ASSOCIATIONS BETWEEN BRAND EQUITY DIMENSIONS AND TOURISTS' REVISIT INTENTION AT SANGIRAN WORLD HERITAGE SITE

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Abstract

Revisit intention is an important indicator of tourism destination sustainability, particularly for heritage destinations that aim to encourage visitors to return. This study examines the influence of brand awareness, brand image, brand loyalty, and brand trust on tourists' revisit intention at Sangiran, a UNESCO World Heritage Site in Sragen, Central Java, Indonesia. This research employs a quantitative associative approach using a cross-sectional survey design. Data were collected from 217 tourists who had visited Sangiran, recruited through accidental (convenience) sampling, and were analysed using multiple linear regression. The model as a whole was significant ($F(4, 212) = 43.98$, $p < 0.001$; $R^2 = 0.454$; adjusted $R^2 = 0.443$), meaning that at least one predictor is related to revisit intention. Partially, brand image ($B = 0.402$; $\beta = 0.406$; $p < 0.001$) and brand loyalty ($B = 0.453$; $\beta = 0.334$; $p < 0.001$) were positive and significant predictors, whereas brand awareness ($\beta = -0.020$; $p = 0.767$) and brand trust ($\beta = 0.049$; $p = 0.461$) were not. Brand image was the strongest predictor, although its difference from brand loyalty was not statistically distinguishable. Among the examined variables, brand image emerges as the strongest predictor of tourists' intention to revisit Sangiran. These findings suggest that visitors' perceptions of a destination and their attachment to its brand play a more substantial role in encouraging repeat visits than mere recognition or trust. This study highlights the importance of strengthening destination image through distinctive tourism experiences, educational attractions, and consistent destination branding. Furthermore, developing visitor loyalty through meaningful engagement and continuous improvements in destination experiences may contribute to sustainable tourism development at heritage destinations.

Keywords: *brand awareness, brand image, brand loyalty, brand trust, revisit intention*

INTRODUCTION

The ability of a destination to generate repeat visits is an important outcome of the relationship between tourists and the places they visit. *Revisit intention* represents tourists' behavioural tendencies after they have experienced a destination, and is therefore an important measure for understanding the relationship between tourists and destinations (Soliman, 2021). It has been widely examined as a behavioural proxy of tourist loyalty (Chen & Tsai, 2007; Stylos & Bellou, 2019; Zhang et al., 2014). It should not, however, be equated with the social, economic, or environmental sustainability of a destination: these are broader outcomes that repeat visitation may contribute to, but that are not measured in this study. At cultural heritage and educational destinations, this challenge has a distinct character, because the decision to return relates not only to entertainment but also to historical value, knowledge, interpretation, and the experience gained during the visit. The management of destinations such as Sangiran needs to understand the factors that encourage tourists to return, including those relating to the destination brand.

Sangiran, in Sragen Regency, Central Java, is a relevant destination to study because of its archaeological, historical, and educational significance. It was inscribed on the UNESCO World Heritage List in 1996 as the Sangiran Early Man Site, one of the key sites for understanding human evolution. UNESCO notes that excavations there have yielded hominid fossils amounting to roughly half of all those known worldwide, and that the area has been inhabited for about 1.5 million years. For visitors, this heritage is interpreted through a group of thematic museum clusters, with the Krikilan cluster serving as the main visitor centre, which presents the history of the discovery, the geological layers, and human evolution. The site therefore combines a scientific and heritage status of international standing with an explicitly educational mode of visitor experience.

Despite this status, visitation to Sangiran has been uneven. Museum records report 73,023 visits in 2020 and 34,147 in 2021 during the COVID-19 pandemic, a recovery to 141,430 in 2022 and 153,217 in 2023, and then a fall to 119,969 in 2024, about 22% lower than the previous year (Hafidh, 2025). Visits are also concentrated in a single cluster: Krikilan received 100,074 of the 119,969 visits recorded in 2024 (about 83%). These figures count visits and do not distinguish first-time from repeat visitors, so they provide context for the

study rather than evidence of a revisit problem. They do show why managers of Sangiran need evidence on which brand-related perceptions are associated with tourists' willingness to come back, so that limited communication and experience-development resources can be directed to the most relevant factors.

Research on revisit intention has developed by positioning destination image, loyalty, tourism experience, trust, and brand elements as factors that may explain the intention to revisit. Stylos and Bellou (2019), in a study of British tourists visiting Crete, examined the relationships between holistic image, subjective norms, previous visit experience, destination loyalty, and intention to revisit. That study emphasised the importance of distinguishing destination loyalty from other behavioural indicators such as intention to revisit and intention to recommend. This finding is relevant because it shows that loyalty should not be treated as a term entirely identical to revisit intention, even though the two are closely related.

Research on destination image also shows that perceptions of a place are an important factor in the formation of tourists' behavioural intentions. Rodrigues et al. (2024) found that brand image has a significant influence on revisit intention. Wei et al. (2024) examined the influence of destination image on revisit intention. The results of these studies show that destination image functions not only as knowledge about a place's attributes, but can also form a psychological bond that is relevant to the decision to return.

In the context of destinations with a cultural identity, Prawira et al. (2024) examined the influence of brand image, cultural authenticity, and community engagement on revisit intention through perceived cultural exchange and destination identity alignment. Their results show that perceived cultural exchange is a strong predictor of revisit intention, while cultural authenticity and brand image shape destination identity alignment and intercultural engagement. This finding offers the perspective that the branding of cultural destinations needs to be read together with the experiences and meanings that visitors perceive.

