

Faculty of Economics and Business

Rural Tourism Destination Competitiveness: Hard Measures versus Soft Measures and Moderating Role of Knowledge Sharing

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Rural Tourism Destination Competitiveness: Hard Measures versus Soft Measures and Moderating Role of Knowledge Sharing

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DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulations of Universiti Malaysia Sarawak. Except where due acknowledgements have been made, the work is that of the author alone. The thesis has not been accepted for any degree and is not concurrently submitted in candidature of any other degree.



……

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ABSTRACT

Within the tourism literature, there has been a growing interest in the notion of destination competitiveness and there is an increasing trend showing more authors have been taking initiatives investigating the concept of destination competitiveness in the rural tourism context. Realising the fact that the tourism sector was one of the world's largest growth industries before the COVID-19 pandemic, and the relevance of rural tourism post the pandemic, rural tourism activities are therefore seen to play an essential role in contributing towards rural economic and social welfare, and indirectly, to the country's economic growth. Therefore, in the review of the current relevant literature in tourism and rural tourism destination, gaps of the literature have been identified and a research model was proposed by the researcher. There is a need to examine and identify factors contributing to the enhancement and development of rural tourism destination competitiveness because these critical factors could provide considerable help to the rural tourism industry. This study intends to investigate the impact of hard measures (i.e., destination appeal and tourism infrastructure) and soft measures (i.e., service quality and destination image) on rural tourism destination competitiveness (i.e., sustainable management, destination marketing efforts, as well as a comparative and competitive advantage). Also, knowledge sharing was adopted as the moderator variable to testify its moderating impact in enhancing the relationship among the four predictors to rural tourism destination competitiveness. Three underlying theories were used to underpin the research framework, namely, Competitiveness Theory, Stakeholder Theory and the Social Exchange Theory. This study took place in six of the rural tourism destinations in Sarawak. A quantitative approach and survey questionnaires were used as the research instruments for data collection. 390 rows of data were used, comprising of respondents from both the international and domestic tourists visited the study sites. The

WarpPLS (version 6.0) was used to perform the PLS-SEM analysis to assess the research model. The findings of this study show that ten of the direct relationship hypotheses tested were supported. Interestingly, three of the moderating hypotheses were supported as well. Knowledge sharing was found to have a positive moderating impact on service quality and sustainable management. Also, knowledge sharing was found to positively moderated the relationship between service quality to comparative and competitive advantage. Knowledge sharing was found to have a positive moderating impact on destination image to sustainable management. To summarize, this study significantly enhanced both scholars' and practitioners' understanding of the impact on both hard (i.e., destination appeal and tourism infrastructure) and soft (i.e., service quality and destination image) measures on the development of rural tourism destination competitiveness (i.e., sustainable management, destination marketing efforts and comparative as well as a competitive advantage) with tourist's knowledge sharing as the moderators that enhanced the relationship among the predictors and dependent variables. This study provides a basis for future researchers interested in the field of rural tourism studies to further investigate the relationship among the constructs.

Keywords: Hard and soft measures, destination competitiveness, moderator, rural tourism, Sarawak

Daya Saing Destinasi Pelancongan Luar Bandar: Faktor-Faktor Keras Berbanding Faktor-Faktor Lembut dan Menyederhanakan Peranan Berkongsi Pengetahuan

ABSTRAK

Pada linkungan sastera pelancongan, terdapat peningkatan pada segi minat terhadap persepsi tujuan daya saing dan pertambahan pada pola menunjukkan banyak sasterawan mengambil inisiatif penyelidikan terhadap konsep tujuan daya saing dalam konteks pelancongan luar bandar. Kesedaran bahawa sektor pelancongan merupakan salah satu industri pertumbuhan terbesar di dunia sebelum wabak pandemik dan kesesuaian pelancongan luar bandar di pasca covid-19, aktiviti pelancongan luar bandar memainkan peranan penting dalam perkembangan ekonomi luar bandar dan kesejahteraan sosial serta secara tidak langsung memberi impak terhadap kemajuan ekonomi negara. Oleh itu, dalam kajian sastera yang berkaitan pada masa kini dalam destinasi pelancongan luar bandar, jurang sastera telah dikenal pasti dan model kajian telah dicadangkan oleh penyelidik. Terdapat keperluan untuk meneliti dan mengenal pasti faktor-faktor yang menyumbang kepada peningkatan dan pengembangan daya saing destinasi pelancongan luar bandar kerana faktor-faktor ini dapat memberikan banyak bantuan kepada industri pelancongan luar bandar. Kajian ini bertujuan untuk menyelidiki kesan faktor-faktor keras (misalnya, daya tarikan destinasi dan infrastruktur pelancongan) dan factor-faktor lembut (iaitu, kualiti perkhidmatan dan imej destinasi) terhadap daya saing destinasi pelancongan luar bandar (iaitu, pengurusan lestari, usaha pemasaran destinasi, serta kelebihan perbandingan dan daya saing). Juga, perkongsian pengetahuan diadaptasi sebagai pemboleh ubah moderator untuk membuktikan kesannya yang sederhana dalam meningkatkan hubungan antara empat peramal dengan daya saing destinasi pelancongan luar bandar. Tiga teori asas digunakan untuk menyokong kerangka penyelidikan, iaitu Teori

Daya Saing, Teori Pemangku Kepentingan dan Teori Pertukaran Sosial. Kajian ini dilakukan di enam destinasi pelancongan luar bandar di Sarawak. Pendekatan kuantitatif dan soal selidik tinjauan digunakan sebagai instrumen kajian untuk pengumpulan data. 390 baris data digunakan, terdiri daripada responden dari pelancong antarabangsa dan domestik yang mengunjungi lokasi kajian. WarpPLS (versi 6.0) digunakan untuk melakukan analisis PLS-SEM untuk menilai model kajian. Dapatan kajian ini menunjukkan bahawa sepuluh hubungan hipotesis secara langsung dan tiga hipotesis moderasi yang diuji telah disokong. Perkongsian pengetahuan didapati memberi kesan positif yang sederhana terhadap kualiti perkhidmatan dan pengurusan lestari. Juga, perkongsian pengetahuan didapati secara positif menyederhanakan hubungan antara kualiti perkhidmatan dengan kelebihan perbandingan dan daya saing. Perkongsian pengetahuan memberi kesan positif yang sederhana terhadap imej destinasi kepada pengurusan lestari. Kesimpulannya, kajian ini secara signifikan telah meningkatkan pemahaman para sarjana dan pengamal mengenai kesan terhadap factor-faktor keras dan factor-faktor lembut terhadap peningkatan daya saing destinasi pelancongan luar bandar (iaitu pengurusan lestari, usaha pemasaran destinasi dan perbandingan serta kelebihan daya saing) dengan perkongsian pengetahuan pelancong sebagai penyederhana yang meningkatkan hubungan antara peramal dan pemboleh ubah bersandar. Kajian ini memberi asas kepada penyelidik pada masa depan yang berminat dalam bidang kajian pelancongan luar bandar untuk mengkaji lebih jauh hubungan antara konstruk.

Kata kunci: *Faktor-faktor yang keras dan lembut, daya saing destinasi, penyederhana, pelancongan luar bandar, Sarawak*

TABLE OF CONTENTS

		Page
DECLARATION		i
ACKNOWLEDGEMENT		ii
ABSTRACT		iv
ABSTRAK		vi
TABLE OF CONTENTS		viii
LIST OF TABLES		xxi
LIST OF FIGURES		xxiii
CHAPTER 1: INTRODUCTION		1
1.1	Background of the Study	1
1.1.1	The Malaysian Scenario	7
1.2	Problem Statement	15
1.3	Research Objectives	18
1.3.1	General Objective	18
1.3.2	Specific Objectives	18
1.4	Research Questions	20
1.5	Definition of Key Terms	21
1.6	Significance of the Study	23

1.7 Scope of the Study 26

1.8 Organization of Chapters 26

CHAPTER 2: LITERATURE REVIEW 28

2.1 Introduction 28

2.2 Definition of Rural Tourism 29

2.3 The Concepts of Destination Competitiveness 35

2.3.1 Sustainable Management 41

2.3.2 Destination Marketing Efforts 45

2.3.3 Comparative and Competitive Advantage 47

2.4 Antecedents of Rural Tourism Destination Competitiveness 49

2.5 Consequences of Development of Rural Tourism Destination Competitiveness 52

2.6 The Concept of Destination Appeal 54

2.7 The Concept of Tourism Infrastructure 59

2.8 The Concept of Service Quality 63

2.9 The Concept of Destination Image 66

2.10 Knowledge Sharing (As a Moderator) 70

2.11 Underlying Theories 73

2.11.1 Competitiveness Theory 75

2.11.2 Stakeholder Theory 77

2.11.3 Social Exchange Theory (SET) 79

2.12 Theoretical Framework 81

2.12.1 Gaps in the Literature 81

2.12.2 Justification of the Theoretical Framework 84

2.12.3 Description of Variables 85

2.13 Development of Hypotheses 86

2.13.1 Destination Appeal and Destination Competitiveness 86

2.13.1.1 Destination Appeal and Sustainable Management 86

2.13.1.2 Destination Appeal and Destination Marketing Efforts 87

2.13.1.3 Destination Appeal to Comparative and Competitive Advantage 88

2.13.2 Tourism Infrastructure and Destination Competitiveness 89

2.13.2.1 Tourism Infrastructure and Sustainable Management 89

2.13.2.2 Tourism Infrastructure and Destination Marketing Efforts 90

2.13.2.3 Tourism Infrastructure to Comparative and Competitive Advantage 91

2.13.3 Service Quality and Destination Competitiveness 92

2.13.3.1 Service Quality and Sustainable Management 92

2.13.3.2 Service Quality and Destination Marketing Efforts 93

2.13.3.3 Service Quality to Comparative and Competitive Advantage 93

2.13.4 Destination Image and Destination Competitiveness 94

2.13.4.1 Destination Image and Sustainable Management 94

2.13.4.2 Destination Image and Destination Marketing Efforts 95

2.13.4.3 Destination Image to Comparative and Competitive Advantage 96

2.13.5 Knowledge Sharing Moderates Destination Appeal and Destination Competitiveness 96

2.13.5.1 Knowledge Sharing Moderates Destination Appeal and Sustainable Management 96

2.13.5.2 Knowledge Sharing Moderates Destination Appeal and Destination Marketing Efforts 98

2.13.5.3 Knowledge Sharing Moderates Destination Appeal as well as Comparative and Competitive Advantage 99

2.13.6 Knowledge Sharing Moderates Tourism Infrastructure and Destination Competitiveness 100

2.13.6.1 Knowledge Sharing Moderates Tourism Infrastructure and Sustainable Management 100

2.13.6.2 Knowledge Sharing Moderates Tourism Infrastructure and Destination Marketing Efforts 101

2.13.6.3 Knowledge Sharing Moderates Tourism Infrastructure as well as Comparative and Competitive Advantage 102

2.13.7 Knowledge Sharing Moderates Service Quality and Destination Competitiveness 103

2.13.7.1 Knowledge Sharing Moderates Service Quality and Sustainable Management 103

2.13.7.2 Knowledge Sharing Moderates Service Quality and Destination Marketing Efforts 104

2.13.7.3 Knowledge Sharing Moderates Service Quality as well as Comparative and Competitive Advantage 105

2.13.8 Knowledge Sharing Moderates Destination Image and Destination Competitiveness 106

2.13.8.1 Knowledge Sharing Moderates Destination Image and Sustainable Management 106

2.13.8.2 Knowledge Sharing Moderates Destination Image and Destination Marketing Efforts 107

2.13.8.3 Knowledge Sharing Moderates Destination Image as well as Comparative and Competitive Advantage 108

2.14 Summary 109

CHAPTER 3: METHODOLOGY 110

3.1 Introduction 110

3.2 Research Sites 110

3.2.1 Annah Rais Bidayuh Longhouse, Kuching 116

3.2.2 Kampung Po Ai Melugu, Sri Aman 117

3.2.3 Rumah Panjang Bawang Assan, Sibu 118

3.2.4 Rumah Benjamin Angki Homestay, Kanowit, Sibu 119

3.2.5 Bario Kelabit Highlands, Miri 120

3.2.6	Ba'kelalan Homestay, Lawas, Miri	121
3.3	Research Design and Sample	122
3.3.1	Data Collection Procedures	125
3.3.2	Participatory Approach	126
3.4	Development of Research Questionnaire	128
3.5	Measures	133
3.5.1	Destination Appeal	133
3.5.2	Tourism Infrastructure	134
3.5.3	Service Quality	134
3.5.4	Destination Image	134
3.5.5	Knowledge Sharing	135
3.5.6	Sustainable Management	135
3.5.7	Destination Marketing Efforts	136
3.5.8	Comparative and Competitive Advantage	136
3.5.9	Demographic Profile	137
3.6	Pre-test	137
3.7	Statistical Analyses	140
3.7.1	Descriptive Statistics	140
3.7.2	Common Method Variance (CMV)	141
3.7.3	Reliability Analysis	142

3.7.4 Multicollinearity Statistics 143

3.7.5 Structural Equation Modeling – Partial Least Square (SEM-PLS) 143

3.7.5.1 Average Variance Extracted (AVE) 148

3.7.5.2 Composite Reliability (CR) 149

3.7.5.3 Cronbach's Alpha 150

3.7.5.4 Convergent Validity 151

3.7.5.5 Discriminant Validity 151

3.7.5.6 Coefficient of Determinants ((R^2) 151

3.7.5.7 Predictive relevance (Q^2) 152

3.7.5.8 Effect size (f^2) 152

3.7.5.9 Variance Inflation Factors (VIF) 153

3.8 Summary 153

CHAPTER 4: RESULTS 154

4.1 Introducion 154

4.2 Profile of Respondents 154

4.3 Common Method Variance (CMV) 158

4.4 The Statistical Overview of the Variables 158

4.4.1 Assessment of the Measurement Model 162

4.4.1.1 Loading and Cross Loading 167

4.4.1.2 Convergent Validity 170

4.4.1.3 t-Value 171

4.4.1.4 Discriminant Validity 173

4.4.1.5 Reliability Test 174

4.4.1.6 Coefficient of Determinants (R^2) 177

4.4.1.7 Predictive Relevance (Q^2) 177

4.5 Assessment of the Structural Model 178

4.5.1 Hypothesis Testing 178

4.5.2 Findings of Hypothesis Testing 179

4.5.2.1 Destination Appeal to Sustainable Management 186

4.5.2.2 Destination Appeal to Destination Marketing Efforts 187

4.5.2.3 Destination Appeal to Comparative and Competitive Advantage 187

4.5.2.4 Tourism Infrastructure to Sustainable Management 187

4.5.2.5 Tourism Infrastructure to Destination Marketing Efforts 188

4.5.2.6 Tourism Infrastructure to Comparative and Competitive Advantage 188

4.5.2.7 Service Quality to Sustainable Management 188

4.5.2.8 Service Quality to Destination Marketing Efforts 188

4.5.2.9 Service Quality to Comparative and Competitive Advantage 189

4.5.2.10 Destination Image to Sustainable Management 189

4.5.2.11 Destination Image to Destination Marketing Efforts 189

4.5.2.12 Destination Image to Comparative and Competitive Advantage 190

4.5.2.13 Knowledge Sharing Moderates Destination Appeal and Sustainable Management 190

4.5.2.14 Knowledge Sharing Moderates Destination Appeal and Destination Marketing Efforts 190

4.5.2.15 Knowledge Sharing Moderates Destination Appeal as well as Comparative and Competitive Advantage 191

4.5.2.16 Knowledge Sharing Moderates Tourism Infrastructure and Sustainable Management 191

4.5.2.17 Knowledge Sharing Moderates Tourism Infrastructure and Destination Marketing Efforts 191

4.5.2.18 Knowledge Sharing Moderates Tourism Infrastructure as well as Comparative and Competitive Advantage 192

4.5.2.19 Knowledge Sharing Moderates Service Quality and Sustainable Management 192

4.5.2.20 Knowledge Sharing Moderates Service Quality and Destination Marketing Efforts 193

4.5.2.21 Knowledge Sharing Moderates Service Quality as well as Comparative and Competitive Advantage 193

4.5.2.22 Knowledge Sharing Moderates Destination Image and Sustainable Management 194

4.5.2.23 Knowledge Sharing Moderates Destination Image and Destination Marketing Efforts 195

4.5.2.24 Knowledge Sharing Moderates Destination Image as well as Comparative and Competitive Advantage 196

4.5 Summary 196

CHAPTER 5: DISCUSSION AND CONCLUSION 197

5.1 Introduction 197

5.2 The Backdrop 197

5.3 Discussion 200

5.3.1 Destination Appeal and Rural Tourism Destination Competitiveness 203

5.3.1.1 Destination Appeal and Sustainable Management (H1) 204

5.3.1.2 Destination Appeal and Destination Marketing Efforts (H2) 205

5.3.1.3 Destination Appeal and Comparative as well as Competitive Advantage (H3) 205

5.3.2 Tourism Infrastructure and Rural Tourism Destination Competitiveness 206

5.3.2.1 Tourism Infrastructure and Sustainable Management (H4) 207

5.3.2.2 Tourism Infrastructure and Destination Marketing Efforts (H5) 208

5.3.2.3 Tourism Infrastructure and Comparative as well as Competitive Advantage (H6) 209

5.3.3 Service Quality and Rural Tourism Destination Competitiveness 209

5.3.3.1 Service Quality and Sustainable Management (H7) 210

5.3.3.2 Service Quality and Destination Marketing Efforts (H8) 210

5.3.3.3 Service Quality and Comparative as well as Competitive Advantage (H9) 211

5.3.4 Destination Image and Rural Tourism Destination Competitiveness 212

5.3.4.1 Destination Image and Sustainable Management (H10) 212

5.3.4.2 Destination Image and Destination Marketing Efforts (H11) 213

5.3.4.3 Destination Image and Comparative as well as Competitive Advantage (H12) 214

5.3.5 Knowledge Sharing Moderates Destination Appeal and Rural Tourism Destination Competitiveness 215

5.3.5.1 Knowledge Sharing Moderates Destination Appeal and Sustainable Management (13) 215

5.3.5.2 Knowledge Sharing Moderates Destination Appeal and Destination Marketing Efforts (H14) 216

5.3.5.3 Knowledge Sharing Moderates Destination Appeal and Comparative as well as Competitive Advantage (H15) 218

5.3.6 Knowledge Sharing Moderates Tourism Infrastructure and Rural Tourism Destination Competitiveness 219

5.3.6.1 Knowledge Sharing Moderates Tourism Infrastructure and Sustainable Management (H16) 220

5.3.6.2 Knowledge Sharing Moderates Tourism Infrastructure and Destination Marketing Efforts (H17) 221

5.3.6.3 Knowledge Sharing Moderates Tourism Infrastructure and Comparative as well as Competitive Advantage (H18) 221

5.3.7 Knowledge Sharing Moderates Service Quality and Rural Tourism Destination Competitiveness 222

5.3.7.1 Knowledge Sharing Moderates Service Quality and Sustainable Management (H19) 223

5.3.7.2 Knowledge Sharing Moderates Service Quality and Destination Marketing Efforts (H20) 224

5.3.7.3 Knowledge Sharing Moderates Service Quality and Comparative as well as Competitive Advantage (H21) 225

5.3.8 Knowledge Sharing Moderates Destination Image and Rural Tourism Destination Competitiveness 226

5.3.8.1 Knowledge Sharing Moderates Destination Image and Sustainable Management (H22) 226

5.3.8.2 Knowledge Sharing Moderates Destination Image and Destination Marketing Efforts (H23) 227

5.3.8.3 Knowledge Sharing Moderates Destination Image and Comparative as well as Competitive Advantage (H24) 228

5.4 Implications 229

5.4.1 Theoretical Implications 229

5.4.2 Practical Implications 232

5.5 Strenghts and Potential Limitations of the Research 238

5.6 Directions for Future Research 240

5.7 Conclusion 242

REFERENCES 244

APPENDICES 338

LIST OF TABLES

		Page
Table 1.1	Tourist Arrivals and Receipts to Malaysia	12
Table 1.2	Tourist Arrivals to Sarawak by Domestic, International and Overall	13
Table 2.1	Types of Term Used for Rural Tourism	34
Table 2.2	Definition of Destination Competitiveness	38
Table 2.3	Summary of Variables Covered by Competitiveness Theory, Stakeholder Theory and Social Exchange Theory (SET)	75
Table 3.1	Characteristics of the Selected Research Sites	113
Table 3.2	Summary of the Measurement of the Constructs	131
Table 3.3	Outcomes of Pre-testing Questionnaire	138
Table 3.4	Assessing Measurement Models	147
Table 3.5	Assessing Structural Models	148
Table 4.1	Demographic Profile of Respondents	155
Table 4.2	Total Variance Explained	159
Table 4.3	Mean and Standard Deviation	160
Table 4.4	The Skewness and Excess Kurtosis	164
Table 4.5	The Results of Measurement Model	165

