Meanwhile, based on the correlation value between variables or the path coefficient value or the original sample value (O), a positive value indicates a positive effect, and vice versa if it is negative, it indicates a negative effect.

Table 6. Path Coefficient Estimation and t-Test

| Path Coefficient Estimation | Original Sample (O) | T Statistics (|O/STDEV|) | P Values | Conclusion |
|----------------------------|---------------------|--------------------------|----------|------------|
| Integration of Green Tourism in Education -> BSP’s Brand Image | 0.539 | 5.079 | 0.000 | Significant Positive |
| Integration of Green Tourism in Research -> BSP’s Brand Image | 0.383 | 3.552 | 0.000 | Significant Positive |
| BSP’s Brand Image -> Willingness to Pay More | 0.734 | 11,519 | 0.000 | Significant Positive |
| BSP’s Brand Image -> Willingness to Support | 0.761 | 14,184 | 0.000 | Significant Positive |
| BSP’s Brand Image -> Willingness to Recommend | 0.725 | 12,362 | 0.000 | Significant Positive |

Source: SmartPLS 3.3.9 Output Data Processed (2022)

Based on the value of Original Sample O in Table 6, as well as in Figure 2, the main structural equations formed are:

- \( BI = 0.539 \times IGE + e1 \)
- \( BI = 0.383 \times IGR + e2 \)
- \( WP = 0.734 \times BI + e3 \)
- \( WS = 0.761 \times BI + e4 \)
- \( WR = 0.725 \times BI + e5 \)

where IGE is Integration of Green Tourism in Education, IGR is Integration of Green Tourism in Research, BI is BSP’s Brand Image, WP is Willingness to Pay More, WS is Willingness to Support, WR is Willingness to Recommend, and e is error terms.

Based on the structural equations formed, it is known that the coefficient of the structural model of the main line of Integration of Green Tourism in Education towards BSP’s Brand Image has a positive value of 0.539 units with a T-statistics value of 5.079 > 1.96 and P-Values of 0.000 < 0.05. This shows that the Integration of Green Tourism in Education has a positive and significant effect on BSP’s Brand Image, where the higher the Integration of Green Tourism in Education is applied, the higher the BSP’s Brand Image. The increase in BSP’s Brand Image with each increase in the Integration of Green Tourism in Education is 0.539 units. So, Hypothesis H1: Integration of Green Tourism in Education has a positive and significant effect on BSP’s Brand Image is accepted.

Based on the structural equation, it is also known that the coefficient of the structural model of the main line of Integration of Green Tourism in Research towards BSP’s Brand Image is positive at 0.383 units with a t-statistics value of 3.552 > 1.96 and a P-Values of 0.000 < 0.05. This shows that the Integration of Green Tourism in Research has a positive and significant
effect on BSP's Brand Image, where the higher the Integration of Green Tourism in Research applied, the higher the BSP's Brand Image. The increase in BSP's Brand Image with each increase in the Integration of Green Tourism in Education is 0.383 units. Therefore, H2: Integration of Green Tourism in Research has a positive and significant effect on BSP's Brand Image is accepted.

Based on the structural equation, it is also known that the coefficient of the structural model of the main path of BSP's Brand Image to the Willingness to Pay More has a positive value of 0.734 units with a T-statistics value of 11.519 > 1.96 and a P-Values of 0.000 < 0.05. This shows that BSP's Brand Image has a positive and significant effect on Willingness to Pay More, where the higher BSP's Brand Image is applied, the higher the Willingness to Pay More. The increase in Willingness to Pay More for each increase in BSP's Brand Image is 0.734 units. So, H3: BSP's Brand Image positive and significant effect on Willingness to Pay More is accepted.

Based on the structural equation, it is also known that the coefficient of the structural model of the main path of BSP's Brand Image to the Willingness to Support has a positive value of 0.761 units with a T-statistics value of 14.184 > 1.96 and a P-Values of 0.000 < 0.05. This shows that BSP's Brand Image has a positive and significant effect on Willingness to Support, where the higher BSP's Brand Image is applied, the higher the Willingness to Support. The increase in Willingness to Support every increase in BSP's Brand Image is 0.761 units. Therefore, H4: BSP's Brand Image positive and significant effect on willingness to support is accepted.

Based on the structural equation, it is also known that the coefficient of the structural model of the main path of BSP's Brand Image to the Willingness to Recommend has a positive value of 0.725 units with a T-statistics value of 12.362 > 1.96 and a P-Values of 0.000 < 0.05. This shows that BSP's Brand Image has a positive and significant effect on Willingness to Recommend, where the higher BSP's Brand Image, the higher Willingness to Recommend. The increase in Willingness to Recommend in every increase in BSP's Brand Image is 0.725 units. So, H5: BSP's Brand Image positive and significant effect on Willingness to Recommend is accepted.

5. Conclusion

The application of green tourism integration in education and research positively and significantly affects BSP's brand image. In addition, BSP's brand image influences the willingness to pay more. This study is based on a way to encourage stakeholders to engage with tuition fees per semester. BSP's brand image also influences willingness to support. This means that the higher the brand image, the higher the willingness to support studying at BSP. Furthermore, BSP's brand image has a positive and significant effect on willingness to recommend BSP. Green tourism-oriented educational institutions are good models that can have an impact on sustainable tourism development because students during the study period have studied and practiced the basics of sustainable development. This finding is in line with the research result from Budarma [5]. The integration of green tourism in education and research is complementary and mutually reinforcing to building the BSP brand image and its implications for influencing stakeholder loyalty on the aspect of willingness to pay more, willingness to support, and willingness to recommend.

References