The study by Intuluck et al. (2024) in Phuket examined tourism brand attributes and the mediating role of perceived value, brand awareness, and brand loyalty in shaping tourism revisit intention. That study is important for the present research because it directly links two brand dimensions, namely awareness and loyalty, with the intention to revisit. In another study in Bangkok, Intuluck et al. (2024) likewise positioned brand awareness and brand loyalty as mechanisms explaining the relationship between brand attributes and revisit intention. Both studies show that brand awareness and loyalty can play a role in broader models, although the direct role of each construct may depend on the characteristics of the tourists and the destination.

In terms of trust, Poon and Koay (2021) studied tourist trust and intention to revisit in the context of Hong Kong. That context shows that trust can be an important consideration when tourists face uncertainty about a destination. Celep (2025) examined destination brand equity, destination trust, and revisit intention. That study shows that the relationship between trust and revisit intention needs to be understood with attention to tourists' experience and visit characteristics.

A number of studies in Indonesia have also examined factors related to revisit intention. Istiqomah et al. (2023) investigated brand image and destination attributes in relation to revisit intention at Selecta Tourism Park. Arisman et al. (2024) examined the relationships between destination image, utilitarian and hedonic value, preference, and revisit intention. These studies show that destination image is a construct that has been tested repeatedly, but that the models, objects, and pathways of influence used are not always the same.

Taken together, the literature points to three observations. First, destination image and loyalty are frequently linked to revisit intention. Second, awareness and loyalty have often been positioned as mediating mechanisms within broader models (Intuluck et al., 2024), and trust has mainly been examined under specific conditions, such as security uncertainty (Poon & Koay, 2021) or differences in visit frequency (Celep, 2025). Third, studies of Indonesian destinations have concentrated on destination image and have typically been set in recreational or park settings (Arisman et al., 2024; Istiqomah et al., 2023). What remains unanswered is how the four brand dimensions compare when they are entered together as predictors of revisit intention at a single archaeological and educational World Heritage Site, where reasons for returning, such as learning, interpretation, and family or school visits, may differ from those at leisure destinations. Because awareness, image, loyalty, and trust are correlated, their separate contributions cannot be read from bivariate evidence and require a simultaneous model.

The contribution of this study is therefore deliberately modest and specific. It does not propose a new brand construct or model. Rather, it applies established customer-based brand equity dimensions to a particular context, an archaeological World Heritage Site in Indonesia, and goes beyond a replication of the four constructs in four ways: (a) it estimates the four dimensions simultaneously, so that the unique association of each can be assessed while the others are held constant; (b) it reports standardised coefficients, confidence intervals, and

unique variance shares to compare their relative strength; (c) it reports a full set of regression diagnostics, robust standard errors, and power considerations to show how far the estimates can be trusted; and (d) it interprets the results in light of Sangiran's archaeological, historical, and educational attributes, separating what the data show from what is only a plausible explanation.

Conceptually, brand awareness describes tourists' ability to recognise and recall a destination (Angraini & Taftazani, 2026). Brand image represents the perceptions and associations attached to a destination (Gómez-Rico et al., 2023). Brand loyalty indicates a tendency to maintain one's choice of a destination (Tran et al., 2023). Meanwhile, brand trust describes confidence in the reliability of the destination or its managers (Xu et al., 2022). These four constructs are expected to contribute to revisit intention in different ways. Awareness can keep a destination in memory, a positive image can form favourable evaluations, loyalty can strengthen the preference to return, and trust can reduce uncertainty in the decision to visit.

The four constructs follow the customer-based brand equity (CBBE) tradition. Aaker (1991) conceptualised brand equity as a set of assets linked to a brand, including name awareness, associations, and loyalty, while Keller (1993) defined it through brand knowledge, which comprises brand awareness and brand image. These frameworks were adapted to tourism destinations by Konečnik and Gartner (2007) and Boo et al. (2009), who operationalised destination brand equity through awareness, image, quality, and loyalty. Brand trust is not part of the original Aaker and Keller frameworks. It is included here following Chaudhuri and Holbrook (2001), who positioned trust as an antecedent of brand loyalty and brand performance, and the destination studies that treat trust as part of the relationship between tourists and destinations (Celep, 2025; Poon & Koay, 2021; Xu et al., 2022). The model in Figure 1 is thus a selective, direct-effects specification drawn from established CBBE frameworks, not a full destination brand equity model: it contains no perceived quality or perceived value dimension and no mediating paths.

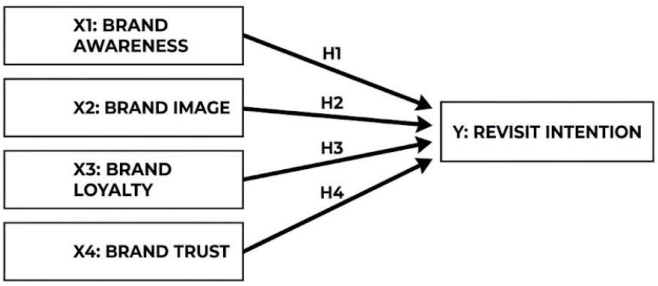


Figure 1. Conceptual model

Brand awareness. Awareness places a destination in the tourist's consideration set and is the foundation of brand equity in both Aaker's (1991) and Keller's (1993) frameworks, which supports a positive expectation. Empirical evidence is mixed because awareness has mostly been studied as part of a chain: in the Thai studies of Intuluck et al. (2024), awareness operated together with perceived value and loyalty rather than as a stand-alone driver. For tourists who have already visited, awareness is also expected to be high and to vary little, which may limit its ability to discriminate between tourists with higher and lower intentions to return. H1 nonetheless posits a positive association because awareness is the base of the CBBE structure.
H1: brand awareness influences revisit intention