Table 4.6 Loading and Cross Loadings 168

Table 4.7 Summary Results of the Model Constructs 171

Table 4.8 Discriminant Validity of Constructs 174

Table 4.9 Results of the Reliability Test 175

Table 4.10 The R2 Values (R-squared) 177

Table 4.11 The Q2 Values (Q-squared) 178

Table 4.12 Path Coefficients and Hypotheses Testing 180

LIST OF FIGURES

		Page
Figure 2.1	Conceptual Framework	86
Figure 3.1	Homestay Sarawak Location Map	111
Figure 3.2	The Location of the Research Sites	113
Figure 3.3	Annah Rais Bidayuh Longhouse	116
Figure 3.4	Kampung Po Ai Melugu	117
Figure 3.5	Rumah Panjang Bawang Assan	118
Figure 3.6	Rumah Benjamin Angki Homestay	119
Figure 3.7	Bario Kelabit Highlands	120
Figure 3.8	Ba'kelalan Village	121
Figure 3.9	G*power Graph	124
Figure 3.10	Graphs for Inverse Square Root Method and Gamma-exponential Method	124
Figure 3.11	A Group Photo with Community Members After a Participatory Approach Session at Bawang Assan	128
Figure 4.1	Research Model	164
Figure 4.2	Research Model with Path Coefficient and P-values	180
Figure 4.3	3D Graph for Moderating Effect for H19 (SQ*KS*SM)	193
Figure 4.4	3D Graph for Moderating Effect for H21 (SQ*KS*C&CAdv)	194

Figure 4.5 3D Graph for Moderating Effect for H22 (DI*KS*SM) 195

CHAPTER 1

INTRODUCTION

1.1 Background of the Study

The tourism sector is considered one of the world's largest and fastest growing industries, significantly contributing to the development of a country's economy (Nilashi et al., 2019; Scott, Hall & Gössling, 2019; Yang, Ishtiaq & Thanh, 2019; Nicolaides, 2020). Tourism is defined as the movement of people across places (Baggio, 2019) who seek to travel for different authentic natural and cultural experiences (Forbes, 2017). According to Tang and Tan (2015), the tourism industry is recognized as a key factor in enhancing the country's long-term economic growth as a whole. This includes not only contributing to the economy of the country but also to the enhancement of earnings of local communities through the creation of more jobs and business opportunities for both the community and tourism stakeholders (Falak, Lo & Yeo, 2016; Gabriel et al., 2017; Long & Nguyen, 2018). In a simplified context, the tourism industry, particularly the rural tourism industry, is seen as a bottom-up economic contributor; in which (i) the micro-level communities benefit from tourism activities; (ii) tourism industry players earn and perform at the meso-level; and (iii) this ultimately leads to an increase in the country's economic growth on the macro-level. Statistical facts reported by The World Tourism Organization (UNWTO) reveals that there has been an increase of international tourist arrivals by 4% in 2019, which accounts for a total of 1.5 billion international tourist arrivals (UNWTO, 2020a). Furthermore, the statistical facts from UNWTO also recorded Asia and the Pacific as the second led growth regions in the year 2019. On top of that, a recent report by World Travel & Tourism Council (2020) indicated that there is a growth of 3.5%, totalling $8.9 trillion in contributions, to the

global Travel & Tourism sector in the year 2019. However, with the emergence of the COVID-19 pandemic, the latest statistics show that international tourist arrivals have fallen by 72% in January to October 2020, setting the tourism sector back by US$1 Trillion (UNWTO, 2020c).

Over the past decade, the tourism industry, specifically rural tourism, has long been recognized for its contribution to local economic development (Ibănescu, Stoleriu, Munteanu & Iaţu, 2018; Nooripoor, Khosrowjerdi, Rastegari, Sharifi & Bijani, 2020). There is an increasing trend showing that more tourists are traveling to rural destinations due to the attractive natural and cultural components, allowing them to relax and get away from their everyday busy routine (Edirin, 2018; Zhu & Deng, 2020). This trend is expected to further increase as more and more tourists and visitors are expected to move away from congested and unsafe locations to practice avoiding the 3Cs – Confined spaces, Close contact and Crowded spaces. Thus, the scope of this study is to take a closer look into the potential tourism contribution in rural areas. The term "rural tourism" is defined as tourism that takes place at rural destinations, with the existence of natural, cultural and human experiences equipped with rural character (Maksin, 2012). Similarly, Wani and Shafi (2013) proposed another definition for rural tourism, namely that it is a rustic destination which largely depends on the natural environment, customs and traditions of local communities to create natural experiences for tourists. Studies have indicated that the reason why rural tourism is in the focus of the tourism industry development today is because a growing number of tourists are seeking out rural destinations to enjoy and get rid of everyday stressful activities (Najafabadi, 2012; Jacobs, Preez & Fairer-Wessels, 2020). Researchers in the past (e.g., Zenelaj & Prifti, 2013) have elucidated that for one to absolutely relax and enjoy a tourism destination, he or she must come to a place where the everyday experiences are not repeated.

With the decline of traditional agrarian industries, various tourism stakeholders (i.e., local communities, government and industry players) have recentered their focus on rural tourism due to its potential as an alternative solution to generate income (Ruiz-Molina, Gil-Saura & Moliner-Velazquez, 2010; Moric, 2013). In fact, rural tourism has been recognized as an imperative tool to improve local welfare and standards of living (Aliman, Hashim, Wahid & Harudin, 2016; Sima, 2019). Past studies have also postulated the importance of rural tourism as an alternative way to generate income for rural communities (Maksimovic, Mihajlović & Urošević, 2015; Rasoolimanesh, Ringle, Jaafar & Ramayah, 2017) and development of better infrastructure and facilities (Topolansky Barke, Gonzaley Triay & Häufele, 2016). The uniqueness of rural destinations in terms of its nature, culture and ethnicity have successfully attracted tourists' attention and intention to visit (Hernandez, Suarez-Vega & Jimenez, 2016; Long & Nguyen, 2018; Suryawardani, Wiranatha, Purbanto & Nitivattananon, 2020). Ultimately, the main intention is to boost tourists' spending using the uniqueness and attractions available at the rural tourism destination, because tourists' spending could enhance the performance of the local economy (Engström & Kipperberg, 2015).

Past researchers have highlighted that it is important to identify factors that contribute to the development of tourism destination competitiveness as this could possibly provide some significant and considerable help to the tourism industry (Demirović, Petrović, Monteiro & Stjepanović, 2016). However, due to today's immense development and increasing challenges for rural tourism development (Campón-Cerro, Hernández-Mogollón & Alves, 2017), innovation has become the key driver that differentiates one rural tourism destination from another, particularly to determine the level of competency for a tourism destination and "knowledge" has long been recognized as the key to innovation (Albino,

Rodrigues, Mendes & Periera, 2010). UNDP (2013) has propounded the need of new knowledge to improve living conditions in rural areas. The study by Ali and Avdic (2015) has investigated the use of a knowledge management framework for sustainable rural tourism development. Accordingly, knowledge sharing is considered as one of the most important components for sustainable development of tourism destination competitiveness because the sharing of knowledge between individuals could jointly create new knowledge for tourism development (Odunga, Kieti & Too, 2020).

This study intends to investigate the proposed research model for tourists' perspective. Although past researchers Milman and Pizam (1995) and Formica (2000) have propounded that the use of tourists' perspectives to evaluate tourism performance is somewhat not ideal due to their short period of visiting time, however, based on the subsequent investigations, the findings have revealed that an in-depth knowledge of tourists' perceptions is vital in determining the competitiveness of tourism destinations (Hallmann, Muller & Feiler, 2014; Carneiro, Lima & Silva, 2015; Pavlović, Avlijaš & Stanić, 2016; Reisinger, Michael & Hayes, 2019). Thus, it is believed that there is merit in considering tourists' view of a destination, especially in considering levels of competitiveness, as this information could add value to improving a destination's competitiveness. It was put forward that two main factors that could possibly influence the length of a tourist vacation period at a tourism destination were (i) the availability of tourist information; and (ii) information on types of products demanded (Mazilu & Stancioiu, 2009). However, current investigations on the perceptions of tourism stakeholders has neglected its influence on tourism destination competitiveness (Mazilu, 2010; Er & Simon, 2015). Thus, it is vital to have an in-depth understanding of tourists' perspectives on the development of rural tourism destination

competitiveness by looking into various potential strategic factors and moderators in the rural tourism context.

Although, rural tourism has been steadily growing over the past decade, there have been a few challenges experienced by the tourism destinations. Past studies have confirmed that there was an increased competition among tourism destinations (Ramseook-Munhurrun, Naidoo, Seebalck & Pillai, 2016; Demirovića, Košićb & Stjepanovićc, 2018; Hanafiah & Zulkifly, 2019; Fernández, Azevedo, Martín & Martín, 2020; Mustafa, Omar & Mukhiar, 2020). As a result, it was revealed that studies on rural tourism destination competitiveness is gaining more attention from tourism stakeholders, and countless efforts have been taken by past researchers to examine and identify factors to develop rural tourism destination competitiveness. The study on rural tourism destination competitiveness will be more relevant today, as tourists will seek out less crowded and open spaces tourism destinations, especially during the post Covid-19 period (UNWTO, 2020b).

A tourism product can either be tangible or intangible services (Lamb, Hair, McDaniel, Boshoff & Terblanches, 2004; Wadawi, Brresler & Herbst, 2011; UNWTO, 2019). Services, on the other hand, are defined as non-physical goods provided in exchange for money in a business environment (Davidoff, 1994). In the tourism industry, services play a vital role to attract tourists. This is further supported by past studies (e.g., Qu, Kim & Im, 2011; Schaar, 2013) where it was stated that both tangible and intangible assets in a tourism destination significantly build up a tourist destination. Apostolopous and Gayle (2002) proposed that the tangible assets include natural resources and man-made attractions (e.g., tourism infrastructure), whereas the intangible assets are destination image and reputation. Past studies have also identified cultural and natural attractiveness as the components for

hard measures, whereas the soft measures refer to visitors' perception or experiences toward tourism activities provided (Dwyer & Kim, 2003; Ancincova, 2014), whereby its characteristics are prominently seen interrelated to the various components of service quality. In short, destination appeal and tourism infrastructure fall under tangible products or hard services, as both provide physical satisfaction to visitors. It has been documented that both service quality and destination image in a tourism destination provides psychological satisfaction and motivation to attract visits from tourists. However, some debated that tangible elements brought a more significant impact on tourism compared to intangible elements (Albayrak, Caber & Aksoy, 2010). It is concluded that service quality and destination image are categorised under intangible products or soft services (Apostolopous & Gale, 2002; Ancincova, 2014).

It was evidenced that the components of destination appeal and tourism infrastructure significantly influenced the development of rural tourism destination competitiveness (Adeyinka-Ojo & Nair, 2015; Gajić, Penić, Vujko & Petrović, 2018; Manrai, Manrai & Friedeborn, 2018; Owiya, Mulwa & Kemboi, 2019). On the other hand, service quality has been identified as one of the contributors to the development of a destination's competitive advantage (Yaru, Liu & Jing, 2018). Fotiadis and Vassiliadis (2010) states that the ability of a rural tourism destination to provide excellent services to tourists is important in order to ensure more promising income generation. It is believed that when excellent services to tourists are provided, not only can new tourists be attracted, but existing tourists will continue to revisit the place and spread positive reviews about their experiences at the destination. Destination image is also recognized as another crucial factor that plays a role in determining the competitiveness of a tourism destination (Konecnik, 2002; Prayag, 2010; Chew & Jahari, 2014).

Clearly, the concept of "destination competitiveness" plays a significant part in the tourism industry, particularly in the context of rural tourism. Hence, it is worthy to conduct an in-depth investigation into the antecedents and consequences in order to identify the gaps and to propose a more comprehensive model for the development of rural tourism destination competitiveness. The proposed research model is based on the hard and soft measures, while integrating knowledge sharing as one of the innovative initiatives for tourism development. Thus, knowledge sharing is adopted as the moderating variable in this study in order to affirm whether the existence of knowledge sharing would enhance or strengthen the relationship between the proposed independent variables on rural tourism destination competitiveness. In other words, the community could potentially leverage the knowledge or experiences shared by tourists to better develop rural tourism destination. In fact, Felix and Usman (2008) highlighted that "no place is too remote to be visited". They added that any place could be developed as a potential tourism destination if the destination could be packaged well and an effective promotional strategy was devised. In sum, factors (i.e., destination appeals, tourism infrastructure, service quality and destination image) that contribute to the development of rural tourism destination competitiveness from the tourists' point of view are worth examining, as this could lead to the better development of rural tourism destination competitiveness in terms of sustainable management, destination marketing and development of comparative and competitive advantage.

1.1.1 The Malaysian Scenario

The tourism industry is well recognized as one of the industries that can generate lucrative incomes for the local communities and has the potential to greatly contribute to the country's economic growth (Okello, 2014; Dayour, Adongo & Taale, 2016; World Tourism Organization and Global Tourism Economy Research Centre, 2016; Scott et al., 2019). A

vast number of researches has been conducted in the past to indicate the potential economic contributions of rural tourism in enhancing the livelihood of communities (Khound, 2013; Bel, Lacroix, Lyser, Rambonilaza & Turpin, 2015; Hena, 2015; Triyanto et al., 2018). In the Malaysian context, the tourism sector has been identified as a key economic sector that possesses high potential for income generation and development (Cheuk, Lo & Atang, 2015). This finding is further reinforced by the recent performance of the sector in 2019, which saw it contributing to a total of RM86.14 billion to the national economy with 26.1 million tourists (Tourism Malaysia, 2020). To date, a number of initiatives have been taken by the government to grow the tourism industry, particularly in the rural tourism or ecotourism sector (Al-Mulali, Gholipour & Al-hajj, 2019). For instance, the Rural Tourism Master Plan (RTMP) was initiated by the government as an additional measure to boost the growth of Malaysia's rural tourism industry. Recently, it was reported in the news that Malaysia is targeting to receive a total of RM100 billion following the arrival of 30 million international tourists during the Visit Malaysia 2020 campaign (New Straits Times, 2019).

In Malaysia, it has been noted that rural tourism is becoming increasingly viewed as an activity for alternative income generation among rural communities (Jaafar, Bakri & Rasoolimanesh, 2015; Akbar et al., 2016; Anup, 2016; Falak et al., 2016; Joyner, Lackey & Bricker, 2018). Over the years, a number of studies examining rural tourism destinations in Malaysia have been carried out by researchers. A recent example is the study carried out by Rajaratnam and Nair (2015) which focused on a few rural tourist destinations in Malaysia, namely, Bario, Gopeng, Pangkor, Taman Negara, and Royal Belum. This study identified a total of eight primary attributes (i.e., amenities, accessibility and logistics, core tourism experience, hygiene, information, security, value for money and hospitality) which contributed to destination quality of rural tourism destinations. Another instance was a study

which took place at Mersing, Malaysia, where it was found that tourism activities successfully contributed to postitive economic impact of the community (Sapari, Shuib, Ramachandran, & Kunasekaran, 2019).

Apart from that, an example worth highlighting is the success story of Kiulu, a rural tourism destination located in the state of Sabah. In Kiulu, the development of rural tourism was shown to have successfully increased the incomes of local communities (Paimin, Modilih, Mogindol, Johnny & Thamburaj, 2014). Another research conducted by Adeyinka-Ojo and Nair (2016) on brand building Bario, Sarawak indicated that branding was an important component for the successful development of a rural tourism destination. A recent trend shows more travelers have opted to travel to rural tourism destinations in order to experience the natural and cultural uniqueness of Malaysia (i.e., East and West Malaysia). The country's richness in biodiversity and diverse cultural aspects have brought about additional advantages to the country in developing the rural tourism sector (Forbes, 2017; Jaafar, Marzuki & Abdullah, 2019). Thus, due to the growing research trends on rural tourism in Malaysia and the increasing popularity of rural tourism destinations among travelers have proven that the rural tourism industry is playing an important role for the communities as well as the country in general. To a certain extent, it has successfully triggered the attention of researchers to conduct in-depth investigations about the development of the rural tourism industry.

The total population residing at rural destinations in Sabah and Sarawak number to almost 3.1 million (Adnan, 2019). In order to increase the income and living standards of the local communities, a few significant initiatives were taken by both the government and tourism authorities. An instance of this is the homestay programme, which is one of the

strategic initiatives taken on by the Malaysian government to assist development of rural tourism and the communities (MTPB, 2015). In brief, the homestay programme refers to a travel arrangement whereby tourists stay with local communities or the owner of the house under the same roof (Miraz, Ramli, KuMahamud, Albarune & Islam, 2015). The existence of additional attraction components such as cultural, natural and environmental resources is crucial towards making the homestay programme at the rural tourism destination successful.

In general, the homestay programme offers alternative accommodation and unforgetful experiences for tourists, while at the same time, acting as a second income generation component for most of the rural communities (Hamzah & Ismail, 2003). Community-based tourism is another form of the rural tourism sector that emphasizes purely on the communities as the key role players for the development and management of rural tourism (Mohamad & Hamzah, 2013; Hussin & Kunjumara, 2014). Table 1.1 shows the statistics on receipts and tourist arrivals to Malaysia from the years 1998 to 2019. The statistical trends have clearly indicated that the receipts from the tourism industry has been increasing on a yearly basis. In 2017, a total sum of receipts amounting to RM82.10 billion was recorded, while in 2018, the total sum of receipts indicated an increase to RM84.10 billion. In addition to that, in 2019, a total sum of receipts amounting to RM86.10 billion was recorded. This clearly signifies that tourism crucially contributes to the country's economy growth. Based on the report by the Travel and Tourism Competitiveness Index 2019, Malaysia was ranked 29th with the overall index score of 4.50 (World Economic Forum, 2019). Surprisingly, the results indicated that despite Malaysia being a country with one of the richest natural and cultural resources in the region, Malaysia still recorded a slightly lower score in terms of travel and tourism competitiveness index in comparison to its nearest neighbour, Singapore (ranked 17th in the global context).

Sarawak, a Malaysian state on Borneo that stretches along the island's northwest coast, is rich with various natural heritages and unique cultural resources that adds advantages to the development of its tourism industry (Er & Simon, 2015). Sarawak aims to attract about 4 million of tourists into the state, which would boost up to 30,000 employment opportunities for locals by the year 2020 (Sarawak Corridor of Renewable Energy, 2012). It is undeniable that the tourism industry in Malaysia plays an important role for the growth of the country's economy; hence, it is crucial to enhance the tourism destination competitiveness and sustainability over time in order to ensure the sustainable and continuous contribution of the tourism industry to the country's economy. Realising the fact that the few core tourism components of Sarawak are very much dependent on its natural and cultural aspects, most of Sarawak's tourism development initiatives have focused on ecotourism or rural tourism efforts. Considering this, it is therefore important for the various key tourism players to offer better services to visitors in order to stay sustainable and competitive in comparison to other competitors within the same industry.

An examination of the total revenue received by Sarawak in 2019 from the rural tourism industry showed that a total of RM4,483,226.54 was received from 58,722 visitors to homestays throughout the whole of Sarawak (Ministry of Tourism, Arts and Culture Sarawak, 2019). Rural tourism has brought about an era of transformation for the local community, from the primary sector to the tertiary sector, extending the opportunities for additional gains and better lifestyles. According to Chief Minister Datuk Amar Abang Johari Tun Openg, both the tourism and services sectors have been identified as the new economic growth engine for Sarawak to diversify the state's economy by 2030 (Borneo Post Online, 2017). Amin, Chan and Omar (2014) opined that it is important to enhance visitor

experiences with ecotourism destinations, however, limited research in this area has been done in Sarawak. However, the tourism industry is not without its challenges.

With the emergence of the novel Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2), the world has been thrown into turmoil because of the Coronavirus Disease 2019 (COVID-19) pandemic. As a result, global business activities are now at a standstill and this has affected the tourism sector immensely. Nonetheless, looking at the post-COVID-19 phases, rural tourism and ecotourism destination is still placed as a top priority for the Ministry of Tourism, Arts and Culture Malaysia to revitalise the country's tourism industry. It is also expected that rural tourism will see an influx of visitors in the next one or two years, as tourists seek less congested tourism destinations for relaxation. For instance, one of the initiatives taken by the Sarawak state is the "Sia Sitok Sarawak" Intrastate Tour Packages. The initiative is a collaboration between Sarawak Tourism Board (STB) and Sarawak Tourism Federation (STF) to promote intrastate tourism, focusing on ecotourism and rural tourism destinations in Sarawak. Thus, this research study plays a significant role in contributing to the development of rural tourism industry.

Table 1.2 presents the total tourist receipts according to domestic, international and overall number of visitors from the years 1998 to 2019 in Sarawak.

Table 1.1: Tourist Arrivals and Receipts to Malaysia

Year	Arrivals (Million)	Receipts (RM Billion)
2019	26.10	86.10
2018	25.83	84.10
2017	25.95	82.10
2016	26.76	82.10

Table 1.1 continued

2015	25.72	69.10
2014	27.44	72.00
2013	25.72	65.44
2012	25.03	60.60
2011	24.71	58.30
2010	24.58	56.50
2009	23.65	53.40
2008	22.05	49.60
2007	20.97	46.10
2006	17.55	36.30
2005	16.43	32.00
2004	15.70	29.70
2003	10.58	21.30
2002	13.29	25.80
2001	12.78	24.20
2000	10.22	17.30
1999	7.93	12.30
1998	5.56	8.60

Source: Tourism Malaysia (2019)

Table 1.2: Tourist Arrivals to Sarawak by Domestic, International and Overall

Year	Arrivals (Million) - Domestic	Arrivals (Million) - International	Arrivals (Million) - Overall
2019	2,579,975	2,082,444	4,662,419

Table 1.2 continued

2018	2,317,946	2,112,975	4,430,921
2017	2,217,366	2,639,522	4,856,888
2016	2,402,444	2,258,656	4,661,100
2015	2,020,163	2,497,016	4,517,179
2014	1,862,012	2,995,855	4,857,867
2013	1,707,066	2,664,682	4,371,748
2012	1,434,308	2,634,715	4,069,023
2011	1,452,137	2,343,236	3,795,373
2010	1,372,715	1,897,940	3,270,655
2009	1,163,209	2,117,447	3,280,656
2008	2,862,062	2,261,713	5,123,775
2007	2,914,719	2,434,298	5,349,017
2006	2,418,427	2,030,162	4,448,589
2005	2,217,758	2,261,696	4,479,454
2004	2,030,928	2,242,516	4,273,444
2003	1,694,388	1,817,840	3,512,288
2002	1,939,420	1,734,415	3,673,835
2001	1,823,417	1,668,898	3,492,315
2000	1,789,809	1,494,406	3,284,215
1999	1,876,159	1,431,308	3,307,467
1998	1,884,543	1,381,779	3,266,322

Source: Ministry of Tourism, Arts and Culture, Sarawak (2019)

1.2 Problem Statement

Tourist patterns of movement has recorded that more travelers who visited Malaysia have gone to one of the eco- or rural tourism destinations in the country. It is believed that tourists' perception on Malaysia does not solely focus on its urban tourism destinations, but they also view the country as a place to experience diverse cultures and to enjoy nature. This is especially relevant in Sarawak, as the Malaysian state has an abundance of natural, cultural and heritage resources which fit the travel requirements of these tourists. However, the fact of the matter is that the current rural tourism industries are still experiencing a number of major issues that hinder the successful development of rural tourism destinations, both in the country and within Sarawak itself.

The service sector has been experiencing stiff competition within the industry for decades, and the rural tourism sector is not exempt from this (Tan & Omar, 2014; Ramseook-Munhurrun et al., 2016). One of the biggest contemporary issues for the development of successful rural tourism destinations is the growing competition among the rural tourism industries (Triyanto et al., 2018) and sadly it was revealed that rural tourism destinations in Malaysia and Sarawak in specific are not immune to competition to compete with other rural tourism destinations (Lo, Songan, Ramayah, Yeo & Nair, 2013). Past studies show evidence that both hard resources (i.e., destination appeal and tourism infrastructure) and soft resources (i.e., service quality and destination image) were identified as crucial factors for the development of rural tourism destination competitiveness (Chew & Jahari, 2014; Adeyinka-Ojo & Nair, 2015; Owiya et al., 2019). The studies above indicate that both the tangible and intangible assets were identified as important resources for the development of tourism destination competitiveness. However, there is a gap in the literature in terms of rural tourism destination competitiveness. To date, there are no studies that have examined

the relationship of both hard and soft resources in a single framework on the phenomenon of rural tourism destination competitiveness. Thus, this study intends to fill the gap by investigating the development of rural tourism destination competitiveness from the tourist's point of view by investigating the hard (i.e., destination appeal and tourism infrastructure) and soft measures (i.e., service quality and destination image) that could potentially contribute to the development of rural tourism destination competitiveness.

Sarawak, while being a city that has plenty of natural and cultural resources, is not well promoted and tourists are not made aware of the existence of these unique rural tourism destinations. As reported in Sarawak Tourism Quick Facts 2018 and 2020, there was a decreased rate of 8.77% and 74.27% of visitor arrivals respectively in 2018 and 2020 (Ministry of Tourism, Arts and Culture, Youth and Sports Sarawak, 2018; Ministry of Tourism, Arts and Culture Sarawak, 2020). While the importance of tourism destination marketing efforts is recognised, however efforts to promote rural tourism destination is still limited. This was highlighted in a recent study and noted that tourists were not aware of the existence as well as tourism potential of Sarawak, prior to visiting the state (Cheuk, Atang, Lo & Ramayah, 2018). Researchers in the past (e.g., Bowen & Clarke, 2009; Dabija & Pop, 2013) have elucidated the importance of knowing tourist expectations and demands for better development of rural tourism destination. It is believed that there is a lot of misconceptions regarding the tourists' demands, which have led to the unsuccessful development of tourism destination competitiveness. A study by Oh and Schuett (2010) show that part of the small new tourism businesses fails after operating for a few months due to their lack of knowledge in terms of the current market. Therefore, this study investigates the development of rural tourism destination competitiveness from the tourist's point of view, in order to address the issue of misconceptions pertaining to tourist's demand.

Therefore, this study examines the hard and soft measures as well as tourists' knowledge sharing practices in order to identify its potential impact on rural tourism destination competitiveness such as the destination marketing efforts of rural tourism destinations.

On the other hand, most of the rural tourism destinations in Sarawak are not sustainably managed by the community due to the misconceptions of tourists' perspectives or beliefs (Bowen & Clarke, 2009). Researchers in the past have elucidated the importance of knowing tourist expectations and demands for better development of rural tourism destinations (Dabija & Pop, 2013). It is believed that a lot of misconceptions regarding the tourists' demands and limited knowledge for tourism destination development have led to the unsuccessful development of tourism destination competitiveness. It was revealed that knowledge plays a significant role in improving living conditions in rural areas (UNDP, 2013). A recent study by Odunga et al. (2020) highlighted that knowledge sharing between tourism stakeholders could possibly jointly create new knowledge for the development of tourism destination competitiveness.

Therefore, this study investigates the development of rural tourism destination competitiveness to gather information from the tourist's point of view, particularly to address the issue of misconceptions pertaining to tourist's demand and to capture the true concern of tourists when visiting rural tourism destination. In addition, this study also investigates the moderating role of tourists' knowledge sharing with tourism stakeholders as the potential key factor to improve rural tourism destination competitiveness. It is believed that knowledge sharing between tourists and the local community is considered as the innovative solution of problem solving. When tourists share their experiences, perspectives and knowledge gained from other rural tourism destinations that they have visited with the local

community, this could potentially lead to more success and further development of rural tourism destination competitiveness.

1.3 Research Objectives

The present study aims to meet the following objectives:

1.3.1 General Objective

The main objective of this study is to describe the relationship between (i) hard measures (destination appeal and tourism infrastructure) and (ii) soft measures (service quality and destination image) on rural tourism destination competitiveness (i.e., sustainable management, destination marketing efforts, as well as comparative and competitive advantage). Furthermore, this study also intends to examine the moderating relationship of knowledge sharing among the said independent variables and rural tourism destination competitiveness.

1.3.1 Specific Objectives

The specific objectives of this study are:

i. to investigate the relationships between destination appeal and destination competitiveness (i.e., sustainable management, destination marketing efforts, as well as comparative and competitive advantage) in rural areas of Sarawak.
ii. to examine the relationship between tourism infrastructure and destination competitiveness (i.e., sustainable management, destination marketing efforts, as well as comparative and competitive advantage) in rural areas of Sarawak.

iii. to explore the relationship between service quality and destination competitiveness (i.e., sustainable management, destination marketing efforts, as well as comparative and competitive advantage) in rural areas of Sarawak.

iv. to determine the relationship between destination image and destination competitiveness (i.e., sustainable management, destination marketing efforts, as well as comparative and competitive advantage) in rural areas of Sarawak.

v. to explore the tourists' perspective on the moderating relationship of knowledge sharing on destination appeals, tourism infrastructure, service quality, as well as destination image and tourism destination competitiveness (i.e., sustainable management, destination marketing efforts and also comparative and competitive advantage).

This study intends to establish an empirical relationship between the four independent constructs; i.e., both hard (destination appeal and tourism infrastructure) and soft (service quality and destination image) measures and rural tourism destination competitiveness (i.e., sustainable management, destination marketing efforts, as well as comparative and competitive advantage) in a single framework from the perspectives of tourists. In addition to that, knowledge sharing is integrated in the proposed framework as the moderator variable and attempts to examine its moderating impact in strengthening the relationship between the four independent constructs towards rural tourism destination competitiveness. Thus, this study is deemed to provide a solid foundation of knowledge about the importance of destination appeals, tourism infrastructure, service quality and destination image with knowledge sharing practices for the better development of rural tourism destination competitiveness. All of this information serves as an added-value advantage to tourism stakeholders and the relevant government departments or agencies in

order to achieve rural tourism destination competitiveness in terms of sustainable management over time, excellent marketing strategy and to possess a comparative and competitive advantage.

1.4 Research Questions

Based on the problems outlined in section 1.2, this study attempts to provide answers to the following research questions:

i. Does destination appeal affect the sustainable management, destination marketing efforts, as well as comparative and competitive advantage of rural tourism development of destination competitiveness in rural areas of Sarawak?
ii. Does tourism infrastructure affect the sustainable management, destination marketing efforts, as well as comparative and competitive advantage of rural tourism development of destination competitiveness in rural areas of Sarawak?
iii. Does service quality affect the sustainable management, destination marketing efforts, as well as comparative and competitive advantage of rural tourism development of destination competitiveness in rural areas of Sarawak?
iv. Does destination image affect the sustainable management, destination marketing efforts, as well as comparative and competitive advantage of rural tourism development of destination competitiveness in rural areas of Sarawak?
v. Does knowledge sharing have a positive moderating effect on destination appeals, tourism infrastructure, service quality and destination image towards the sustainable management, destination marketing efforts, as well as comparative and competitive advantage of rural tourism development of destination competitiveness in rural areas of Sarawak?

1.5 Definition of Key Terms

This section defines the key terms used in this study. These terms include destination competitiveness, sustainable management, destination marketing efforts, comparative and competitive advantage, hard and soft measures, destination appeals, tourism infrastructure, service quality, destination image and knowledge sharing. The definition of each term is described below:

i. Destination Competitiveness: A destination's ability to create and integrate value-added products that sustain its resources while maintaining market position relative to competitors (Hassan, 2000). In this study, destination competitiveness refers to the tourists' perspective on the development of rural tourism destination competitiveness in rural Sarawak based on sustainable management, destination marketing efforts and comparative and competitive advantage.

ii. Sustainable Management: To meet the needs of the present without compromising the ability of future generations to meet their own needs (Brundtland Commission, 1987). In this study, sustainable management refers to the development of rural tourism destinations in a sustainable manner without bringing any adverse impact to the rural environment and is sustainable over time.

iii. Destination Marketing Efforts: A continuous process of identifying and satisfying the needs and wants of tourists who want to travel to a destination (Sharma, 2013). In this study, destination marketing efforts refers to tourists' perceptions on whether the study tourism destinations are making efforts towards destination marketing and fulfilling their needs.

iv. Comparative & Competitive Advantage: Comparative advantage is defined as the availability of endowments (natural) resources at a tourism destination (Bobirca & Cristureanu, 2008) whereas competitive advantage is defined as the man-made (built) resources such as infrastructure and facilities (Crouch & Ritchie, 1999). In this study, comparative and competitive advantage refers to the availability of both natural and built resources at a tourism destination that makes up its competency level.

v. Hard and Soft Measures: Hard measures are defined as tangible resources, whereas for soft measures refers to visitors' perceptions or experiences towards the tourism activities provided (Dwyer & Kim, 2003).

vi. Destination Appeals: Destination appeal refer to the people, culture, climatic condition, landscape characteristics, tourist-related activities, food and history of the destination (Kresis & Prebzac, 2011). In this study, destination appeal refers to the influence of natural resources, cultural heritage and outdoor activities as the factors which appeal to tourists when choosing to visit rural tourism destinations.

vii. Tourism Infrastructure: Physical elements created, or made, which comprise of soft and hard infrastructure, to cater for visitors (Inskeep, 1991). In this study, tourism infrastructure refers to tourists' perspectives on the quality of transportation facilities and accommodation amenities at rural tourism destinations in Sarawak.

viii. Service Quality: Service quality is the gap between the expectations of customers and their perceptions (feeling) in using services (Parasuraman, Zeithaml & Berry, 1985). In this study, service quality refers to tourists' perceptions towards the service quality provided by the rural tourism destination based on several aspects, such as

reliability, assurance, empathy and responsiveness. These aspects are considered to lean more towards intangible measures.

ix. Destination Image: Destination image is composed of an individual's beliefs, thoughts and impressions about a destination (Cropmton, 1979). In this study, destination image refers to tourists' perceptions and interpretation towards the rural destination of Sarawak in terms of cognitive, affective and conative beliefs.

x. Knowledge Sharing: Knowledge sharing is defined as the process of exchanging knowledge (both implicit and explicit) between two individuals with the intention to create new knowledge together (Van Den Hoof, De Ridder & Aukema, 2004). In this study, knowledge sharing refers to tourists' willingness to share knowledge with the local communities and to jointly create new knowledge (e.g., knowledge for better development of rural tourism destination competitiveness, knowledge on how to develop better destination appeal, better tourism infrastructure, improvement on service quality and better destination image of rural destinations in Sarawak).

1.6 Significance of the Study

This study brings to attention the growing trend whereby more tourists are now interested in visiting places that offer natural and cultural resources, specifically rural tourism destinations. In line with this, the topic on tourism destination competitiveness has received increasing attention among scholars and practitioners, as they look at the sustainability of a tourism destination for competitiveness. Over the years, Sarawak has recorded a positive increase in the numbers of tourists visiting rural tourism destinations, although these numbers are not as high as those visiting other urban tourism destinations in the state.

Firstly, while past studies have explored determinants, environmental factors, the evaluation model of tourism destination industry, as well as qualitative and quantitative variables on tourism destination competitiveness, the exploration on the impact of both hard and soft measures in a single framework at rural tourism destinations is absent in the literature. Undoubtedly, the total number of tourists visiting rural tourism destinations in Sarawak at the current stage is limited, but if we can capture the views from these groups of tourists on factors that contributed the most in attracting them to visit rural tourism destinations in Sarawak, the data could be beneficial to other rural tourism destinations in Sarawak for the purpose of destination competitiveness development. Therefore, this study has proposed a framework for the development of rural tourism destination competitiveness based on a comprehensive review of existing literature and both the identification and integration of hard measures (destination appeal and tourism infrastructure) and soft measures (service quality and destination image) in a single framework to examine its influence on the development of rural tourism destination competitiveness, namely, sustainable management, destination marketing efforts, as well as comparative and competitive advantage from tourists' point of view at selected rural tourism destinations in Sarawak.

Apart from that, in a highly competitive tourism market, it is important to enhance the ability of tourism destinations to respond to change and remain competitive in the market. Thus, knowledge sharing has been identified as one of the crucial factors in addressing this issue. Based on the researcher's past experiences working with local communities from different rural tourism destinations in Sarawak, the majority of the communities commented that suggestions from people who were not from their village on how to improve the current tourism facilities or services would be much appreciated. Local communities are keen to

provide the best services to tourists, but they need to know exactly what the preferences of tourists are when it comes to attractions, infrastructure and quality of services. Studies in the past have evidenced that the sharing of knowledge between two parties could jointly generate new competencies (Paroutis & Saleh, 2009). However, the current level of adoption on knowledge sharing as the moderating variable is minimal in the study of rural tourism destination competitiveness. This study adopted knowledge sharing as the moderator variable attempts to examine its potential impact in enhancing the relationship between hard and soft measures on rural tourism destination competitiveness at rural tourism destinations in Sarawak.

Lastly, this research study analyses the importance of hard and soft measures on the development of rural tourism destination competitiveness at rural tourism destinations in Sarawak. The findings from this study provide significant insights to tourism stakeholders (e.g., tourism industry players, local government and local communities, entrepreneurs or homestay owners) about the importance of having an attractive destination appeal, good tourism infrastructure, desired service quality and prestigious destination image for the development of better destination competitiveness in rural destinations. To develop a competitive rural tourism destination, tourism stakeholders should take into consideration tourists' point of view because eventually the developed tourism destination aims to satisfy and fulfill tourists' needs. Hence, the local government and local communities or entrepreneurs should focus on these four aspects for the development of better rural tourism destination competitiveness at rural areas in Sarawak. In addition, the findings of this study also provide valuable practical implications to tourism stakeholders, especially with the integration of knowledge sharing as the moderator variable. Some tourists might travel a lot to different rural tourism destinations; thus they are the right people to consult and obtain

constructive opinions and knowledge for the better development of rural tourism destination competitiveness. Therefore, the findings of this study could possibly help tourism stakeholders to better manage and develop competitiveness of rural tourism destinations in Sarawak.

1.7 Scope of the Study

This study investigates the relationship between hard measures (destination appeal and tourism infrastructure) and soft measures (service quality and destination image) on rural tourism destination competitiveness (i.e., sustainable management, destination marketing efforts, as well as comparative and competitive advantage). In addition to that, this study also adopted knowledge sharing as the moderator variable attempts to examine the moderating relationship between the proposed predictors and dependent variables. This research was conducted in rural areas of Sarawak, Malaysia. The targeted respondents were both international and domestic tourists visiting the selected study sites. The study locations include Annah Rais Bidayuh Longhouse, Bawang Assan Homestay, Kampung Po Ai Melugu, Rumah Benjamin Angki Homestay, Bario Kelabit Highlands and Ba'kelalan Homestay in the state of Sarawak. The data collection period was from August 2018 until March 2019.