Brand image. In Keller's (1993) terms, image consists of the associations a tourist holds about a destination. Evidence that image is related to revisit intention and loyalty is consistent across settings: Chen and Tsai (2007) and the meta-analysis of Zhang et al. (2014) link destination image to loyalty and behavioural intentions, and Rodrigues et al. (2024), Wei et al. (2024), and Prawira et al. (2024) report related findings for brand and destination image. At heritage sites, image is expected to include perceptions of historical significance and educational value, which are the reasons many visitors come. H2 therefore posits a positive association.
H2: brand image influences revisit intention

Brand loyalty. Loyalty reflects preference and commitment toward a destination and is a standard antecedent of repeat behaviour (Aaker, 1991; Chaudhuri & Holbrook, 2001; Tran et al., 2023). Stylos and Bellou (2019) showed that destination loyalty and revisit intention are closely related yet distinct, and cautioned against treating them as identical. H3 posits a positive association, with the caveat that the conceptual closeness of the two constructs may inflate their association.
H3: brand loyalty influences revisit intention

Brand trust. Trust reduces perceived uncertainty and has been linked to revisit intention (Poon & Koay, 2021; Xu et al., 2022), and to loyalty (Chaudhuri & Holbrook, 2001). The evidence is conditional, however: Poon and Koay studied trust under security uncertainty, and Celep (2025) examined the trust–revisit relationship with visit frequency in the model. In heritage tourism, trust is likely to relate to the accuracy of information and the credibility of interpretation and management, but direct empirical evidence on its link with revisit intention is limited. H4 posits a positive association, with the expectation that its strength may be small.
H4: brand trust influences revisit intention

Joint association. Because the four dimensions are theorised to operate together in CBBE frameworks, H5 posits that, taken as a set, they are significantly associated with revisit intention. As explained in the Results, this omnibus test does not imply that every individual dimension is significant.
H5: brand awareness, brand image, brand loyalty, and brand trust simultaneously influence revisit intention.

RESEARCH METHOD

This study uses a quantitative associative approach with a cross-sectional survey design. This approach is applied to test the relationships of brand awareness, brand image, brand loyalty, and brand trust with revisit intention at the Sangiran tourist destination in Sragen Regency, Central Java. The sampling technique used is accidental sampling, in which respondents are selected on the basis of availability and the researchers' convenience in encountering them at the time of data collection. The analysis focuses on post-visit behaviour, specifically tourists' intention to make a repeat visit.

The population for this study consists of tourists who have visited Sangiran. The sampling technique used is accidental sampling, in which respondents are selected on the basis of availability and the researchers' convenience in encountering them at the time of data collection. Accidental (convenience) sampling is a non-probability technique (Etikan et al., 2016). The inclusion criterion is having visited Sangiran at least once, as the intention to revisit is considered a post-experience assessment. The survey was conducted from July 3, 2026, to August 30, 2026. A total of 217 fully completed questionnaires were used for the analysis, with no missing values across any of the 19 survey items.

The model contains four predictors. With 217 valid observations, the ratio is about 54 observations per predictor, well above the minimum of 5 and the desirable 15–20 per predictor suggested for multiple regression (Hair et al., 2019). It also exceeds the rules of Green (1991) of $N \geq 50 + 8k = 82$ for testing the overall model and $N \geq 104 + k = 108$ for testing individual predictors ($k = 4$). The sample is therefore adequate for detecting medium and larger effects, but less sensitive to small unique effects.

Table 1. Operational Definitions of Variables

Variable	Instrument item code	Number of items	Measurement focus
Brand awareness (X1)	BraAw1–BraAw4	4	Recognition and recall of Sangiran as a destination
Brand image (X2)	BraIm1–BraIm4	4	Tourists' perceptions of and associations with Sangiran
Brand loyalty (X3)	BraLo1–BraLo4	4	Preference, commitment, and tendency to choose Sangiran again
Brand trust (X4)	Bratr1–Bratr3	3	Tourists' confidence in the reliability of the destination/managers
Revisit intention (Y)	RevIn1–RevIn4	4	Tourists' tendency or plans to visit again

The independent variables comprise brand awareness (X1), brand image (X2), brand loyalty (X3), and brand trust (X4), while the dependent variable is revisit intention (Y). Brand awareness is measured with four items (BraAw1–BraAw4), brand image with four items (BraIm1–BraIm4), brand loyalty with four items (BraLo1–BraLo4), brand trust with three items (Bratr1–Bratr3), and revisit intention with four items (RevIn1–RevIn4).

The data analysed are primary in the form of questionnaire responses, with 217 respondents analysed. Data were processed using multiple linear regression analysis. The regression model is formulated as $Y = \alpha + \beta1X1 + \beta2X2 + \beta3X3 + \beta4X4 + \varepsilon$. Hypotheses were tested using the t-test to assess the partial influence of each independent variable on revisit intention while controlling for the other independent variables in the model. A partial hypothesis is deemed supported if the significance value is less than 0.05. The F-test was used to assess whether all the independent variables together have a significant relationship with the dependent variable. The coefficient of determination was used to describe the proportion of variation in revisit intention that can be explained by the model. The significance level used was 5%.