1.8 Organization of Chapters

This thesis consists of five chapters, as the study was divided into five major parts. Chapter 1 presents the background of the study, problem statement, research objectives, research questions and definition of key terms such as hard measures (i.e., destination appeal and tourism infrastructure), soft measures (i.e., service quality and destination image), knowledge sharing and tourism destination competitiveness (i.e., sustainable management,

destination marketing efforts, as well as comparative and competitive advantage). It also included the significance of the study, scope of the study and the organization of chapters.

Next, Chapter 2 presents a comprehensive review of the literature according to the studied constructs. Definition of models, underlying theories of this study, theoretical framework, underlying gaps in the literature, justification of the theoretical framework and development of hypotheses were included in this chapter.

In Chapter 3, the methodology used in this research study was discussed; including the research sites, research design, sample, data collection procedure, research questionnaire and measurements, pre-test of the questionnaires, data cleaning, multicollinearity test and statistical analyses, which includes the use of Statistical Package for Social Science version 23.0 and WarpPLS (version 6.0).

Chapter 4 reports a series of statistical findings of the research study based on respondents' profile, statistical overview, assessment of the measurement model and assessment of the structural model.

Finally, the discussion of the findings was reported in Chapter 5. On top of that, both theoretical and practical implications as well as future research and potential limitations of the research were outlined in this chapter.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

Of the many studies on factors that contribute to the development of rural tourism destination competitiveness, the majority were about tourism infrastructure and destination resources towards the development of tourism destination competitiveness. These studies were conducted from the perspective of tourism stakeholders, such as local community and tourists. Some past studies also examined the relationship between service quality and its impact on the development of tourism destination competitiveness. There is, however, limited research investigating the relationship between the hard measures (i.e., destination appeal and tourism infrastructure) and soft measures (i.e., service quality and destination image) in a single framework on rural tourism destination competitiveness from the perspective of tourists. Additionally, past research did not adopt knowledge sharing as the moderator variable to examine its moderating relationship between the hard and soft measures on tourism destination competitiveness in the context of rural tourism destination.

Hence, the present study provides a holistic and comprehensive framework by integrating both the hard measures (i.e., destination appeal and tourism infrastructure) and soft measures (i.e., service quality and destination image) as the independent variables and examining its impacts on rural tourism destination competitiveness (i.e., sustainable management, destination marketing efforts, as well as comparative and competitive advantage) as the dependent variable. Knowledge sharing on the other hand is adopted as a moderating variable to examine the moderating relationship in strengthening the relation between hard and soft measures towards rural tourism destination competitiveness. The

fundamental belief behind the selection of these variables in formulating the research framework is because before a tourist visits a rural tourism destination, the initial image of the tourism destination plays a vital role in capturing the tourist's attention and intention to visit. Next, during the visit, the tourist has the opportunity to enjoy the infrastructure, experience the resources at the destination and feel the service quality provided by the locals. Perhaps, some experienced tourists could even give suggestions or share their knowledge with the local community to how improve the comparative or competitive resources of the tourism destination itself. All of these components are proposed to be inseparable and the integration of these variables could form a strength for the development of rural tourism destination competitiveness.

To provide a theoretical basis for these choices, firstly, this chapter highlights and defines the proposed research models. This includes destination appeal, tourism infrastructure, service quality, destination image, knowledge sharing and destination competitiveness. Next, the underlying theories adopted in the present study are discussed. Finally, the theoretical framework, the existing gaps in the literature, justification of the framework, the description of variables and the development of hypotheses are presented.

2.2 Definition of Rural Tourism

Within the tourism literature, there has been a growing interest in the study of rural tourism due to its potential to contribute to the rural economy and help in increasing the standards of living among the local communities (e.g., Adeyinka-Ojo & Nair, 2015; Carneiro et al., 2015; Garau, 2015; Jaafar, Noor & Rasoolimanesh, 2015; Falak et al., 2016; Munien, 2016; Triyanto et al., 2018; Jaafar et al., 2019; Nooripoor et al., 2020). Different versions were proposed to define rural tourism, each according to specific criteria. One of the earliest

definitions for rural tourism was defined by the European Commission in 1986, stating it as all tourist activities in rural areas ranging from farm tourism, agritourism and accommodation by the local communities or specifically by the farmers (European Commission, 2015). According to Keane (1992), rural tourism was defined based on the attributes of the destination's attractiveness, in that a rural tourism destination should provide a series of activities that is able to create a unique experience for tourists, specifically to experience peace, relaxation, recreation and the local culture.

One the other hand, Lane (1994) defined rural tourism as tourism activities that take places at rural areas, whereby all operations are handled by local communities, offering a series of custom-made tourism activities with traditional characteristics to tourists with the continued development over time to ensure sustainability. Similarly, Simonicca (1997) highlighted that the development of rural tourism should aligned with the objectives of sustainable development. Okech et al. (2012) stated that some important characteristics of rural tourism include small settlements, low population and traditional livelihood. Another recent definition of rural tourism by Maksin (2012) defines it as tourism activities that take place at rural destinations with close proximity to the rural environment and has rural characteristics (Paimin et al., 2014). In short, one of the important keywords to define rural tourism is the location of the destination. Based on the previous studies, it is concluded that rural tourism takes place at rural areas.

Past studies documented that tourists are mainly attracted to nature and the relaxing ambiance of rural destinations, motivating them to visit rural areas (Zenelaj & Prifti, 2013; Jaafar et al., 2015). Luvanga and Shitundu (2003) also propounded that the cultural uniqueness, flora and fauna are the primary resources attracting tourists to visit a rural

tourism destination. Moreover, it was found that rural tourism has successfully built an attractor that is said to be attractive to tourists based on their cultural, historic, ethnic and geographical roots (Kachniewska, 2015; Hernandez et al., 2016). These are the important rural characteristics that bring tourists back to the very nature-based environment (Othman et al., 2013). Author, Rukuiziene (2007) also suggested that the development of the rural tourism sector is dependent on the quality of services offered (Kumra, 2008). Yavana (2013) also mentioned that the current trend indicates that tourists are seeking for a balance between tourism, nature, culture and development which is sustainable over time. These findings stem from the definition's analysis which identifies that the availability of natural, cultural resources and environment are the main criteria for a rural tourism destination.

It is undeniable that according to the current trend, rural tourism is well-known as an alternative economic booster strategy for rural destinations in both developed and developing countries (Ghaderi & Henderson, 2012; Zenelaj & Prifti, 2013; Carneiro et al., 2015; Bulatović & Rajović, 2017; Adamov et al., 2020). The development of rural tourism often focuses on activities that could potentially bring benefits to the local communities, both socially and economically (Khound, 2013; Hena, 2015; Sima, 2019). Therefore, past literature shows the emphasis on a community-based focus. The concept of community-based tourism (CBT) was first showcased by Murphy (1985), and it was revealed that the involvement of the community in tourism development at rural areas could bring economic benefits to the local community. CBT is associated with community involvement and empowerment in rural tourism development which benefits the locals in terms of socio, cultural, and economic development for sustainable tourism. It was revealed that rural communities are becoming increasingly interested to get involved in rural tourism activities due to the decline of the agricultural sector (Cai, Liu & Huang, 2008) and the vast potential

that tourism activities had created positive economic impact directly on the communities (Gurung & DeCoursey, 2000; Iorio & Corsale, 2010; Kachniewska, 2015). Past studies have propounded community-based tourism as one of the possible solutions to improve the socio-economic conditions (Ibrahim, Shuib, Ramachandran, & Afandi, 2015) and provide cultural benefits to the local community (Wirahayu, Purwito, & Insani, 2019). In fact, rural communities and farmers will typically offer these types of tourism activities and services (Bhattacharjee, 2015), allowing the local communities to gain economic advantages in return (Lo & Janta, 2020). In sum, past studies have emphasized the importance of local communities and how they play a significant role in rural tourism development.

Furthermore, rural tourism is a sensitive sector and is highly dependent on consumer preferences (Rukuižienė, 2008). Past studies have envisaged that identifying tourists' experiences and preferences are important because this information is useful for rural tourism development (Lavrador Silva, 2008; Carneiro et al., 2015). As stated by Pesonen (2012), understanding tourists' consumption behaviours is important to make greater profit for a tourism destination due to an increasing changing demand from tourists (Aguiló, Alegre & Sard, 2005). Hence, past researchers have propounded the necessity for rural destinations to invest on improving the facilities and services in order to enhance tourists' experience (Fleischer & Tchetchik, 2005). In this regard, based on the review of the various definitions of rural tourism conducted in both developed countries and developing countries, it is summarised that current rural tourism activities provided to tourists takes place at rural destinations and should be aligned with the objective of providing a natural, cultural, historical and human experience that is totally opposite from the urban context, with the involvement of local communities in tourism development.

In the Malaysian context, a definition of rural tourism was highlighted in the Rural Tourism Master Plan (RTMP) which defines it as being tourism activities that provide opportunities for visitors to visit rural areas and experience several attractions such as the local culture and heritage (MOCAT, 2001). Studies in the past have pointed that rural tourism plays an important role for rural economic development (Cai et al., 2008; Polo & Frías, 2010; Barbu, 2013) and this is also applicable to the Malaysian context (Lo, Songan, Mohamad & Yeo, 2013; Ghasemi & Hamzah, 2014; Paimin et al., 2014; Cheuk et al., 2015; Jaafar et al., 2015; Miraz et al., 2015; Akbar et al., 2016). This is one of the reasons why rural tourism in Malaysia has received increased attention from various tourism stakeholders. One obvious example is the initiatives have been taken by the government to improve the performance of the rural tourism industry in Malaysia. The importance of rural tourism in Malaysia was further strengthened with the awarding of one of the largest grants for a social science project in Malaysia during that period. The purpose of the grant was to develop responsible rural tourism framework in 2011-2016 via the Responsible Rural Tourism Network. To develop a multi-dimensional, responsible rural tourism capacity framework, it was reported in this research study that local involvement, enhancement of local pride and sense of belonging, economic empowerment and employment opportunities were proven to be the significant indicators for sustainable rural tourism development (i.e., social-cultural, economic and environment sustainability). For instance, ecotourism has been identified as one of the key economic contributors to the tourism sector in the New Economic Model and Economic Transformation Programme (Economic Transformation Programme: A Roadmap for Malaysia, 2010 as cited in Cheuk et al., 2015). In the state of Sabah, the Ministry of Tourism Culture and Environment Sabah has taken the initiative to develop and promote the rural tourism industry (Paimin et al., 2014). Another strategy is the homestay programme

taken on by the Malaysian government to enhance the performance of rural tourism as well as increase rural communities' income (Hamzah & Ismail, 2003).

According to Beeton (2006), there are a few different terminologies used interchangeably to explain the concept of rural tourism. Table 2.1 shows few types of terms used for rural tourism and their definitions. In sum, they share similarities such as location, resources, community-based and importance of tourism experiences with rural characteristics and away from urban setting. The activities associated with rural tourism can be the various forms of tourism, i.e., ecotourism, agritourism, village tourism, farm tourism, jungle tourism and even green tourism. In short, the definition for each form of rural tourism is quite similar in terms of geographical size and the use of natural and cultural resources to attract tourists.

Table 2.1: Types of Terms Used for Rural Tourism

Form of rural tourism	Definition	Author(s) / Year
Ecotourism	Tourism activities that focus on the natural resources and environment as the main motivators for tourists' visit and together with some elements on local culture as a learning opportunity for visitors.	Wood, 2002; Varjú, Suvák & Dombi, 2013
Agrotourism	Tourism activities that take place in agrarian areas and the used of agrarian products for tourism activities.	Szabó & Spiegler, 2008
Village tourism	Tourism that takes place at the traditional rural countryside and around its small settlements.	Szabó & Csizmadia, 2009

Table 2.1 continued

Farm tourism	Tourism activities and lodging take place at cereal, vegetable, or animal farm.	Polo & Frías, 2010
Green tourism	The development of tourism based on green practices to promote the sustainability of environmental resources.	Fruqan, Mat Som & Hussain, 2010; Handriana & Ambara, 2016

Source: Author Compilation Based on the Past Literature

In short, based on the various studies on rural tourism, there is no single consensus on the definition of rural tourism. From the numerous studies reviewed, it is concluded that rural tourism should possess natural, cultural, attractions, and tourism activities that are taking place at rural areas and is functionally rural. Therefore, in the current research study, rural tourism is defined as tourism activities that take place in rural areas, providing tourists an opportunity to experience and learn about the available unique cultural, natural and historical attributes of the destination. This adopted definition is derived from the definition by Nair, Munikrishnan, Rajaratnam and King (2015), who proposed and redefined the definition of rural tourism in Malaysia in 2015.

2.3 Destination Competitiveness

Within the tourism literature, there is an increased attention and focus on research on the concept of destination competitiveness from various perspectives (Crouch & Ritchie, 1999; Kozak, 2001; Mathew, 2009; Angelkova, Koteski, Jakovlev, & Mitrevska, 2012; Demirovića et al., 2018; Rahmiati, Othman & Tahir, 2020). Various studies have in fact provided evidence that it is important for a tourism destination to identify the unique selling propositions that contribute to the sustainable development of tourism destination

competitiveness (Kozak & Rimmington, 1999; Hassan, 2000; Mihalič, 2000; Enright & Newton, 2004; Crouch, 2010; Quach, 2015; Law & Lo, 2016; Manrai et al., 2018; Ching, Lo, Suaidi, Mohamad & Chin, 2019; Rodríguez-Díaz & Pulido-Fernández, 2020) due to the increasing competition in the current tourism market place (Kozak, 1999; Demirović et al., 2016; Guo, Jiang & Long, 2020). Buhalis (2000) describes "destination" as places that offer tourism products and services to visitors within the destination. From this work, a tourism destination is said to be competitive when the destination experiences an increase in the market share, number of visitors and financial returns (Hassan, 2000).

Over the past decade, a number of definitions for the term "competitiveness", "destination competitiveness" and "tourism destination competitiveness" have been formulated. The term "competitiveness" is originally applied in the organization context (Porter, 1980, 1990) and functions as the vital element of management and marketing strategy (Fornell, 1992). An organization is said to be competitive when it can gain a favourable competitive position in the industry with a great competitive strategy (Porter, 1985). Newall (1992) provided another definition for competitiveness which is that it is viewed as "producing more and better-quality goods and services that are marketed successfully to consumers". In a similar vein, past researchers have also propounded that the term "competitiveness" can be referred to as the combination of both assets and processes, in which the competitiveness is achieved when both natural resources and created resources are processed and transformed into economic results (Crouch & Ritchie, 1999).

One of the earlier destination competitiveness models was Porter's dynamic diamond model (Porter, 1990), which includes four main elements (such as factor conditions, demand conditions, related and supporting industries, and strategy, structure and rivalry of the firms)

to develop tourism destination competitiveness. The subsequent destination competitiveness model proposed by Crouch and Ritchie (1999) encompasses various competitive factors grouped under three main categories, namely, (i) nation-specific, (ii) industry-specific and (iii) firm-specific. Basically, this model uses both tourism-specific (i.e., core resources and attractors) and business-related factors to determine the competitiveness of a tourism destination. On the other hand, Yoon (2002) revealed that the competitiveness of a tourism destination is achieved when its multifaceted elements and attractions are strengthened over time. In concurrence with the Crouch-Ritchie model, Enright and Newton (2004), in supporting Dwyer and Kim (2003), developed a more comprehensive model of tourism destination competitiveness. In their model, to market a tourism destination and to categorise as a fully competitive destination, it is important to include natural resources and attractors (e.g., floral and faunal, cultural and heritage attractions).

There are various definitions for destination competitiveness and one of the most widely cited definitions for destination competitiveness is the one defined by Hassan (2000), which is "the ability of a destination to maintain its market position relative to competitors by creating value added products and to sustain its resources". Ritchie and Crouch (2003) have investigated the concept of competitiveness in the service industry, specifically in the tourism context. Interestingly, there is growing interest among scholars in applying the concept of destination competitiveness and testing it with different tourist destinations (e.g., Dwyer, Forsyth & Rao, 2002; Yoon, 2002; Dwyer & Kim, 2003; Enright & Newton, 2004; Omerzel, 2006; Tubey & Tubey, 2014; Law & Lo, 2016; Andrades & Dimanche, 2019; Teixeira & Ferreira, 2019; Fernández et al., 2020).

Table 2.2: Definition of Destination Competitiveness

Concept	Author (s)	Definitions
Tourism destination competitiveness *	Hassan, 2000	Tourism destination competitiveness is referred to the destination's ability to create and integrate value-added products that sustain its resources while maintaining market position relative to competitors.
Destination competitiveness	Dwyer & Kim, 2003	Destination competitiveness is described as the ability of a destination to meet visitor needs on various aspects of the tourism experience, goods and services better than its competitors.
Competitiveness in tourism	Ritchie & Crouch, 2000	Tourism competition is referred to the ability of facilities providing a high standard of living to the inhabitants of a tourism region.
Destination competitiveness	d'Hauteserre, 2000	Destination competitiveness is defined as the ability of a destination to maintain its market position and share and/or improve upon them through time.
Destination competitiveness	Dwyer, Forsyth & Rao, 2000	Destination competitiveness is related to a general concept that encompasses price differentials coupled with exchange rate movements, productivity levels of the tourist industry and qualitative factors affecting the attractiveness of a destination.
Destination competitiveness	Ritchie & Crouch, 2003	Destination competitiveness is defined as a country's ability to create added value and thus increase the national wealth by managing assets and processes, attractiveness, aggressiveness and proximity and thereby integrating these relationships within an economic and social model

Table 2.2 continued

		that takes into account a destination's natural capital and its preservation for future generations.
Competitiveness	Newall, 1992	Competitiveness is defined as the ability to produce more and better quality of goods and services and successfully market to consumers.
Competitiveness	World Competitiveness Report, 1994	Competitiveness is defined as the ability of a country or company to proportionally, generate more wealth than its competitors in world markets.
Destination competitiveness	Ritchie & Crouch, 1999	Destination competitiveness is referred to the availability of resources to enhance its comparative and competitive advantage in comparing to other tourism destinations.
Destination competitiveness	Go & Govers, 2000	Destination competitiveness is related to the success of integrated quality management of tourism destinations and price-based promotions as a value-increasing strategy have been considered for destination competitiveness.
Destination competitiveness	Pearce, 1997	Destination competitiveness is described as destination evaluation techniques and methods that can systematically analyse and compare the diverse attributes of competing destinations within a planning context.
Destination competitiveness	Mihalič, 2000	Destination competitiveness is described from the environmental perspectives that it is related to natural and man-made tourism components, as well as social and cultural environments.

Table 2.2 continued

Tourism destination competitive advantage (TDCA)	Buhalis, 2001	TDCA is defined as the ability of a destination to provide social, physical and economic benefits to the destination population as well as a satisfying experience to the tourist.
Tourism competitiveness	Enright & Newton, 2004	Tourism competitiveness has been defined as the strength or ability of a destination to provide a quality experience to the visitors and quality of life to the local people by developing sustainable advantages and market.
Destination competitiveness	Crouch & Ritchie, 1999	Destination competitiveness is associated with the economic prosperity of residents of a country.
Competitiveness of the tourism destination	Cracolici & Nijkamp, 2009	It is defined by the set of rigid natural, cultural, artistic or environmental resources, but it is seen as an overall appeal of the destination.

Notes: *Definition of destination competitiveness was employed in the present study.