RESULTS AND DISCUSSION

Results

The analysis was conducted on 217 observations that had total scores for all the research constructs. Descriptive statistics are used to give an overview of the range and tendency of the composite scores for each variable. Table 2 presents the minimum, maximum, mean, and standard deviation, together with the mean per item, the coefficient of variation (CV), and an interpretive category.

Table 2. Descriptive Statistics of the Research Variables

Variable	Items	Minimum	Maximum	Mean (total score)	Standard deviation	Mean per item (1–5)	CV	Category
Brand awareness (X1)	4	7	20	15.76	2.63	3.94	0.17	High
Brand image (X2)	4	4	20	12.85	3.23	3.21	0.25	Moderate
Brand loyalty (X3)	4	9	20	15.65	2.36	3.91	0.15	High
Brand trust (X4)	3	7	15	11.62	1.81	3.87	0.16	High
Revisit intention (Y)	4	5	20	13.73	3.20	3.43	0.23	High (lower boundary)

Source: Data reprocessed (2026). Note: categories use five equal intervals of 0.80 on the per-item mean: 1.00–1.80 very low; 1.81–2.60 low; 2.61–3.40 moderate; 3.41–4.20 high; 4.21–5.00 very high. CV = standard deviation / mean.

Based on Table 2, the mean score for brand awareness is 15.76, for brand image 12.85, for brand loyalty 15.65, for brand trust 11.62, and for revisit intention 13.73. These mean values are total scores, not mean scores per item. Because the constructs have different numbers of items, the per-item means are easier to compare: awareness 3.94, loyalty 3.91, trust 3.87, revisit intention 3.43, and image 3.21. On the five-interval scale, awareness, loyalty, and trust fall in the high category, revisit intention is high but close to the lower boundary (3.41), and brand image is moderate.

Three tendencies stand out. First, respondents rate Sangiran highly on recognition, loyalty, and trust, but less favourably on image, which is the lowest-scoring construct. Second, image and revisit intention have the widest relative dispersion (CV = 0.25 and 0.23), whereas awareness, loyalty, and trust are more compressed (CV = 0.15–0.17); predictors that vary little between respondents have less opportunity to account for differences in the outcome. Third, the construct with the lowest average, image, is also the strongest predictor in the regression reported below, so a high average score should not be read as high predictive importance. These readings describe the sample only. The above-midpoint mean of revisit intention shows that respondents, on average, lean toward returning, not that they will return.

Table 3. Pearson Correlations among the Research Variables

Variable	1	2	3	4	5
1. Brand awareness (X1)	1				
2. Brand image (X2)	0.486	1			
3. Brand loyalty (X3)	0.620	0.574	1		
4. Brand trust (X4)	0.510	0.386	0.613	1	
5. Revisit intention (Y)	0.410	0.607	0.585	0.400	1

Source: Data reprocessed (2026). Note: N = 217; all correlations are significant at $p < 0.001$.

Table 3 shows that all five variables are positively and significantly correlated. Image (r = 0.607) and loyalty (r = 0.585) have the strongest zero-order correlations with revisit intention, while awareness (r = 0.410) and trust (r = 0.400) have moderate ones. The predictors are also correlated with one another (r = 0.386–0.620), which is why the unique contribution of each in the regression can differ markedly from its simple correlation.

Regression assumption checks. Table 4 summarises the assumption checks and Figure 2 shows the residual plots. Multicollinearity is not a concern: VIF values are between 1.56 and 2.31 (tolerance 0.43–0.64), and the highest correlation among predictors is 0.62. Residuals show no sign of autocorrelation (Durbin–Watson = 1.97) or of non-linearity or misspecification (RESET p = 0.433). Two features call for caution. First, the Breusch–Pagan test did not indicate heteroskedasticity (p = 0.192), but the White test did (p < 0.001). Because the White test is also sensitive to specification error and the RESET test found none, the result is taken as evidence of some unequal residual variance, and heteroskedasticity-consistent (HC3) standard errors were computed. Second, residuals depart mildly from normality (skewness = −0.44, excess kurtosis = 1.04; Shapiro–Wilk p = 0.007), mainly because of a few large negative residuals visible in Figure 2b. With 217 observations, the t- and F-tests are fairly robust to moderate non-normality (Lumley et al., 2002), and bootstrap intervals were computed as a check. Two cases had studentised deleted residuals above 3 in absolute value (3.52 and 4.04) and four had leverage above 0.069, but the largest Cook's distance was 0.143, far below 1.

Table 4. Regression Assumption Diagnostics

Assumption	Procedure	Result	Assessment
Multicollinearity	VIF; tolerance	VIF 1.56–2.31; tolerance 0.43–0.64	No concern
Independence of residuals	Durbin–Watson	1.97	No autocorrelation
Linearity and specification	Ramsey RESET	F(1, 211) = 0.62, p = 0.433	No evidence of non-linearity
Homoskedasticity	Breusch–Pagan; White	BP $\chi^2(4) = 6.10$, p = 0.192; White $\chi^2(14) = 39.61$, p < 0.001	Mixed; HC3 standard errors used as sensitivity analysis
Normality of residuals	Shapiro–Wilk; Jarque–Bera; skewness; kurtosis	W = 0.982, p = 0.007; JB = 16.87, p < 0.001; skewness −0.44; excess kurtosis 1.04	Mild departure; large n; bootstrap used as check
Influential observations	Studentised deleted residual; leverage; Cook's D	2 cases with |value| > 3 (max 4.04); 4 cases with leverage > 0.069 (max 0.108); max Cook's D = 0.143	No case with Cook's D near 1; decisions unchanged without outliers

Source: Data reprocessed (2026). Note: k = 4 predictors, N = 217.

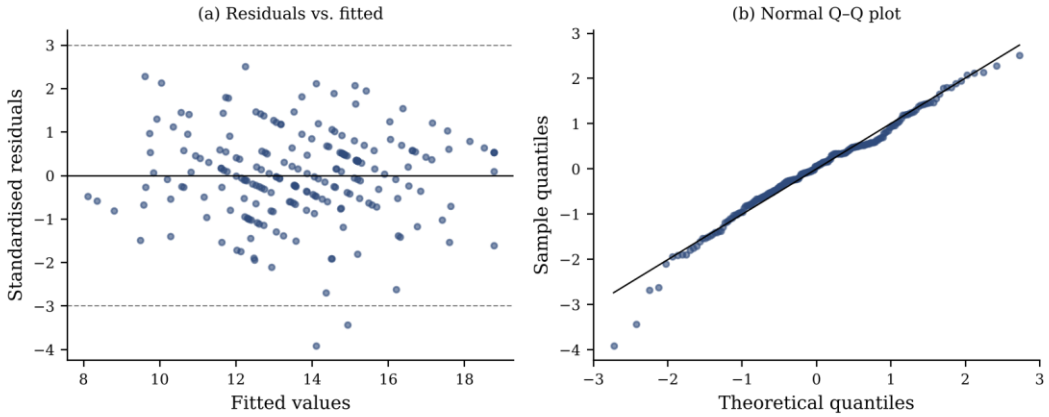


Figure 2. Regression residual diagnostics: (a) standardised residuals against fitted values; (b) normal Q–Q plot of the residuals

Sensitivity analyses. HC3 standard errors gave the same decisions as Table 7 (image: SE = 0.074, p < 0.001; loyalty: SE = 0.139, p = 0.001; awareness: p = 0.806; trust: p = 0.582). The percentile bootstrap 95% confidence intervals for B were 0.263 to 0.542 for image, 0.195 to 0.715 for loyalty, −0.210 to 0.160 for awareness, and −0.196 to 0.394 for trust, so only image and loyalty excluded zero. Re-estimating the model without the two flagged outliers also left every decision unchanged (image B = 0.428 and loyalty B = 0.430, both p < 0.001;

awareness p = 0.698; trust p = 0.409; adjusted R^2 = 0.483). The substantive conclusions are therefore not driven by the assumption departures identified, although they remain conditional on the sample and design.

Table 5. Regression Model Summary and F-Test

Statistic	Value
R	0.673
R Square	0.454
Adjusted R Square	0.443
Std. error of the estimate	2.385
Valid observations (N)	217
Calculated F (df1 = 4, df2 = 212)	43.984
F significance	< 0.001

***Source**: Data reprocessed (2026)*

The multiple linear regression estimates show an R value of 0.673, an R Square of 0.454, and an Adjusted R Square of 0.443 (N = 217; standard error of the estimate = 2.385 points on the 4–20 scale). The Adjusted R Square of 0.443 indicates that 44.3% of the variation in revisit intention can be jointly explained by brand awareness, brand image, brand loyalty, and brand trust in the model. Meanwhile, the remaining 55.7% of the variation lies beyond the explanatory capacity of the model and may relate to other factors not analysed in this study.

Table 6. Analysis of Variance (ANOVA) of the Regression Model

Source	Sum of squares	df	Mean square	F	Sig.
Regression	1000.689	4	250.172	43.984	< 0.001
Residual	1205.808	212	5.688		
Total	2206.498	216			

Source: Data reprocessed (2026). Note: dependent variable = revisit intention.

The F-test in Tables 5 and 6 yields an F value of 43.984 with 4 and 212 degrees of freedom and a significance of less than 0.001. This significance value is smaller than 0.05, so the model containing brand awareness, brand image, brand loyalty, and brand trust is significant as a whole: at least one regression coefficient differs from zero. This does not mean that all four predictors are significant individually; the t-tests in Table 7 show that only brand image and brand loyalty are. The fifth hypothesis is therefore supported only in this omnibus sense by the research data.

The t-test results and regression coefficients for each variable are presented in Table 7. The coefficient B is used to read the change in the revisit intention score for a one-unit change in the predictor score, with the other predictors held constant. The standardised coefficient (β) allows comparison across predictors, and the confidence intervals show the precision of each estimate.

Table 7. Results of Multiple Linear Regression and t-Test

Variable	B	SE	β	t	Sig.	95% CI of B	VIF	Decision
Constant	0.867	1.229	—	0.705	0.481	−1.555 to 3.288	—	
Brand awareness (X1)	−0.024	0.082	−0.020	−0.296	0.767	−0.186 to 0.137	1.77	Not significant
Brand image (X2)	0.402	0.063	0.406	6.412	< 0.001	0.279 to 0.526	1.56	Significant positive
Brand loyalty (X3)	0.453	0.104	0.334	4.335	< 0.001	0.247 to 0.658	2.31	Significant positive
Brand trust (X4)	0.086	0.116	0.049	0.738	0.461	−0.143 to 0.315	1.68	Not significant

Source: Data reprocessed (2026). Note: N = 217; dependent variable = revisit intention; SE = standard error; CI = confidence interval; two-tailed tests.