Table 2.2 provides several different concepts and definitions for destination competitiveness. Based on these definitions, it was posited that in order to develop the competitiveness of a tourism destination, it is vital for a tourism destination to posses some kind of resources (i.e., tangible or intangible resources), and provide services that enhance visitors' experience to achieve its destination competitiveness. The importance of these resources also acts as a significant pulling factor that motivates tourists to visit (Chen, Chen, Lee & Tsai, 2016; Nunes, Estevão & Filipe, 2018). Literature documenting the contribution to destination competitiveness of tourism core resources and attractors (Ritchie & Crouch, 1993; Buhalis, 2000; Hassan, 2000; Wilde & Cox, 2008), price competitiveness (Dwyer, Forsyth, & Rao, 2000; Kim, 2012), and quality management (Go & Govers, 2000),

environmental management (Mihalic, 2000), scholars Ritchie and Crouch (2003) focused on a different aspect, namely natural resources, culture, infrastructure and tourism facilities.

This study adopted the definition of destination competitiveness by Hassan (2000) and defines tourism destination competitiveness as the destination's ability to create and integrate value-added products that sustain its resources while maintaining market position relative to competitors. These value-added products from the destination level are natural resources, culture, infrastructure and facilities. It is important to note that a tourism destination must possess some significant resources for enhancing their comparative and competitive advantage in order to outperform other tourism destinations (Nadalipour & Khoshkhoo, 2019). Hence, it is significant to have an in-depth investigation into the concept of tourism destination competitiveness.

2.3.1 Sustainable Management

Past studies have evidenced that sustainable management is one of the crucial constructs for destination competitiveness (Crouch & Ritchie, 1999; Hassan, 2000; Enright & Newton, 2005; Rodríguez-Díaz & Pulido-Fernández, 2020). Sustainable development is generally defined as development that meets the needs of the present while at the same time conserving these resources sustainability for the use of future generations (WTO, 1998). On the other hand, Harrison, Jayawardena and Clayton (2003) defined sustainable management as the development that meets the needs of the present while protecting and enhancing the resources for economic, social, cultural, ecological and biological sustainability (Goodwin, 2008). In the tourism context, sustainable management is referred to the development that meets the needs of tourists while at the same time conserving local resources for

sustainability and enhancing local communities' quality of life (Bhuiyan, Siwar, Ismail & Ismail, 2011; Adamov, et al., 2020).

Over these past few decades, it was proven from the literature that tourism development is an alternative means of economic generation, however, tourism development is also often associated with two possible impacts; either a positive or an adverse impact. A positive impact leads to income generation for the local communities, while detrimental impacts have brought about adverse effects to the environment due to unplanned tourism development (Chang, Chien, Cheng & Chen, 2018; Wang, Wang, Gan & Voda, 2019). As stated by Coccossis (1996), tourism development in rural areas often brings some adverse impacts to the destination due to a large influx of visitors (Ertuna & Kirbas, 2012; Alexander, Ramotadima & Sanderson, 2018; Sugiama, 2019). These adverse impacts range from vandalism, generation of waste and loud activities (Gildea & Hanrahan, 2010; Mihai, 2018). Undeniably, the core attribute for the rural tourism industry is their natural and environmental resources. Thus, sustainable use of these resources for tourism development is crucial because by depleting these resources, it is equivalent to destroying the fundamental source for income generation. Therefore, Polucha and Žukovskis (2010) have emphasised on the need for sustainable management and development in the development of the tourism industry (Dorobantu & Nistoreanu, 2012; Nicolaides, 2020). Similarly, Curcija, Breakey and Driml (2019) have also propounded that it is equally important for tourism development to focus on balancing the preservation of natural heritage and cultural aspects for the sustainable development of tourism destination.

Past studies have evidenced that tourists are more concerned with the natural resources available at a tourism destination, as these resources contribute towards building

their loyalty to the tourism destination (Mechinda, Serirat, Popaijit, Lertwannawit & Anuwichanont, 2010; Blapp & Mitas, 2018). In fact, it was observed that there is a growing interest among scholars to identify factors that influence rural tourism development in a sustainable way for both profitability and environmental sustainability. Zhang, Choi and Joppe (2016) stated that it is important to engage in strategic planning for rural tourism development, particularly in order to preserve valuable natural, cultural and heritage resources for long term sustainability of rural tourism industry. It was posited that sustainable development of tourism is derived from the principle of sustainable management for ecological sustainability (Muhanna, 2006). Šimková (2007) also highlighted that the strategic plans for rural tourism development should be aligned with the sustainable use of local resources for environmental sustainability (Djekic & Vucic, 2007; Petroman et al., 2010; Nadalipour & Khoshkhoo, 2019; Sugiama, 2019).

Most importantly, tourism development does not only focus on environmental sustainability, but also pays attention to the sustainability of local communities; both socio-economically and culturally (Bulatović & Rajović, 2017; Adamov et al., 2020). Therefore, to ensure long-term economic and environmental sustainability, the efficient use of tourism resources and strategic planning should be the focus when it comes to the development of rural tourism destination. Hence, sustainable management strategies should be identified and developed in order to protect the natural and cultural resources of a rural destination, specifically valuable resources that belong to the rural community.

Costa, Rodrigues and Gomes (2019), in supporting Parashar, Bhardwaj and Kumar's (2014) study, they mentioned that the concept of sustainable tourism is rather like the concept of rural tourism because both emphasize on preserving natural resources and local

cultural heritage to meet the needs of tourists, while at the same time preserving them for the use of future generations. However, it is not true that both sustainable tourism and rural tourism share the same characteristics. Based on the agreed definition of rural tourism, rural tourism takes place at a rural area which is non-urban based. A rural tourism destination can be sustainably or not sustainablye developed. In fact, one should first understand the concept of sustainable tourism from an in-depth and holistic view to properly implement the strategies of sustainable management (N'Drower, 2014) because many tourism operators failed to implement sustainable tourism due to the lack of understanding and knowledge on the notion of sustainable tourism (Rainford, 2007; Mihalic, 2016; Font & McCabe, 2017). It has been proven that the proper implementation of sustainable management practices reduces the adverse impacts caused from tourism development or activities (Choi & Sirakaya, 2006; Dolnicar & Leisch, 2008; Mensah & Casadevall, 2019). Past studies have propounded a few strategies for sustainable management and environmental protection (Castellani & Sala, 2010), including the concept of re-use and re-cycle (Lim & McAleer, 2005) and the strategy that emphasizes on ecological sustainability (Elleuch, Bouhamed, Elloussaief & Jaghbir, 2018).

Ballantyne, Packer and Hughes (2009) suggested that there is a need to examine tourists' support for sustainable management practices in tourism development (Shen, Sotiriadis & Zhou, 2020) and Neto (2003) proposed that tourism development should align with the objective of sensible use of natural resources by tourism stakeholders, so as to ensure the sustainability of the predominant natural and cultural resources at a tourism destination (Castellani & Sala, 2010; Logar, 2010; Zhang & Lei, 2012; Cvijanović, Radović & Vojinović, 2017; Potashova & Girijchuk, 2019). The review suggests that in order to develop a successful tourism destination, sustainability of the tourism destination is essential,

thus, this study adopted sustainable management as one of the sub-dimensions of tourism destination competitiveness.

2.3.2 Destination Marketing Efforts

Various studies have provided evidence that tourism destination marketing is one of the most powerful and much needed tools for the development of tourism destinations in order to achieve sustainable tourism development (Lange-Faria & Elliot, 2012; Lo et al., 2013; Giray, Kadakoğlu, Çetin & Bamoi, 2019; Matthias & Birgit, 2019). This, in turn, allows the reaping of more fruitful benefits, especially in face of the fierce competition among the various tourism markets. In a sense, every successful tourism destination has a story to tell and a good marketing strategy always plays a role in telling the story to potential tourists. Kotler, Haider and Rein (1995) suggested that good destination marketing should follow a series of planned strategies, starting with the infrastructure, then identifying local attractions, followed by getting the support from the local people, before looking into destination image development as the last step. Destination marketing efforts is defined as a continuous process to identify the needs of the tourists, developing a marketing strategy to satisfy those needs by enhancing the travel experience (Sharma, 2013; Manhas, Manrai & Manrai, 2016).

Buhalis (2000) propounded that the implementation of destination marketing efforts must lead to the sustainability of local resources and optimization the positive impacts from tourism development (Mwinuka, 2017). He also added that tourists come from diverse backgrounds and cultures, thus destination marketing plays a significant role in developing appropriate offerings to meet the needs of tourists. In fact, destination marketing has been proven as an important initiative in promoting local resources, acting as an attractor that will

influence the decision making of tourists when choosing a destination (Peceny, Urbančič, Mokorel, Kuralt & Ilijaš, 2019). Examples emphasised destination marketing including Thompson, Newman and Liu (2014) who propounded that destination marketing plays a role in switching tourist behaviour.

Moreover, past studies on tourism research have repeatedly evidenced that destination marketing plays a vital role and acts as a motivator to influence tourists' intention to visit a tourism destination (Xiao, Jafari, Cloke & Tribe, 2013; Kanwel et al., 2019). In addition to that, Xu, Li and Zhou (2015) posited that destination marketing functions as a brand builder (Lund, Cohen & Scarles, 2018) and subsequently leads to the development of the destination personality. The successful development of a destination personality is important because it ensures better success of the tourism destination as compared to other tourism destinations (Ye, 2012). According to Pinto and Kastenholz (2011), destination marketing also helps to improve destination image.

Researchers in the past, such as Murphy, Moscardo and Benckendorff (2007) and Garren (2012), have envisaged the need of proper marketing efforts for rural tourism destinations to enhance customer satisfaction and intention to revisit, particularly in the current competitive tourism marketplace (Alves, Campón-Cerro, & Hernández-Mogollón, 2019). One of the objectives of destination marketing is to highlight the local destination appeal to tourists. Some of the resources of local destination appeal are natural, cultural and heritage attractiveness. Anholt (2009) has proposed a term "Place-Product" in the tourism destination context. The "Place-Product" is defined as the bundle of products and services that are being sold to tourists (Anholt, 2009). In addition to that, Kavaratzis and Ashworth (2006) mentioned that the rural marketers should identify the unique selling points of a

destination and promote that product authentically (Hana, Font, Scarles, Weeden & Harrison, 2018).

On the other hand, rural marketing another way of expressing destination marketing. Rural marketing is defined as a series of activities that asserts, promotes and reorganizes customers to purchase certain goods or services (Karalkova, 2016). In sum, Blain, Levy and Ritchie (2005) suggested that a tourism destination which creates differentiation and gains competitive advantage, as well as practices destination marketing efforts for tourism development would be an added advantage (Morgan, Pritchard & Piggott, 2002). Most importantly, rural tourism marketing should work along with the objective of achieving rural economic, social and environmental advantage (Giray et al., 2019). Considering the importance of promotional initiatives at a destination level for rural tourism destination development, this study adopted destination marketing efforts as one of the sub-dimensions for rural tourism destination competitiveness.

2.3.3 Comparative and Competitive Advantage

Destination competitiveness has become one of the major topics in recent tourism literature (Crouch, 2007; Tsai, Song, & Wong, 2009; Corte & Aria, 2016; Demirovića et al., 2018; Thong, Lo, Suaidi, Mohamad & Chin, 2019; Rodríguez-Díaz & Pulido-Fernández, 2020). In discussing destination competitiveness, researchers generally emphasize both comparative advantage and competitive advantage as the crucial determinants of destination competitiveness (Crouch & Ritchie, 1999; Ritchie & Crouch, 2003; Dwyer & Kim, 2003; Mustafa et al., 2020). The concept of competitive advantage was originally developed to measure performance of the firm (Barney, 1995) due to the rising global competition in the marketplace (Popescu & Alecsa, 2015). Traditionally, competitive advantage is defined as a

firm's capabilities or the resources that enables the firm to outperform other firms (Philips, 1999; Porter, 2000). Accordingly, firms that possess some resources that are valuable, rare, inimitable and unsubstitutable are considered to have gained some competitive advantage in comparison with other firms (Chang, 2011). The concept of comparative advantage is explained as a source of international competitiveness (Dwyer, 2001).

Interestingly, the concepts of competitive advantage and comparative advantage are also popularly applied to the service industry, specifically to the tourism industry (Coghlan & Prideaux, 2009; Lohmann & Pearce, 2010; Fernando, 2014; Fernández et al., 2020). Some scholars argued that the term comparative advantage and competitive advantage carry different meanings (Zhang & Jensen, 2015). However, in the tourism context, comparative advantage is defined as the availability of legacies or the natural and cultural resources at a tourism destination (Bobirca & Cristureanu, 2008), whereas the competitive advantage is associated with the ability to effectively use these resources to enhance the destination competitiveness in the long-term (Borbica & Cristureanu, 2008; Gupta, 2009). Resources for comparative advantage could be the climate, natural scenery, flora and fauna, while the transportation, accommodation and facilities can be a source of competitive advantage (Dwyer & Kim, 2003; Mazurek, 2014). Past studies have also propounded that a competitive advantage includes having man-made resources such as tourism infrastructure and tourist facilities (Crouch & Ritchie, 1999; Erislan, 2016).

Due to the intense competition among the different tourism destinations in the global tourism market, tourism destinations are always seeking alternative ways to improve their local attractors and to enhance the level of attractiveness to catch tourists' attention (Ekin & Akbulut, 2015; Gupta & Singh, 2015; Guo et al., 2020). As stated by Dujmović and Vitasović (2014), a tourism destination must possess strong comparative and competitive

advantage and fully leverage on these resources to develop a modern tourist product to fulfill the needs of tourists (Fernando, 2015). Moreover, Grimstad and Burgess (2014) concluded that to be competitive, the identified resources at a tourism destination must be valuable and non-substitutable.

In short, to measure destination competitiveness, both comparative and competitive advantages should be considered. The current research study adopted both comparative and competitive advantages as one of the sub-dimensions for tourism destination competitiveness. This thesis emphasizes that at rural tourism destinations, comparative advantage refers to natural resources, whereas competitive advantage is associated with man-made elements.

2.4 Antecedents of Rural Tourism Destination Competitiveness

It has been noted that there has been an increasing number of studies investigating tourists' destination competitiveness from different tourism destinations within the tourism literature (Kozak, 1999; Kozak & Rimmington, 1999; Enright & Newton, 2004; Hall, 2007; Ruhanen, 2007; Aschalew & Gedyon, 2015; Chen et al., 2016; Law & Lo, 2016). Past studies have predicted that certain marketing plans and promotional strategies are the important determinants for sustainable tourism, which subsequently lead to better tourism destination competitiveness (Peattie & Peattie, 1996; Go & Govers, 2000). Furthermore, Mihalič (2000) also propounded that marketing efforts are the crucial strategies to enhance tourism destination's appeal and strengthen the competitive position of the destinations.

Crouch and Ritchie (1999) have proposed a comprehensive model by integrating eight main determinants of destination competitiveness. These determinants include supporting factors and resources, destination management, destination policy, planning and

development and qualifying and amplifying determinants. Prior to this, there was a total of eleven elements of attractors which include natural features, climate, cultural and social characteristics, tourism superstructure, basic services infrastructure, general infrastructure, access and transportation facilities, attitudes towards tourists, cost or price levels, economic and social ties and uniqueness that were integrated in the Ritchie and Crouch's model (1993). This model highlights the importance of these determinants in contributing to the competitiveness of a tourism destination. A later study also examined the supporting factors and its impact on sustainable tourism destination competitiveness in Post-Socialist countries and found that quality of infrastructure has a significant relationship with destination competitiveness (Petrović et al., 2018).

Given a study conducted by Mihalič (2000) who looked at the influence of environmental aspects towards tourism destination competitiveness, another study by Gomezelj and Mihalic (2008) come to a consensus that it is necessary to conserve the nature of the environment to ensure the sustainability of the core resources (Scales, 2014). On the other hand, environmental constructs have been tested as the antecedents of tourism destination competitiveness by various researchers. One prominent example was given by Yoon (2002), who examined the impact of environmental, natural and cultural resources on tourism destination competitiveness. Dwyer and Kim (2003) integrated environmental elements such as natural resources, range of activities and accessibility into their model and examined its influence on tourism destination competitiveness. Moreover, past researchers have also adopted various environmental components such as environmental conservation, environmental education, tourism infrastructure, quality of the environment and carrying capacity to examine its impacts towards rural tourism destination competitiveness from communities' point of view (e.g., Chin, Lo, Nair & Songan, 2016; Manrai et al., 2018) and

as well as tourists' perspective (e.g., Law & Lo, 2016; Lo, Chin, Mohamad & Ramayah, 2016).

Past researchers Mechinda et al. (2010) have highlighted the two different types of variables linked to the notion of destination competitiveness. On the one hand, the quantitative variables are visitor numbers, market share and tourists' expenditure. On the other hand, the qualitative measured variables could be the richness of culture and heritage or quality of the tourism services. Moreover, past studies have also indicated the use of quantitative measures to estimate the competitive position of tourist destinations (Gursoy & Kendall, 2004; Mangion, Durbarry & Sinclair, 2005). According to a study by Law and Lo (2016), the influence of natural resources, range of activities, accessibility of destination and local communities' support for tourism towards rural tourism destination competitiveness in the context of Sarawak was investigated. The findings revealed that tourists are concerned about the natural resources of the destination, activities available and accessibility to the destination. Based on the review of past literature, a list of representative samples of previous studies on destination competitiveness is shown in Appendix A. In summary, the research study indicates that most of the past studies investigated the tangible determinants of tourism destination competitiveness such as supporting factors, natural, cultural, tourism superstructure, infrastructure, accessibility and range of activities.

Despite the fact that current trends have evolved into diverse dimensions to testify its impact on tourism destination competitiveness, including exploring environmental components (i.e., environmental conservation, environmental education), destination management, policy and qualifying determinants as well as stakeholders involvement, little has been touched on the importance of soft measures (i.e., service quality and destination

image) from tourists' perspective on rural tourism destination competitiveness. Noting the importance of these components to the field of tourism destination competitiveness, this thesis focused on examing the impact and the relationships of hard measures, and soft measures in explaining rural tourism destination competitiveness. Moreover, there is even less attention given to the Sarawak context, making this study one of the first studies that examined the impact of both hard measures (i.e., destination appeal and tourism infrastructure) and soft measures (i.e., service quality and destination image) on rural tourism destination competitiveness of rural destinations in Sarawak from tourist's perspective. This study also explored the potential of using tourist knowledge sharing as a moderator to enhance the relationship between the hard and soft measures towards rural tourism destination competitiveness. This study uniquely explored the smaller groups of tourists visiting rural tourism destinations in Sarawak with the intention of capturing vital data that could potentially be used to expand the rural tourism markets for a larger group of tourists.

2.5 Consequences of Development of Rural Tourism Destination Competitiveness

The notion of tourism destination competitiveness has received increasing attention among scholars from different countries (e.g., Dwyer, Mellor, Livaic, Edwards & Kim, 2004; Omerzel, 2006; Tubey & Tubey, 2014; Maravić, Gračan & Zadel, 2015; Demirović et al., 2016; Abreu-Novais, Ruhanen & Arcodia, 2018; Croes, Ridderstaat & Shapoval, 2020; Hermawati, 2020). Past studies have highlighted several significant contributions as a result of achieving tourism destination competitiveness. Hassan (2000) stated that a competitive tourism destination is ascertained when its visitor numbers and financial returns are increasing. In this regard, Law and Lo (2016) have propounded that profitability and sustainability are ensured with tourism destinations that are said to be competitive. Tourism destination competitiveness is built up based on tourism resources such as natural resources,

activities, cultural heritage and infrastructure. These resources are confirmed to be factors that enhance tourists' satisfaction (Yoon & Uysal, 2005; Chen, Chen & Lee, 2011), encourage repeat visits (Vengesayi, 2003) and subsequently build tourists' loyalty (Reichheld & Schefter, 2000). Overall, the results highlighted the importance of tourism destination to achieve destination competitiveness because a competitive tourism destination tends to generate more economic benefits to the local community at the destination.

In contrast, a tourism destination that does not possess enough resources to stay competitive is said to be incapable of withstanding the high pressure in the current competitive marketplace (Law & Lo, 2016). Past studies have also evidenced that it is important for a tourism destination to gain a favourable position in the current competitive tourism market (Cracolici & Nijkamp, 2009; Tanja, Vladimir, Nemanja & Tamara, 2011; Saqib, 2019). In fact, tourists have limited knowledge about a tourism destination prior to their visit. However, most of the time, travel decisions are made based on the image or the brand name of the destination itself. Thus, the competitiveness of a tourism destination often turns out to be the core competency that influences tourists in making travel decisions (Hovinen, 2002; Cracolici & Nijkamp, 2009; Kovacevic, 2018). A tourism destination that is attractive and competitive tends to deliver a satisfying experience to the visitors (Vengesayi, 2003) and subsequently strengthens the image of the tourism destination (Ramukumba, 2019). These findings reconfirm the importance of destination image on tourism destination competitiveness. It is crucial to note that in order to build up the image of a tourism destination, both the availability of destination resources and services play a significant role in satisfying tourist wants.

Moreover, past studies have propounded that destinations' tourism resources significantly influence the success and failure of a tourism destination and the development of its competitiveness (Azzopardi & Nash, 2016; Mustafa et al., 2020). These resources include both the hard measures and soft measures as it has been recognized as important sources to enhance the performance of the tourism destination (Cheuk et al., 2015; Hanafiah & Zulkifly, 2019). In sum, it is essential for tourism destinations to identify the factors that contribute to the development of tourism destination competitiveness due to its potential to provide considerable help to the tourism industry. It is even more relevant at rural tourism destinations because rural tourism destinations are highly dependent on the natural, cultural and heritage resources. Hence, this thesis highlighted that for an understanding of tourism destination competitiveness, it is important to cover both hard measures and soft measures in explaining tourism destination competitiveness.

2.6 The Concept of Destination Appeal

The idea of destination appeal has received a growing interest in the rural tourism industry as it could enhance the destination's attractiveness and attract more tourists (Crouch & Ritchie, 1999; Loureiro, 2012; Long & Nguyen, 2018). Past studies have evidenced that there is a significant relationship between destination appeal and tourism destination competitiveness (Ndivo, Waudo & Waswa, 2012; Karalkova, 2016; Owiya, Mulwa & Kemboi, 2019). The concept of destination appeal has been defined in several different ways. On the one hand, destination appeal is interpreted as referring to the experience of dealing with the public and private infrastructure or amenities, accessibility, human resources, image and price or costs. On the other hand, Kresis and Prebzac (2011) propounded that destination appeal refers to the people, culture, climatic condition, landscape characteristics, tourists-related activities, food and history of the destination. The differences between these two

definitions are that the earlier one focused on the man-made infrastructure and facilities, whereas the second definition highlights more on the natural, environmental, cultural aspect and the people.

In reference to a definition of rural tourism, as proposed by the Finnish theme group, highlighted that the natural and cultural resources are part of the components in the rural tourism context (Blinnikka, Härkönen, Väisänen & Tunkkari-Eskelinen, 2014). Essentially, destination appeal should refer to the natural and cultural attractiveness of the tourism destination (naturally exists) and not so much on the built infrastructure. Thus, the definition, as defined by Kresis and Prebzac (2011), was applied to this study, which mainly looks at the influence of natural resources, cultural heritage and outdoor activities as the appealing factors which attract tourists to rural tourism destinations. Past researchers have highlighted the importance of conserving and enhancing a destination's natural and cultural tourism resources to improve the destinations' unique set of assets (Goeldner, Ritchie & MacIntosh, 2000; Potashova & Girijchuk, 2019; Suryawardani et al., 2020). Doing this will subsequently influence the decision making of tourists when considering travelling to rural tourism destinations (Mostowfi, 2000; Sugiama, 2019).

Within the rural tourism context, natural resources or amenities have become the crucial input for rural tourism products (Vail & Hulkrantz, 2000; Neves, 2006; Matthew, Shuib, Ramachandran, Herman & Nair, 2011; Nooripoor et al., 2020). Past studies have also indicated that it is necessary to pay attention to cultural and heritage elements for rural tourism development (Sharpley, 2002; Mahmoudi et al., 2011; Karalkova, 2016) as these elements are considered as leading tourism attractions (Okech et al., 2012). On the other hand, it is also important to note the significant role outdoor activities play in enhancing the

destination appeal and competitiveness of the rural tourism destinations (Krippendorf, 1987) because of its ability to serve as a "pulling" factor in influencing tourists when making travel decisions (Yun, Hennessey & Courtney, 2016). In fact, there are changes in tourist behavior in the recent decades, as tourists are more demanding than before and seek a new inexperienced approach to destinations (Lo & Janta, 2020), so to be successful in the tourism market, tourism destinations must be able to provide more tourist activities rather than depending solely on natural and cultural resources for rural tourism development. Therefore, it is concluded that in order to assess destination appeal of tourism destinations, it is crucial to integrate the components of natural, cultural and outdoor activities of tourism destinations.

Natural and environmental resources have been repeatedly evidenced as being crucial and an integral part of rural tourism destination development (Ritchie & Crouch, 2000; Dwyer & Kim, 2003; Matthew et al., 2011; Mihalič, 2013; Chen et al., 2016; Zakariya, Ibrahim & Wahab, 2019). As rural areas are rich with ecological and diverse natural resources, the beauty and quality of these resources are said to be lucrative factors that attract visitors to visit (Bilali et al., 2014; Figueiredo, Kastenholz & Pinho, 2014). Natural resources are the core resources of the environment, such as flora and fauna (Crouch & Ritchie, 1999), found in nature settings used by people (Lovins, Lovins & Hawken, 2007). In fact, these are the major resources that should be conserved because the quality of these natural resources would influence the quality of the tourism products. For instance, in the case study conducted by Aziz, Hashim and Awang (2018) on Sungai Sedim Nature Forest (SSNF) in Kedah, Malaysia. It was found that natural resources (i.e., waterfall, mountain and flora fauna), culture and heritage (i.e., history of Sedim) and landscapes are the important resources for SSNF. Thus, to ensure sustainable economic benefit to the host community, the authors

highlighted on the importance of preserving and protecting the natural and cultural resources for the development of niche markets in rural tourism.

Tourists travelling to a rural tourism destination are mostly influenced by the quality of natural resources in making travel decisions (Lane, 2009). It was posited that a tourism destination which possesses an abundance of natural resources could eventually increase the competitive advantage of the tourism destination (Hassan, 2000; Ritchie & Crouch, 2000; Jaafar & Maideen, 2012). Moreover, Giannakis (2014) concluded in his study that the natural beauty and the un-spoilt environment end up as the central axis of a rural development strategy. One of the reasons why tourists visit rural tourism destinations is because of its natural beauty and relaxing environment that could be therapeutic and recharging for them (Cofas, 2014). Considering that the natural environment can act as a crucial factor to the rural tourism destination as tourists are seen to enjoy the natural environment of the rural tourism destination; thus it is essential to conserve and preserve these resources for sustainability of rural tourism development.

Past studies have explained cultural heritage in several ways. Kovanthanakul (2006) defined cultural heritage as the inheritance from the past, which contains events, places and people. Lertrit (2004) and Lertcharnrit (2008) explained that cultural heritage is based on tangible products such as products of culture, antiquities, monuments, heritage buildings and historical urban areas. Similarly, Sarttatat (2010) has markedly defined cultural heritage as cultural assets, cultural resources and the cultural environment. Cultural heritage attractions have become a crucial element for rural tourism development as it is not only important for identity cultivation (Poria & Ashworth, 2009), but is also recognized as one of the pillars for community economic development (Ngamsomsuke, Hwang & Huang, 2011; Park, 2014).

Based on the literature, it is summarised that the availability of cultural heritage resources at a tourism destination is important as it significantly enhances the unique selling point of the destination, leading to more successful development of the rural tourism destination.

Past studies have postulated that the distinct culture, history and ethnic elements in rural areas have proven to be a special component of destination appeal (Djekic & Vucic, 2007). It functions to satisfy the interests of tourists as well as to shape the competitiveness of rural tourism destinations (Hennessey, Yun, MacDonald & MacEachern, 2008; Ritchie & Crouch, 2010; Chakraborty, 2020). Ivanovic (2008) propounded that cultural heritage could act as a pulling factor for a tourism destination to attract tourists' attention to visit (Fam et al., 2017). The cultural and heritage components are equally important in comparison to the natural resources because both are the factors that could potentially increase the length of stay and motivate tourists' revisit intention (Underberg-Goode, 2014). On the other hand, Iniyan (2015) found that cultural heritage plays a vital role in shaping tourists' satisfaction. A recent study by Zhang, Chen and Hu (2019) also noted that it is crucial to preserve the traditional culture to attract tourists for the development of destination competitive advantages. Therefore, it is important for a rural destination to conserve its existing cultural heritage attractions in order to maintain its destination appeal in enhancing destination competitiveness.

Outdoor activities in rural tourism are perceived as activities taking place outside, in nature, or in green areas (Bell, Tyrväinen, Sievänen, Pröbstl & Simpson, 2007). These outdoor activities range from hiking, birdwatching, sight-seeing, as well as water-based and farm activities (Cawley & Gillmor, 2008) and is considered as significant drivers to fulfill the needs of visitors at rural tourism sites (Greaves & Skinner, 2010). Ritchie and Crouch

(2010) have propounded that destination appeal of the tourism destination is enhanced if there is a range of activities made available to tourists. A study by Heintzman and Dawson (2010) has highlighted that outdoor activities are found to be necessary for all three rural settings investigated. In fact, the series of activities available at the rural tourism destination is indispensable and vital in enhancing the attractiveness of the destination and will subsequently generate additional revenue for rural business operators. In a similar vein, outdoor activities are also confirmed as one of the primary motivators for tourists, as these activities could enhance tourists' recreational experiences in rural areas (Agapito, Mendes & Valle, 2012).

Based on the literature, in order to assess the competitiveness of a rural tourism destination, it is vital to involve the component of destination appeal, which includes cultural attractions, natural resources and activities for tourists. This study aimed to propose a comprehensive model for the development of rural tourism destination competitiveness based on both hard and soft measures. In the past, destination appeal has been proven to be one of the main attractors that pull tourists' attention to visit a rural tourism destination. This particular variable was grouped under the category of hard components. Thus, this study adopted destination appeal as one of the hard measures and as an independent variable to verify its relationship with rural tourism destination competitiveness such as sustainable management, destination marketing efforts, as well as a comparative and competitive advantage.

2.7 The Concept of Tourism Infrastructure

In view of the importance of rural tourism in contributing to the local communities' income, tourists' arrival has become the main concern for all the tourism stakeholders. This

is because the total number of tourist arrivals would have a direct effect on the income generation for the local communities or tourism industry players (Wani & Shafi, 2013; Heikkilä, Poladova & Kääriä, 2014; Raad, 2019). In this regard, tourism infrastructure has become one of the fundamental factors that influence tourists' travel decision making when considering a tourism destination (Javanović & Ilić, 2016; Chi, Lee, Ahn & Kiatkawsin, 2020). Inskeep (1991) defined tourism infrastructure as a physical element created to cater to visitors' needs. On the other hand, the term tourism infrastructure is associated with things like accommodation facilities, gastronomy facilities and transport at the destination (Panasiuk, 2007; Wilde & Cox, 2008; Virkar & Mallya, 2018). It is believed that the availability of tourism infrastructure inevitably enhances a destination's strength to compete with other tourist destinations (Tampakis, Manolas & Tampakis, 2012; Long & Nguyen, 2018). This is because better quality infrastructure would indirectly enhance tourist travel experiences and directly impact the tourist arrival rates.

As stated by Kumar (2016), tourism infrastructure is divided into two main groups, namely soft infrastructure and hard infrastructure. Soft infrastructure is related to providing training, whereas the hard infrastructure refers to the tangible elements such as transportation facilities, information facilities and access methods for tourists. Past studies on tourism research have repeatedly evidenced that tourism infrastructure is one of the most important supporting factors in contributing to the successful development of tourism destinations (Panasiuk, 2007; Abdullah, Razak & Jaafar, 2015; Javanović & Ilić, 2016), destination competitiveness (Aref & Gill, 2009; Ritchie & Crouch, 2010; Lovelock & Lovelock, 2013; Rahmiati et al., 2020) and to enhance tourists' overall tourism experience (Gartner, 2005; Walter, Edvardsson & Öström, 2010). In addition to that, it was found that the availability of quality tourism infrastructure also significantly affects the competitiveness of a tourism

destination (Prideaux, 2000; Hankinson, 2004; Goffi, Cucculelli & Masiero, 2019; Fernández et al., 2020). Based on the literature, most of the past studies emphasized on the hard elements of tourism infrastructure. Realizing the importance of tourism infrastructure for the tourism industry, specifically the rural tourism sector, thus this thesis maintains that the sub-elements of tourism infrastructure such as transportation facilities, accommodation facilities and tourists' facilities should be integrated into a single research model and further examine its impacts on rural tourism destination competitiveness.

Transportation facilities are affirmed as one of the fundamental pre-requisites to attract tourists' visit, especially into the remote rural tourism destinations where the supply of transportation infrastructure is limited (Tureac et al., 2008; Ritchie & Crouch, 2010; Firoiu & Croitoru, 2012; Bimonte, Ferrini & Grilli, 2015; Kanwal, Rasheed, Pitafi, Pitafi & Ren, 2020). The availability of efficient transportation facilities tends to enhance the quality of accessibility by reducing the travelling costs for tourists (Quach, 2013) and makes tourist attractions accessible for the tourists (Herawati, Purwaningshi, Pudianti & Surya, 2014). Essentially, there are two primary modes of transport, namely air transport and motor car transport (Lumsdon, 2000). However, in some cases, one has to take a small boat to access some of the rural tourism destinations.

In the Malaysian context, the government has realized the importance of tourism infrastructure as a valuable asset to the growth of the tourism industry and country development, thus the government has become a significant funder for the development of public infrastructure (Abdullah et al., 2015). Past studies have also highlighted that there is a need to provide an efficient transport network for tourists as it is an essential factor for the development of tourist flows and subsequently in enhancing the overall competitiveness of

the tourism destinations (Dwyer & Kim, 2003; Khadaroo & Seetanah, 2008; Crouch, 2011; Massidda & Etzo, 2012; Almstedt, Lundmark & Pettersson, 2016). It is believed that the quality of transportation infrastructure plays a vital role in shaping the success of tourism development (Okech et al., 2012; Suanmali, Chankao & Ammarapala, 2014; Souca, 2019). As suggested by Setokoe, Ramukumba and Ferreira (2019), in order to ensure the sustainable development of rural areas for tourism, concern and effort should be given to improve the infrastructure of the areas. Therefore, it is true that transportation infrastructure plays a vital role in connecting tourists from one tourist point to another. In fact, the development of an efficient transportation infrastructure should be a collaborative effort between the different stakeholders (i.e., local government and host community), in which the government could be the major funder to build the primary access roads and facilities, whereas the local community can provide transportation services at the rural destination level (e.g., boat service).

Accommodation amenities are listed as one of the core components for tourism infrastructure (Panasiuk, 2007; Wilde & Cox, 2008). The term accommodation in Greece's rural tourism context is defined as accommodation in traditionally furnished rooms with a local traditional breakfast (Darău et al., 2010). In the rural tourism context, one of the sources of income for the local communities who are involved in the tourism activities is through providing accommodation, or best known as homestay services. Past studies further support this (e.g., Maksimović et al., 2015) as it was observed that the offering of suitable accommodation and tourist facilities in rural areas had become one of the significant sources of income for local communities. It was documented in past studies that communities should participate in rural tourism development by providing accommodation paired with cultural amenities and engaging activities to fulfil the needs of the tourists (Viljoen & Tlabela, 2007;

Polucha & Žukovskis, 2010). The accommodation services in rural destinations are generally inclusive of accommodation and meals. Past studies have also indicated that tourism destination competitiveness is achieved if the tourist facilities are made available to them (Vengesayi, 2003; Basher & Al-Ajloni, 2012). It is concluded that at a rural tourism destination, accommodation services also play a crucial role to provide necessary living comfort and to enhance tourist experiences, other than experiencing natural and cultural attractions at the site.

For rural tourism destinations to be competitive, issues of accessibility and accommodation are often being highlighted. This study collected the view from tourists to assess the impact of tourism infrastructure, specifically with items for transportation, accommodation and tourist facilities, to testify its impact on the development of rural tourism destination competitiveness. It is believed that at every rural tourism destination, tourists rely heavily on the local transport, homestay and local facilities during their stay at the destination. Thus, to assess the competitiveness of a rural tourism destination, it is vital to include the component of tourism infrastructure.

2.8 The Concept of Service Quality

The idea of service quality has been the primary concern among service providers in today's modern, globalized and competitive environment. Much debate has been outlined to illustrate proof of the importance of service quality to enhance the performance and the success of a service organization (El-refae, 2012; Pakurár, Haddad, Nagy, Popp & Oláh, 2019; Elrahman, Borsaly & Hassan, 2020) and as well as the successful development of tourism industry (Chiu, Liu & Tu, 2016; Tabaku & Cerri, 2016; Lin Lin & Chen, 2018; Park & Jeong, 2019). An analysis of the terms revealed that service quality or quality of services

are used interchangeably but carries the same meaning. Past studies have repeatedly envisaged that the term service quality is a multidimensional concept, and it is interpreted differently based on different contexts. There are various definitions for service quality and one of the earliest is the one defined by Grönroos (1984), which explains it as the comparison between customers' pre-purchase expectations towards goods and services and the post-purchase perception (Grönroos, 1990). In line with this, the post-purchase perception should be higher than the pre-purchase expectation in order to indicate good service quality (Rahman & Shil, 2012; Suneeta & Koranne, 2014; Ullah, Raza & Chander, 2016).

On the other hand, the term tourism service quality in an organization (e.g., travel agencies and hotels) is defined to mean that the services provided should meet with the quality of excellence, value and the quality of meeting tourism customer expectations (Wei, 2012). Brady and Cronin (2001) also provided another definition for service quality, which is that customers' perceptions of the elements of service and these include the interaction quality, physical environment quality and outcome quality. Prior to this, Ducker (1991) outlined that service quality can be defined as the amount that customers are willing to pay for a service or product and not the amount customers pay based on the price set by the supplier. Within the rural tourism literature, the concept of service quality is also repeatedly investigated by tourism researchers in the context of rural tourism or nature-based tourism (Komppula, 2006; Moreira & Dias, 2010; Tan & Omar, 2014; Rajaratnam & Nair, 2015). Services are recognized as an intangible asset (Reichel et al., 2000; Moreira & Dias, 2010; Chang & Tsai, 2016; Skálová & Peruthová, 2016) and often these intangible assets play a crucial role to determining the success of the travel sectors (Wei, 2012; Darfoon, 2013). It can be summarized that service quality emphasizes on the amount that tourists pay to

experience a product or service, thus the quality of the product or services highly determines the amount that one is willing to pay.

There are a few service quality models that have been introduced over the years to measure consumers' perceptions about the quality of service provided. Parasuraman, Zeithaml and Berry (1985, 1988) proposed one of the earliest service quality models, namely the SERVQUAL model. This model perceives service quality as the comparison between customers' expectations and their perceptions towards the performance of the actual service they have received (Parasuraman et al., 1988). The SERVQUAL model outlined a total of five dimensions, such as tangibles, reliability, responsibility, assurance and empathy, with 22 measurement items to measure the service quality construct. However, Cronin and Taylor (1992) introduced the SERVPERF model to replace SERVQUAL model's scale because of its limited theoretical support and weak empirical evidence support. The SERVPERF model emphasized that the assessment of service quality should be based on the performance of the service provided rather than the concept of expectation – perceptions. On the other hand, Grönroos (1990) proposed another version of the service quality model, which is the technical-functional quality model. This model outlined that the technical quality refers to "what" is provided, whereas the functional quality refers to "how" it is delivered.