The resulting regression equation is Y = 0.867 − 0.024X1 + 0.402X2 + 0.453X3 + 0.086X4. These results show that brand image and brand loyalty have positive and significant coefficients, whereas brand awareness and brand trust are not significant. Based on the standardised Beta, brand image has the largest value at 0.406, followed by brand loyalty at 0.334, brand trust at 0.049, and brand awareness at −0.020. Brand image therefore has the largest standardised coefficient and the largest unique variance share (squared semipartial correlation = 0.106, against 0.048 for loyalty, 0.001 for trust, and 0.000 for awareness). However, the 95% bootstrap interval for the difference between the standardised coefficients of image and loyalty (−0.20 to 0.35) includes zero, so the data do not show that image is a stronger predictor than loyalty; they show that these two are the only predictors with unique associations. Adding awareness and trust to a model that already contains image and loyalty raises R^2 only from 0.452 to 0.454.

Discussion

The Relationship between Brand Awareness and Revisit Intention

The test results show that brand awareness has no significant association with revisit intention (B = −0.024, 95% CI −0.186 to 0.137; t = −0.296; p = 0.767). A significance value greater than 0.05 indicates that the first hypothesis is not supported. This result needs careful reading. Awareness is not unrelated to revisit intention in simple terms: its zero-order correlation with revisit intention is moderate and significant (r = 0.410; Table 3). What disappears is its unique contribution once brand image and brand loyalty are held constant (squared semipartial correlation = 0.000). Awareness is strongly correlated with loyalty (r = 0.620) and image (r = 0.486), so most of what it shares with revisit intention is also shared with these two dimensions. Conceptually, brand awareness relates to tourists' ability to recognise and recall a destination. Brand awareness plays a role at the stage of recognition and initial consideration, but recognition does not necessarily develop into a reason for a repeat visit.

This result needs to be compared with Intuluck et al. (2024), who tested brand awareness and brand loyalty as part of the mechanism linking brand attributes to tourists' revisit intention. That study placed brand awareness in a model involving perceived value and brand attributes. This difference in models is important because the Sangiran study tests the direct effect of brand awareness on revisit intention, whereas Intuluck and colleagues examined the role of brand awareness within a broader framework of relationships. Accordingly, a non-significant result in the direct model does not necessarily rule out the possibility that brand awareness plays a role at the early stage of the decision process or through mediating variables.

The following explanations were not tested in this study. (a) Restricted variability: all respondents had visited Sangiran, so awareness is high (per-item mean 3.94) and varies little (CV = 0.17), which limits its ability to discriminate between tourists who intend to return and those who do not. (b) Conceptual ordering: in CBBE frameworks awareness is a precondition for image and loyalty (Keller, 1993), so its association with revisit intention may be indirect, running through these dimensions; mediation or structural models would be needed to test this. (c) Statistical power is unlikely to be the main explanation: the sample could detect a unique effect of about $f^2 = 0.04$, and the observed unique effect of awareness ($f^2 = 0.0004$) is far smaller. (d) At heritage and educational destinations, the intention to return may be more closely tied to the content of the experience offered than to the mere ability to recognise the destination's name. If so, visitors who already know Sangiran may need a new reason to return, such as refreshed exhibitions, educational activities, interpretation of archaeological findings, family programmes, or an experience that differs from previous visits. The survey did not measure any of these; they are possible implications to be evaluated, not results of the survey.

The Relationship between Brand Image and Revisit Intention

Brand image is found to have a positive and significant association with revisit intention (B = 0.402, 95% CI 0.279 to 0.526; β = 0.406; t = 6.412; p < 0.001). The second hypothesis is therefore supported. The positive coefficient indicates that an increase in the brand image score is associated with an increase in the intention-to-revisit score when the other variables in the model are held constant. In substantive terms, a one-point higher image score (on the 4–20 scale) goes with a 0.40-point higher revisit-intention score, and image alone accounts for about 10.6% of the variance in revisit intention beyond the other predictors, the largest unique share in the model. This finding is consistent with Rodrigues et al. (2024), who showed that brand image has a significant influence on revisit intention. Wei et al. (2024) found that destination image is related to revisit intention. This similarity of results reinforces the view that tourists' perceptions of a destination's character and quality are an important element in the formation of behavioural intentions, and agrees with the meta-analytic evidence that destination image is related to tourist loyalty (Zhang et al., 2014).

The findings of Prawira et al. (2024) are also relevant because they examined brand image at a destination of cultural significance in Indonesia. That study shows that brand image interacts with cultural authenticity,

community engagement, destination identity, and perceived cultural exchange. For Sangiran, this finding suggests that the image of a heritage destination is shaped not only by promotion, but also by the way historical value and knowledge are communicated to visitors.

The attributes available to build Sangiran's image are unusual. In Keller's (1993) terms, brand image is the set of associations held in memory, and for Sangiran these can draw on a UNESCO-inscribed site recognised for its contribution to understanding human evolution (UNESCO World Heritage Centre, n.d.), a fossil-bearing landscape that connects visitors to deep time, and museum clusters that interpret the history of discovery, the geological layers, and human evolution. Research on heritage tourism has argued that the experience depends on how visitors relate to the heritage on display (Poria et al., 2003), and that experience quality and perceived value shape heritage tourists' behavioural intentions (Chen & Chen, 2010). A brand image built on such associations may therefore be closely tied to the wish to return. The data are consistent with this reading in one respect: image has the lowest mean of the five constructs (3.21 per item) and the widest dispersion (CV = 0.25), so differences between visitors in how they see Sangiran are large, and these differences go with differences in intention. In the context of Sangiran, associations with being a world heritage site, a centre of knowledge about early humans, and a space for learning about human evolution can form a distinctive destination identity. If tourists regard Sangiran as a place that is valuable, interesting, and informative, and that offers an experience not easily found elsewhere, this image can strengthen the desire to visit again. Two cautions apply. The study has no comparison group, so it cannot show that image matters more at heritage sites than at recreational destinations; the pattern is consistent with, but does not demonstrate, a distinctive heritage effect. Image was also analysed as a single construct, so which specific attributes drive the result remains an open question.