Service quality is important to both the urban and rural tourism industry as the quality of services delivered tends to determine tourists' satisfaction and subsequently influence visitors' revisit intention (Cole & Illum, 2006; Žabkar, Brenčič & Dmitrović, 2010; Han & Radder, 2011; El-refae, 2012; Ismail et al., 2013; Soleimani & Einolahzadeh, 2018; Ramdhani & Astuti, 2019; Chi et al., 2020; Nguyen, 2020). It is believed that the service quality of the homestay provider plays an essential role in the success and failure of the rural

tourism industry (Tinakhat, Viriyachaikul & Vorasingha, 2018; Yaru et al., 2018). In addition to that, it was also found that service quality also crucially contributes to the development of customers' satisfaction and builds loyalty among the visitors (Masrurul, 2019). This loyalty will further lead to positive word-of-mouth and revisit intention (Kabir & Carlsson, 2010). This is an important dimension that needs to be included in the study of both the urban and rural tourism destinations because it helps to enhance tourist's satisfaction and intentions to revisit, which directly contributes to economic development.

Moreover, Al-Ababneh (2013) stated that the quality of services provided and experienced by tourists' will determine their level of happiness, which is the better the quality, the happier the tourists. This is a critical aspect to consider in order to build tourists' satisfaction. Other than that, some revealed that service quality might function as a pulling factor to enhance the performance of the rural tourism sector (Butnaru & Miller, 2012; Rajaratnam & Nair, 2015; Choi, Ann, Lee & Park, 2018). Researchers in the past (e.g., Mohammed, 2006; Kumra, 2008; Devesa, Laguna & Palacios, 2010) have elucidated that quality of services is one of the sources of competitive advantage and it plays a vital role in contributing to the development of tourism destination competitiveness (Hossain & Islam, 2019; Purnomo, Rahayu, Riani, Suminah & Udin, 2020). In many developing countries and emerging economies including Malaysia, which have significant proportions of rural population, service quality has been propounded as an important dimension that should not be neglected for the development of tourism destination competitiveness.

2.9 The Concept of Destination Image

Studies in the past pointed out destination image as one of the crucial factors to enhance the competitiveness of a tourism destination (Lin, Hsueh, Liu, Huang & Min, 2013;

Melo, Moniz, Silva & Batista, 2017; Perles-Ribes, Ramón-Rodríguez, Moreno-Izquirdo & Such-Devesa, 2019). Various studies have evidenced the importance of a tourism destination to possess high destination image because it determines popularity of the destination among visitors (Hsu, Wolfe & Kang, 2004) and at the same time increases destination attractiveness (Sumaco & Richardson, 2011; Virdee, 2019). According to past researchers (e.g., Fakeye & Crompton, 1991; Tasci & Gartner, 2007; Grigaliūnaitė, Pileienė & Bakanauskas, 2015), tourism is associated with the offering of intangible products or experiences to visitors. Thus, these intangible experiences are a vital measure to influence tourists' perceptions toward the tourism destinations. Tourism destinations that are able to provide good tourism experiences to tourists are deemed capable of leading towards visit or revisit intentions to these tourism destinations (Bandyopadhyay & Kerstetter, 2003; Hosany, Ekinci & Uysal, 2006; Santoso, 2019).

In the rural tourism context, tourists' visitation and expenditure originate from the concept of consumer behaviour (Chon, 1990; Dobni & Zinkhan, 1990); hence brand image or destination image does play a crucial part in shaping the tourists' travel decision making (Gallarza, Saura & García, 2002; Chen, Zhang & Qiu, 2013). Destination image is defined by Crompton (1979) as the sum of beliefs, ideas and impressions that people have of a place or destination, whereas Font (1997) provided a similar definition but also relates it to the products instead of the destinations. On the other hand, Ahmed, Sohail, Myers and San (2006) defined destination image in the tourism context as tourists' perceptions towards a destination that is equipped with a set of tourism services or resources that influence tourists' consumption behaviour. Based on the several definitions of destination image as discussed above, it is summarized that tourism destination image is associated with one's perception and feelings derived from experiencing destination's tourism resources (i.e., natural,

cultural, activities, accommodation, transportation, etc.), in which a good experience tends to create a good image of the destination. Thus, it is important for tourism destinations to possess a good quality of tourism resources in order to enhance tourist experiences.

Past researchers have highlighted the few significant contributions of destination image to the destination, such as to enhance destination attractiveness (Sumaco & Richardson, 2011), to increase the success of marketing strategies for tourism destination (Govers, 2005; Matos, Mendes & Valle, 2012) and as well as to enhance its competitiveness to compete in the highly competitive marketplace (Carroll & Ahuvia, 2006; Chew & Jahari, 2014). Past studies on tourism have repeatedly evidenced that the influence of destination image in consumer's minds is important (Echtner & Ritchie, 2003; Bornhorst, Ritchie & Sheehan, 2010) because it alters their attitude and decision-making behaviour (Kozak, Crotts & Law, 2007) and subsequently results in creating tourist loyalty (Bigné, Sánchez & Sánchez, 2001). It was posited that a tourism destination should create a unique (Qu et al., 2011; Juravle, Sasu & Terec-Vlad, 2016) and positive destination image in the minds of the tourists (Hankinson, 2004) to give it an advantage against other competitors (Fan, 2006). As stated by Kozak and Rimmington (2000), good destination image of a destination tends to lead to more tourists' satisfaction (Chi & Qu, 2008; Aliman et al., 2016). Thus, it is important to note that one of the factors that make tourists visit and revisit a tourism destination is more often due to the successful development of a unique and positive destination image.

Gartner (1993) is of the opinion that destination image is developed based on the three components, namely cognitive, affective and conative (Gartner, 1996). In line with the definition of destination image by Gartner (1996), numerous past studies have adopted the three components, namely the cognitive image, the affective image and the conative image

to measure the image of the destination (Wang & Hsu, 2010; Kim & Perdue, 2011; Chen & Phou, 2013; Zhang, Fu, Cai & Lu, 2014; Basaran, 2016; Lin, Chuang & Chang, 2016; Akguna, Senturk, Keskin & Onal, 2020). Past researchers have provided definitions for these three components, the cognitive component is referred to as the belief or knowledge about a destination's attributes evaluations (Stepchenkova & Mills, 2010), whereas the affective component is defined as the feelings aroused by a place, by people with different motives (Ahmed et al., 2006). These are the two widely used components to measure destination image (Kim & Perdue, 2011; Lin et al., 2013; Basaran, 2016). Simplified, the cognitive image is the rational element, whereas the affective image is associated with the emotional aspects (Beerli & Martin, 2004; Kaplanidou & Vogt, 2007; Stepchenkova & Mills, 2010). On the other hand, the conative image outlines the consumer's future desire or intention (Dann, 1996).

To date, researchers have attempted to collect data through online travel reviews (OTRs) to evaluate and get more precise information on tourism destination image of tourism destinations due to the growing competitiveness of the industry (Marine-Roig, 2019). Therefore, it is observed that destination image has become an essential component of tourism destination competitive advantage. In order to develop a successful competitive rural tourism destination, the soft measure – destination image needs to be included. The reason is that part of assessing the comparative and competitive components of rural tourism destination notes that destination marketing efforts plays a critical role to ensure that a tourism destination stays competitive. Thus, the destination image was adopted as one of the independent variables in the study framework to assess its impact on rural tourism destination competitiveness.

2.10 Knowledge Sharing (As a Moderator)

Within the tourism industry, it is noticed that there is an increasing challenge for an organization or a tourism destination to succeed and to stay competitive in an unpredictable and competitive environment (Baggio & Cooper, 2008; Yang, 2008; Zaei Mansour & Zaei Mahin, 2014; Mustafa et al., 2020). Nonetheless, knowledge has been recognized as one of the crucial key competitive resources for tourism and hospitality organizations to stay competitive in the current turbulent marketplace (Bertella, 2012; Suveatwatanakul, 2013; Kacperska & Lukasiewicz, 2020). Given the pivotal role knowledge plays in enhancing the competitiveness of a tourism destination (Scott & Laws, 2006; Ozlati, 2012), knowledge sharing has emerged to be the imperative tool for knowledge management and considered as a competitive strategy to enhance an organization's competitive edge (Rao, Yang & Yang, 2018; Odunga et al., 2020). The following sections are outlined to demonstrate the relevance of knowledge sharing in the study framework.

As defined by Davenport and Prusak (1998), knowledge is a mix of experience, values and contextual information and it is fundamentally a product of people (Puccinelli, 1998). Accordingly, Cooper (2006) provides another definition for knowledge, that is that it is the use of skills and experience for decision making or carrying out tasks. Knowledge is further divided into two main categories, namely, explicit knowledge and tacit knowledge (Nonaka, 1994; Nonaka & Tacheuchi, 1995; Burke & Sulaiman, 2008). Researchers in the past (e.g., Becerra-Fernandez & Sabherwal, 2001; Ali & Ahmad, 2006) have defined explicit knowledge as the knowledge which can be formally and systematically documented and stored, whereas tacit knowledge is regarded as non-documented knowledge or knowledge that is deeply rooted in action and gained from experience (Alavi & Leidner, 2001; Jain, Manjit & Gurvinder, 2007). Knowledge has been identified as the crucial element for the

survival of an organization (Shim, 2010; Ozlati, 2015; Asrar-u-Haq & Anwar, 2016) and as well as the success of hospitality and tourism organizations in today's competitive era (Yang, 2008; Hu et al., 2009; Abuke, Wöber, Scott & Baggio, 2014; Razmerita, Kirchner & Nielsen, 2016). Also, knowledge is recognized as the valuable resource for organizations or tourism business entities to gain competitive advantage (Scott & Laws, 2006; Paroutis & Saleh, 2009; Swanson, Kim, Lee, Yang & Lee, 2020).

In this regard, the vital role that knowledge plays in determining the success and failure of a tourism organization or destination have been significantly shown, thus knowledge sharing has emerged as the strategy for firms to gain competitive advantage. There are various definitions of knowledge sharing and it is defined differently according to context. Knowledge sharing can be defined as the set of behaviours and provision of information that people can disseminate (Fan & Wu, 2011), as well as collaborative activities with others to develop new ideas (Cummings, 2004; Santos, Goldman & de Souza, 2015). On the other hand, a definition of knowledge sharing by Zhu and Zhang (2011) is the process of organizing the organization's members to exchange the job-related information and experience with the goal of enhancing the organization's knowledge. Fatt and Khin (2010) have highlighted that knowledge sharing is an activity that involves the exchange of knowledge (e.g., information, skills, or expertise) with people, friends, communities, or organizations (Okyere-Kwakye & Nor, 2011; Charband & Navimipour, 2016). In the rural tourism context, it is believed that the process of knowledge sharing could jointly create new knowledge, whereby tourist sharing of tourism experiences and knowledge with the community could potentially create new knowledge for tourism management and development.

Studies in the past have integrated knowledge sharing as one of the important components to determine the competency and success of the tourism and hospitality industry (Yang & Wan, 2004; Noor, Hashim, Haron & Ariffin, 2005; Hu et al., 2009; Idrees, 2011; Liu & Cho, 2011; Yeh et al., 2011; Yiu & Law, 2012). Moreover, past studies have postulated that knowledge sharing has become one of the prerequisite factors to encourage innovation and innovativeness in the tourism and hospitality industry (Jensen, 2003; Hoarau & Kline, 2014) and subsequently leads to the enhancement of competitive advantage (Hawkins, 2006; Scott & Laws, 2006). One example of the application of knowledge sharing in the tourism sector is the study on community acceptance of a knowledge sharing system in travel and tourism websites. It was found that the tourists who shared their experience via tourism websites served as an added value service and at the same time reducing tourists' perceived risk (Noor et al., 2005; Baggio & Cooper, 2008). Furthermore, the study by Bertella (2012) adopted the concept of knowledge sharing in her research and tested it in small-scale tourism in a rural and peripheral area. As pointed out in her study, the sharing of knowledge and cooperation among the inter-organizational relations at the destination level seems to be crucial as this could help to improve the quality of the tourist services offered. Also, a more recent study by Luis, Ana and María (2018) envisaged that to tackle the challenge of long-term tourism competitiveness, a tourism destination needs to create an innovative ecosystem that encourages sharing of knowledge among tourists and the stakeholders involved. From the numerous studies revealed, it is concluded that the sharing of knowledge among stakeholders tends to enhance the performance of tourism development, including at the destination level.

Baggio and Cooper (2010) mentioned that the power of possessing knowledge has moved from knowledge management to sharing of knowledge as it is justifiable that

knowledge sharing helps to create communities' knowledge at the destination level. According to the study by Munar and Jacobsen (2014), tourists are used to sharing their knowledge and experiences in tourism social media. Notwithstanding that, knowledge sharing has been adopted as a moderator variable and tested its moderating impact on the relationship between manufacturing activities and business performance (Huang, Chen & Stewart, 2010). However, no known study was found adopting knowledge sharing as the moderating variable and examining its moderating relationship in the rural tourism context. Hence, because of the importance of knowledge sharing for the development of competitive advantage and destination competitiveness, this study adopted knowledge sharing as the moderator variable and integrated it into the proposed study framework. Based on the literature, it is believed that tourists could share their knowledge learned from other rural tourism destinations with the local community for the improvement of resources appeal, tourism infrastructure, quality of services. This indirectly enhances the image of the rural tourism destination for the development of rural tourism destination competitiveness.

2.11 Underlying Theories

The next section reviews the three theoretical perspectives that underpin the rationale for the relationships between destination appeal, tourism infrastructure, service quality, destination image, knowledge sharing and rural tourism destination competitiveness such as sustainable management, destination marketing efforts, as well as comparative and competitive advantage. These underlying theories are Competitiveness Theory, Stakeholder Theory and Social Exchange Theory (SET). A summary of the variables covered by Competitiveness Theory, Stakeholder Theory and Social Exchange Theory is presented in Table 2.3.

Firstly, Competitiveness Theory is employed to postulate the theoretical basis of comparative and competitive advantage in this study framework. It is propounded that both natural resources (e.g., destination appeal) and man-made resources (e.g., tourism infrastructure, service quality and destination image) are the fundamental resources in enhancing the achievement of rural tourism destination competitiveness in terms of sustainable management, destination marketing efforts, as well as comparative and competitive advantage.

Next, in the study of the rural tourism context, Stakeholder Theory was applied to propose the tourist's perspective on the four proposed independent variables, namely destination appeal, tourism infrastructure, service quality and destination image towards rural tourism destination competitiveness. It is important to study stakeholder perspectives, especially from the demand point of view when comes to tourism destination development. Thus, Stakeholder Theory was applied to serve as a guideline to study the tourist's point of view on the importance of the four proposed independent variables for the development of rural tourism destination competitiveness.

Lastly, the Social Exchange Theory is adopted as the underlying theory for knowledge sharing as one of the significant tourism resources in the development of destination competitiveness through social interactions. It is propounded that with proper encouragement for knowledge sharing among tourism stakeholders (i.e., tourist, local community and other tourism industry players) within the rural tourism destination, this would be an added advantage and a valuable resource for the better development of rural tourism destination competitiveness. The reason is that knowledge is an important resource for business entities and as well as tourism destinations for innovation and innovativeness.

Table 2.3: Summary of Variables Covered by Competitiveness Theory, Stakeholder Theory and Social Exchange Theory (SET)

Theories / Variables	Competitiveness Theory	Stakeholder Theory	Social Exchange Theory
Destination competitiveness	√		
Sustainable management	√		
Destination marketing efforts	√		
Comparative and competitive advantage	√		
Destination appeal		√	
Tourism infrastructure		√	
Service quality		√	
Destination image		√	
Knowledge sharing			√

2.11.1 Competitiveness Theory

This research study adopted Competitiveness Theory as one of the theories to build the study research framework and explain the development of rural tourism destination competitiveness based on the perspective of tourists. Due to the increasing challenges and sustainability of profit-making, competitiveness is recognized as one of the key success factors in winning the competition within the marketplace (Hanafiah, Hemdi & Ahmad, 2011; Demirović et al., 2016). The Competitiveness Theory is the combination of both the concept of comparative advantage (Ricardo, 1891) and competitive advantage (Porter, 1985). As highlighted by Bordas (1994) comparative advantages are related to the available

resources within the destination, whereas competitive advantages are based on created resources. Past research (e.g., Buhalis, 2000; Mihalič, 2000; Dwyer & Kim, 2003; Mazanec, Wöber & Zins, 2007) have elucidated that it is crucial for a tourism industry or destination to achieve competitiveness because being competitive is important for tourism development and as well as for sustainability (Solana-Ibáñez, Para-González & Nieves-Nieto, 2016).

Within the rural tourism context, Poon (1993) was one of the earliest who adopted the comparative and competitive advantage theory in his study. Besides, past studies have also proven the ideality of applying Competitiveness Theory in rural tourism research (Ritchie & Crouch, 1999; Dwyer et al., 2004; Navickas & Malakauskaite, 2009; Oye, Okafor & Kinjir, 2013). It was summarized that the competitiveness theory was adopted to underpin their studies and investigate the impact of both natural and built resources on the development of rural tourism destination competitiveness. As stated by Crouch (2010), it is crucial to investigate and identify factors that contribute to the enhancement of destination competitiveness. Some recent studies (e.g., Novais, 2017; Mutambo, 2018) have also proven the applicability of Competitiveness Theory in the development of tourism contexts.

Given the fact that both comparative and competitive advantage are the fundamental concepts for Competitiveness Theory, Competitiveness Theory therefore provides a theoretical and practical basis to the reciprocal relationship between the four proposed predictors (both natural and created resources) towards rural tourism destination competitiveness. Hence, Competitiveness Theory is relevant to this study in explaining how the natural elements (e.g., destination appeals), man-made elements (e.g., tourism infrastructure, service quality and destination image) and knowledge sharing (resources) will contribute to the development of rural tourism destination competitiveness such as

sustainable management, destination marketing efforts, as well as comparative and competitive advantage from the tourist's point of view.

2.11.2 Stakeholder Theory

Stakeholder Theory was first introduced in the 19th century by Freeman (1984). In the early stages, the Stakeholder Theory was introduced and applied to the business management context. It is defined as any individual or group that can potentially affect or determine the success and failure of an organization (Freeman, 1984). There are different types of definitions for the term "stakeholder". Freeman described stakeholder as any individual or group related to an organization (e.g., employer, employees, suppliers, customers, etc.) that possesses the ability or potential to influence the achievement of the organization's objectives, either directly or indirectly (1984). On the other hand, Donaldson and Preston (1995) provided a later version of the definition for stakeholder and it emphasizes on the keyword "interest", which is that any identified individual should have a legitimate interest towards the organization. On the other hand, Freeman also proposed that a stakeholder should be someone that plays a vital role in determining the success of an organization (2004). In short, past studies on business management have repeatedly shown that Stakeholder Theory is the appropriate theory in explaining the relationship between stakeholder involvement in business management for organizational success (Friedman & Miles, 2006; Freeman, 2017; Uribe, Ortiz-Marcos & Uruburu, 2018).