The Relationship between Brand Loyalty and Revisit Intention

Brand loyalty has a positive and significant association with revisit intention (B = 0.453, 95% CI 0.247 to 0.658; $\beta = 0.334$; $t = 4.335$; $p < 0.001$). The third hypothesis is therefore supported. The positive regression coefficient indicates that the higher the brand loyalty score, the higher the intention-to-revisit score after the influence of the other variables in the model is controlled for. This result is consistent with Stylos & Bellou (2019), who emphasised the importance of destination loyalty in explaining tourists' behavioural indicators. That study also cautioned that loyalty, intention to revisit, and intention to recommend are interrelated constructs that are not entirely identical. This distinction is important when reading the results for Sangiran, because the significant association of loyalty indicates that preference or attachment to the destination is related to the intention to return. Loyalty accounts for about 4.8% of the variance in revisit intention beyond the other predictors.

Loyalty (preference, commitment, and tendency to choose Sangiran again; Table 1) and revisit intention are conceptually adjacent, and their correlation is high ($r = 0.585$). Part of the association may therefore reflect shared content between an attitudinal construct and a behavioural-intention construct, not a separate mechanism. Discriminant validity between the two was not tested and should be examined in future work, for example with confirmatory factor analysis.

Loyalty towards a destination can develop when tourists' experiences match their expectations, when the destination has values regarded as important, and when visitors feel that the place is worth choosing again. At an educational destination such as Sangiran, loyalty may be related to interest in knowledge, the relevance of the experience for family or school learning, and impressions of the site's uniqueness. Tourists with greater attachment and preference for Sangiran tend to be more likely to include the destination in their next itinerary. These links to learning interest and family or school visits are plausible explanations drawn from the nature of the site; they were not measured in this survey.

The Relationship between Brand Trust and Revisit Intention

Brand trust has a positive coefficient but no significant association with revisit intention (B = 0.086, 95% CI −0.143 to 0.315; $t = 0.738$; $p = 0.461$). A significance value greater than 0.05 indicates that the fourth hypothesis is not supported. As with awareness, trust is moderately correlated with revisit intention in simple terms ($r = 0.400$), but its unique contribution is negligible (squared semipartial correlation = 0.001). Trust is most strongly correlated with loyalty ($r = 0.613$), the highest correlation in the data set. *Comparison with the literature.* This finding differs from studies that position trust as one of the explanations of intention to revisit. Poon & Koay (2021) examined tourist trust in the context of security uncertainty arising from the protests in Hong Kong. Celep (2025) tested destination trust and revisit intention while taking visit frequency into account. These differences in context may explain why trust does not always show the same direct influence across all destinations. The strong link between trust and loyalty is also in line with Chaudhuri and Holbrook (2001), who treated trust as an antecedent of loyalty.

These were not tested. (a) At Sangiran, tourists may regard the reliability of information and management as a basic condition that a destination should meet. Under such conditions, trust may function as a factor that reduces doubt, but is not necessarily the main reason to return. (b) Any effect of trust may run through loyalty rather than directly, a path that mediation analysis could examine. (c) Trust is uniformly high in the sample (per-item mean 3.87; the smallest standard deviation of the constructs), so there is little variation to relate to intentions. (d) Trust was measured with three items on reliability; it may not capture heritage-specific aspects such as the perceived accuracy of interpretation. (e) Unlike the Hong Kong study, there was no obvious source of uncertainty at Sangiran that would make trust a deciding factor. The decision to revisit may be more strongly influenced by perceptions of the destination's uniqueness and appeal, the experience gained, or preferences that have already formed.

A non-significant result also does not mean that managers can disregard trust. Trust remains important for maintaining reputation and ensuring the accuracy of information, safety, consistency of service, and the credibility of management. This importance rests on general management reasoning, not on the present data, which contain no evidence on those outcomes. However, based on the empirical model of this study, brand trust has not been shown to be a direct predictor of revisit intention when brand awareness, brand image, and brand loyalty are included simultaneously.

The Simultaneous Relationship of Brand Awareness, Brand Image, Brand Loyalty, and Brand Trust

The F-test results show that the four independent variables simultaneously have a significant relationship with revisit intention ($F(4, 212) = 43.984$; $p < 0.001$). This result indicates that the intention to revisit is better understood as a phenomenon that can be related to several brand dimensions at the same time. However, the omnibus test only shows that at least one coefficient differs from zero. Here it is carried by brand image and brand loyalty: a model containing only these two reaches $R^2 = 0.452$, virtually the same as the full model ($R^2 = 0.454$), so awareness and trust add almost nothing once image and loyalty are known. The fifth hypothesis is thus supported only in the sense that the set of dimensions is related to revisit intention, not in the sense that every dimension is.

The Adjusted R Square of 0.443 indicates that the model explains 44.3% of the variation in revisit intention. By Cohen's (1988) conventions, this is a large effect ($f^2 = 0.83$). This value shows that the brand dimensions make a meaningful explanatory contribution, but do not cover all the factors related to the intention to revisit. The 55.7% of variation not explained by the model may relate to other factors. These factors are possibilities for future research, not variables that have been demonstrated in this analysis.

Theoretical and Practical Implications

Theoretically, this study provides evidence that brand dimensions do not always exert uniform strength of influence in a destination context. Three lessons follow. First, within a customer-based brand equity framework, brand image and brand loyalty retained significant unique associations with revisit intention, whereas awareness and trust did not once these two were controlled. Second, the non-significant results are not simply null: awareness and trust correlate moderately with revisit intention ($r = 0.410$ and 0.400) and strongly with loyalty ($r = 0.620$ and 0.613). This pattern is more consistent with CBBE structures in which awareness and trust come earlier in a sequence (Keller, 1993; Chaudhuri & Holbrook, 2001) than with an absence of any relationship; this is a hypothesis for mediation or structural models, not a finding of this study. Third, because the study covers one heritage site and has no comparison group, it shows that image and loyalty matter at Sangiran but cannot show that heritage sites differ from recreational destinations. This finding supports the need to test brand constructs according to the character of the destination, rather than assuming that all dimensions of brand equity will directly influence revisit intention. Whether the meaning of image and loyalty is more prominent at heritage sites than elsewhere is a question for future studies with a direct comparison design, such as multi-group analysis across destination types.

The suggestions below follow the dimensions that the results support. They are proposals to be piloted and evaluated, not demonstrated effects of any programme, because this study measured perceptions and not programme outcomes (Table 8).

Table 8. Evidence-Linked Implications for Sangiran's Management

Brand dimension	What the data show	Management implication (proposal)
Brand image (first priority)	Strongest predictor (β = 0.406; p < 0.001); lowest mean (3.21 per item) and widest dispersion	Strengthen and communicate a consistent image around Sangiran's archaeological significance and educational value, through a coherent narrative, accurate and easily understood interpretation across clusters, and communication that highlights what is unique about the site. Track image scores over time.
Brand loyalty (second priority)	Significant (β = 0.334; p < 0.001); high mean (3.91 per item)	Give already-attached visitors reasons to return, for example, regular thematic activities, updated educational materials, and family and school programmes, and evaluate them against repeat-visit records.
Brand awareness	Not significant (p = 0.767); high mean (3.94 per item)	Do not treat awareness campaigns as a direct lever for repeat visits based on this study. Awareness may still matter for attracting first-time visitors, which this study did not examine.
Brand trust	Not significant (p = 0.461); high mean (3.87 per item)	Maintain current standards of information accuracy and service as a baseline. This study gives no evidence that raising trust alone would increase revisit intention.

Source: Authors' synthesis of Tables 2 and 7.

Because the sample is non-probabilistic and the analysis does not separate first-time from repeat visitors, managers should validate these proposals with visitor records, for example, the share of repeat visitors by museum cluster, before committing resources. Efforts to increase awareness and trust remain necessary as part of good destination management, but based on this evidence, they need to be integrated with improvements in experience quality rather than expected to raise revisit intention on their own.

CONCLUSION

This study aimed to analyse the relationships between brand awareness, brand image, brand loyalty, and brand trust and tourists' revisit intention at Sangiran. The analysis of 217 respondents recruited through accidental sampling shows that the four variables simultaneously have a significant relationship with revisit intention ($F(4, 212) = 43.984$; $p < 0.001$; adjusted $R^2 = 0.443$), which means that at least one predictor is related to the outcome. Partially, brand image (β = 0.406) and brand loyalty (β = 0.334) have a positive and significant association with revisit intention. Brand awareness and brand trust show no significant partial association. Thus, in the context of this study, positive perceptions of Sangiran and tourist loyalty are stronger in explaining the intention to revisit than the level of brand recognition and trust directly. The theoretical lesson for heritage destination branding is that image and loyalty are the brand equity dimensions that keep unique associations with the intention to return once the other dimensions are controlled, while awareness and trust may matter indirectly, a possibility that remains to be tested. Given the cross-sectional design, the non-probability sample, and the single site, these are associations in a specific context. The study did not measure social, economic, or environmental sustainability, and no conclusion about sustainable tourism development is drawn.

Limitations and Suggestions for Future Research

This study has limitations because it uses only four independent variables, namely brand awareness, brand image, brand loyalty, and brand trust, to explain revisit intention. The results show that not all of these variables have a significant partial association with the intention to revisit. Other variables may therefore explain revisit intention more comprehensively. Further limitations should be noted. (1) Accidental sampling is non-probabilistic, so the results cannot be generalised to all Sangiran visitors. (2) The cross-sectional design supports associations but not causal claims, and all variables were self-reported at one time, which raises the possibility of common-method bias. (3) Construct scores are sums of ordinal items, and discriminant validity, notably between loyalty and revisit intention, was not tested. (4) Residuals showed some unequal variance and mild non-normality, although robust standard errors, bootstrap intervals, and outlier exclusion led to the same conclusions. (5) The model does not control for respondent characteristics or for whether the respondent is a first-time or repeat visitor. (6) The study covers a single heritage site, with no comparison group. Future research is accordingly advised to develop the research model by adding other variables related to tourist behaviour, such as perceived value, tourist satisfaction, experience quality, and place attachment. In addition,

the relationships between brand awareness, brand trust, and revisit intention could be examined further by involving mediating variables in order to obtain a deeper understanding of the relationships among these variables, and by using probability or multi-site samples and comparisons with non-heritage destinations.

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