Interestingly, studies in the past have revealed that Stakeholder Theory has been extensively used in tourism research (Stewart & Draper, 2007; Năstase, Chaşovschi, Popescu & Scutariu, 2010; Kim, 2013; Federico, Magdalena & Cornelia, 2016; Pjetrotić, Rađenović & Tripković-Marković, 2016). In the hospitality and tourism context,

Stakeholder Theory has been defined in a slightly different way compared to the one applied to the business management context. Aas, Ladkin and Fletcher (2005) put forward that tourism stakeholders mean any individual or group that are involved, interested, or affected by the tourism activities. They are host community members, tourists, industry players and as well as government (Swarbrooke, 2001). Within the tourism literature, it is observed that Stakeholder Theory was applied in the study on sustainable tourism development (Byrd, 2007; Kim, 2013) and to highlight stakeholder's perspectives on the development of tourism destination competitiveness (Federico et al., 2016; Chin, Thian & Lo, 2017; Novais, 2017). According to past researches (e.g., Currie, Seaton & Wesley, 2009; Nicolaides, 2015), Stakeholder Theory was widely used as the fundamental theory in underpinning investigations on tourism development from both the demand and supply perception or perspective.

Steward and Draper (2007) stated that it is crucial to involve all the tourism stakeholders, especially in rural tourism development. This is because tourism stakeholders' knowledge and experience in tourism development tends to enhance the efficiency of tourism management. For instance, tourism is very much associated with individual preference, thus it is important to include different stakeholders' perspective in tourism development in order to ensure that the development of tourism destination is able to provide satisfactory experiences to most of the traveler groups. In addition, rural tourism development that incorporates the view from the host community or residents would gain the community's involvement and support for tourism development (Rani, 2013). One of the earlier tourism studies noted that taking the view of stakeholders could be an added advantage to reduce conflicts in tourism development (Yuksel, Bramwell & Yuksel, 1999). This is further supported by a later study by Byrd, Bosley and Dronberger (2009) which

stated that there is a need to incorporate various stakeholder groups for sustainable tourism development.

Sautter and Leisen (1999) highlighted that tourism planners have to be involved in diverse stakeholder groups in the tourism system and not only taking the view from a tourist's perspective (Fomica, 2000). However, some recent studies have revealed that it is important for tourism development that is aligned with the tourist's point of view because they are the sole representatives of the demand-side stakeholders (Dorcheh & Mohamed, 2013) and their perspectives could be value-added knowledge to enhance the efficiency and effectiveness of promoting the tourism destination (Semrad & Rivera, 2015). On top of that, it was posited in an earlier study that if a destination can compiled information on consumer preferences, this would lead to the development of tourism destination competitiveness (Dwyer & Kim, 2003). Thus, Stakeholder Theory was used as one of the fundamental theories to underpin this study in examining tourist's perspective on both the hard measures (i.e., destination appeal and tourism infrastructure) and soft measures (i.e., service quality and destination image) that contribute to the development of rural tourism destination competitiveness such as sustainable management, destination marketing efforts, as well as comparative and competitive advantage. The proposed predictors are deemed to be significant for the development of tourism destination competitiveness.

2.11.3 Social Exchange Theory (SET)

Social Exchange Theory highlights the relationship between an interaction or an exchange of resources between two parties (i.e., individuals or groups) [Ap, 1992] and in particular to assess and understand the behaviour of the individuals involved in the interactions (Cropanzano & Mitchell, 2005). The exchanges of resources between two

parties are often based on the principles of costs and benefits (McGehee & Andereck, 2004; Wang & Pfister, 2008). Social Exchange Theory's focus is on social relationships rather than economic exchange (Bock & Kim, 2002). Past studies have revealed the use of Social Exchange Theory to explain why and how people react to and support tourism development (Lee, 2013).

On the other hand, studies in the past have provided evidence that Social Exchange Theory is the fundamental theory to understand and explain knowledge sharing behaviour (Andolšek & Andolšek, 2011; Molose & Ezeuduji, 2015). It is important to note that knowledge sharing between tourism stakeholders is a form of social interaction and exchange of knowledge (Bock, Zmud, Kim & Lee, 2005). As described by Kim and Lee (2013), knowledge sharing is the process of mutually exchanging knowledge between individuals to jointly create new knowledge. In the context of rural tourism, the benefits from the social exchange are not on economic or monetary rewards, but it is more on relationship building (Cook, 2000) such that tourists share their knowledge or experience dealing with other rural tourism destinations with community members from the current one. This would serve as a platform to create mutually positive feelings with each other that could lead to favourable outcomes. Also, one of the emphasis of social exchange is trust-building between tourists and local community members. Once the trust is gained, local community members would be more willing to accept the knowledge shared by the tourist and in return, it will lead to support and involvement for tourism development (Holmes, 1981).

Knowledge sharing is considered as one of the cornerstones for one to build its competitive capabilities to compete with others in the current competitive environment (Szulanski, 1996; Nickerson & Zenger, 2004). Thus, in this study, Social Exchange Theory

is applied in the research framework by relating the relationship of knowledge sharing in strengthening the relationship between the hard measures and soft measures towards the development of rural tourism destination competitiveness. For instance, in rural tourism destinations, a supportive environment should be created to encourage informative interaction between tourists and the local community to share experiences rather than tourists giving negative feedback on the products or services provided to them. This is because the local community would expect to be respected by the visitors visiting their village and not someone to instruct them on how to improve or make changes on things. As mentioned before, once trust is gained through social interactions, community members would be more willing to accept and leverage on the knowledge shared by the tourists to generate competitive capabilities that will help to improve destination appeal, tourism infrastructure, service quality and destination image of the rural tourism destination to outperform rivals in the same industry.

2.12 Theoretical Framework

2.12.1 Gaps in the Literature

The present study examines the influences of destination appeal, tourism infrastructure, service quality and destination image on the development of rural tourism destination competitiveness such as sustainable management, destination marketing efforts, as well as comparative and competitive advantage in rural tourism destinations in Sarawak, Malaysia. Furthermore, knowledge sharing is adopted as the moderating variable to testify the moderating impacts among the proposed constructs.

Firstly, from the review of existing empirical research, the study on determinants that contribute to the development of tourism destination competitiveness mostly looks at the

environmental or natural constructs (Kozak & Rimmington, 1999; Mihalič, 2000; Yoon 2002; Fons, Fierro & Patino, 2011; Zhang & Lei, 2012; Manrai, Manrari & Friedeborn, 2018; Peng & Yuan, 2019; Suryawardani et al., 2020), infrastructure (Dwyer & Kim, 2003; Ejarque, 2005; Wilde & Cox, 2008; Crouch, 2010; Bimonte et al., 2015; Natalia et al., 2019; Mustafa et al., 2020), cultural heritage (Cecilia & Kylie, 2002; Reimer & Walter, 2013; Teixeira & Ferreira, 2019; Fernández et al., 2020) and trip experience (Rahmiati et al., 2020). Limited studies investigate the involvement of both the natural elements (e.g., destination appeals) and man-made elements (e.g., tourism infrastructure, service quality and destination image) as the fundamental contributive factors on the development of rural tourism destination competitiveness. In fact, there is no known study found investigating both the hard measures and soft measures in a single framework and tested in the rural tourism destination.

Secondly, based on the fundamental concepts of Competitiveness Theory, only the comparative and competitive advantages are highlighted in the study framework. It is evidenced by past research that for a tourism destination to achieve competitiveness, a series of strategies should be integrated, without only focusing on the comparative and competitive aspects (Ritchie & Crouch, 2000; Dwyer & Kim, 2003). In a similar vein, Matloka and Buhalis (2010) has also propounded that some additional variables like sustainable management, destination marketing and management should also be integrated into the study of destination competitiveness. It is believed that to achieve competitiveness, it is important to have a series of marketing strategies to promote the destination's comparative and competitive resources while at the same time, employing sustainable practices to ensure the sustainability of competitiveness over time. However, limited studies examine these mentioned aspects in the tourism context. Thus, this study does not only look at the

development of rural tourism destination competitiveness, but it is specifically examining the tri-dimensional constructs of destination competitiveness, namely sustainable management, destination marketing efforts, as well as comparative and competitive advantage.

Thirdly, knowledge sharing has been repeatedly recognized as an important source for tourism destinations to achieve a competitive advantage in the current competitive market (Jasimuddin, 2007; Zhang & Jasimuddin, 2008; Yang & Wu, 2008; Ghobadi & D'Ambra, 2011; Odunga et al., 2020). Mihalič (2013) has even propounded that there is a need to investigate how knowledge can play a role in improving environmental resources and subsequently lead to destination competitiveness. However, within the tourism literature, there is no known research found in investigating the moderating impact of knowledge sharing among destination appeals, tourism infrastructure, service quality and destination image on rural tourism destination competitiveness. Thus, this study is perhaps the first to adopt tourist's knowledge sharing as the moderating variable and to look at the impact on both the hard measures and soft measures of rural tourism destination towards the development of destination competitiveness such as sustainable management, destination marketing efforts, as well as comparative and competitive advantage.

To fully understand, explain and predict the development of rural tourism in a competitive way, it is essential to have a holistic investigation on how the proposed four elements (i.e., destination appeals, tourism infrastructure, service quality and destination image) affects the development of rural tourism destination competitiveness with knowledge sharing playing a role in the proposed research framework. It is propounded that on one hand, destination image is the priority factor to pull tourist attention and intention to visit a

destination and tourism infrastructure are the fundamental facilities that connect or move tourists from one place to another and to put up overnight stays. On the other hand, appealing destination resources and service quality are the two resources tourists will experience during their visit. However, to be competitive, tourist willingness to share their knowledge with the local community members could play a role in improving these resources and that will, in return, enhance rural tourism destination competitiveness. The knowledge shared by tourists is another way to capture tourist perspectives to better improve a tourism destination's products and services. Most importantly the knowledge shared could be in form of suggestions or comments that are more acceptable by the local communities or operators for future improvement plans.

In the next section, the theoretical framework is presented to indicate the relationships between these constructs and aids in the understanding of the research hypotheses that were developed.

2.12.2 Justification of the Theoretical Framework

Firstly, the direct relationships between destination appeal and destination competitiveness, namely, sustainable management, destination marketing efforts, as well as comparative and competitive advantage are measured. These are hypothesized in H1 to H3. Subsequently, the model examined the tourism infrastructure on destination competitiveness, namely, sustainable management, destination marketing efforts, as well as comparative and competitive advantage. These hypotheses are labelled in H4 to H6. Next, the direct relationships between service quality and destination image on destination competitiveness, namely, sustainable management, destination marketing efforts, as well as

comparative and competitive advantage are examined. These hypotheses are named H7 to H9 and H10 to H12 consecutively and respectively.

On the other hand, the moderating hypotheses were proposed and tested between the independent variables and dependent variables. Knowledge sharing is positively and significantly the moderating relationship between destination appeal and destination competitiveness (e.g., sustainable management, destination marketing efforts, as well as comparative and competitive advantage), as discussed in hypotheses H13 to H15. Subsequently, knowledge sharing also positively and significantly moderates the relationship between tourism infrastructure and destination competitiveness (e.g., sustainable management, destination marketing efforts, as well as comparative and competitive advantage). These hypotheses are labelled in H16 to H18. Moreover, the positive and significant moderating relationships between service quality and destination image on destination competitiveness (e.g., sustainable management, destination marketing efforts, as well as comparative and competitive advantage) are also being tested. These are hypothesized in H19 to H21 and H22 to H24, respectively. The next section presents the description of variables for the study and followed by the development of hypotheses.

2.12.3 Description of Variables

The framework, as shown in Figure 2.1, consists of two primary constructs, namely, independent variables and dependent variables. The independent variables consist of four constructs, namely destination appeals, tourism infrastructure, service quality and destination image, as discussed in section 2.6 to 2.9. On the other hand, the constructs that fall under the proposed dependent variables are sustainable management, destination marketing efforts, as well as comparative and competitive advantage and are discussed in

section 2.3. In addition, knowledge sharing is adopted in this study as the moderator variable to look at its impact in enhancing the relationship between the four proposed independent variables to the dependent variables and are discussed in section 2.10.

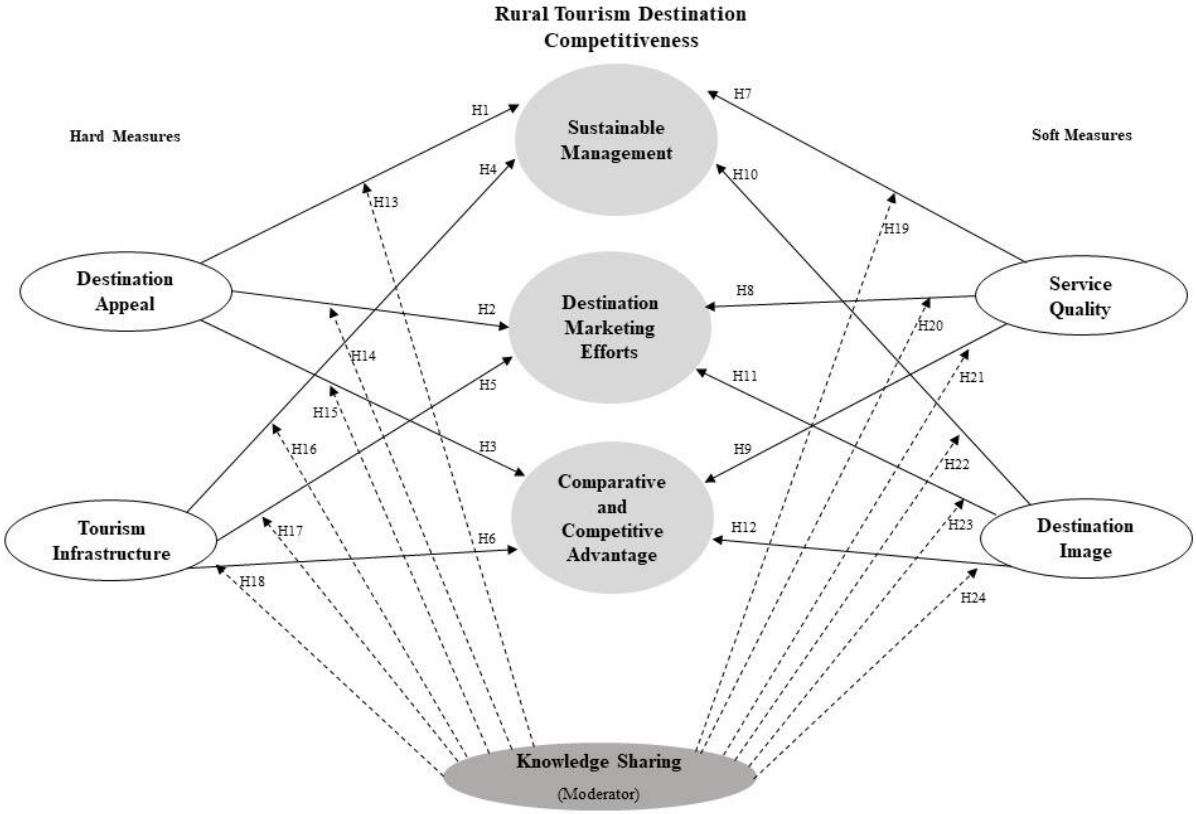


Figure 2.1: Conceptual Framework

2.13 Development of Hypotheses

2.13.1 Destination Appeal and Destination Competitiveness

2.13.1.1 Destination Appeal and Sustainable Management

Destination appeal has been recognized as an important factor for the development of tourism destination competitiveness (Abolfazl, 2012; Ndivo et al., 2012; Hanafiah & Zulkifly, 2019; Lo, Chin & Law, 2019). On the other hand, Sedmak and Kociper (2013) emphasized that the development of tourism destination should not ignore on the aspect of

sustainability because unstructured and unplanned development tends to destroy the natural resources of the tourism destination that would lead to unsuccessful development of the destination (Gartner, 2005). Buhalis (2000) highlighted that the competitiveness of the tourism destination could be enhanced through strategic and sustainable management strategies. The underlying truth is that the components of destination appeal crucially enhance tourism destination competitiveness (Dwyer & Kim, 2003; Ritchie & Crouch, 2005; Wilde & Cox, 2008; Chambers, 2010; Fernández et al., 2020); hence the quality of destination appeal is seen to influence the sustainable management of tourism destination that would further lead to the development of tourism destination competency levels (Karalkova, 2016). Proper management and conservation of resources on destination appeal is crucial for the development of destination competitiveness in a sustainable way. The above discussion led the researcher to formulate the following hypothesis:

H1: Destination appeal is positively and significantly related to sustainable management.

2.13.1.2 Destination Appeal and Destination Marketing Efforts

Within the tourism literature, it is observed that tourism destination resources do play a vital role in developing the competitiveness of the tourism destination (Mostowfi, 2000; Mahmoudi et al., 2011), particularly if the resources are valuable, rare, irreplaceable and inimitable would be an added competitive advantage (Chen et al., 2016). The fundamental attractiveness of a tourism destination is made up of various tourism destination appeals, namely natural resources, cultural heritage and social appeals (Gartner, 2005; Leask, 2010; Ndivo et al., 2012). It also functions as a pulling factor to attract tourists' visit (Dwyer & Kim, 2003; Lai & Vinh, 2013). As stated by Crouch and Ritchie (1990), an appropriate

marketing and management strategy could lead to the enhancement of tourism destination competitiveness (Yoon, Gursoy & Chen, 2001; Wilde & Cox, 2008). It is important to note that various studies in the past have identified destination appeal resources (e.g., natural resources, heritage, cultural, festivals and range of available activities) as the crucial attributes for destination promotion (Murphy et al., 2000; Lai & Vinh, 2013) and significant factors of tourism destination marketing and competitiveness (Dwyer & Kim, 2003; Ritchie & Crouch, 2003; Sheresheva, Polukhina & Oborin, 2020). On the other hand, past studies have evidenced that the deployment of marketing initiatives and promotional strategies could enhance the perceived appeal of a tourism destination (Wilde & Cox 2008; Ndivo et al., 2012). Based on the above discussion, the hypothesis was developed as follows:

H2: Destination appeal is positively and significantly related to destination marketing efforts.

2.13.1.3 Destination Appeal to Comparative and Competitive Advantage

Previous research has highlighted both comparative and competitive advantage as crucial contributive factors for tourism destination competitiveness (Dwyer & Kim, 2003; Zainuddin, Radzi & Zahari, 2015; Nyaboro et al., 2020). Each of these factors is conceptualized in different ways. On the one hand, the concept of comparative advantage mainly looks at the availability of natural, cultural, flora and fauna at a tourism destination (Bobirca & Cristureanu, 2008). In contrast, the concept of competitive advantage specifically studies man-made resources such as transportation, accommodation and tourist facilities (Dwyer & Kim, 2003; Mazurek, 2014). Past studies on tourism have repeatedly evidenced that the components of destination appeal are crucial in determining tourism destination competitiveness, such as comparative and competitive advantage (Dugulan,

Balaure, Popescu & Veghes, 2010; Taylor et al., 2014). Accordingly, the cultural heritage components were found to play a pivotal role in tourism destination competitiveness (Alberti & Giusti, 2012; Oye et al., 2013). Natural resources were seen to be a critical attribute that attracted visitors and acted as the basis of destination competitiveness (Crouch & Ritchie, 1999; Lane, 2009). Aside from that, the availability of tourist activities enhances destination attractiveness and further leads to an increase in destination competitiveness (Ayikoru, 2015). In addition to that, it was found that the elements of destination appeal significantly contribute to the destination's comparative advantage (Mohammadi, Rast & Khalifah, 2010; Patti, 2019). Given the current research findings, the researcher hypothesized that:

H3: Destination appeal is positively and significantly related to comparative and competitive advantage.

2.13.2 Tourism Infrastructure and Destination Competitiveness

2.13.2.1 Tourism Infrastructure and Sustainable Management

Given the importance of development for rural tourism destination competitiveness, the concept of sustainability should also not be neglected. Researchers in the past (e.g., Hassan, 2000; Enright & Newton, 2005) have elucidated that sustainable management is one of the important constructs for destination competitiveness, particularly in the study of tourism destination. The term sustainable management is defined as the development of tourism destinations that meet the tourists' current needs while preserving the resources for the benefits of future generations (Harrison et al., 2003; Parashar et al., 2014). Some studies have proven that a tourism destination that possesses some components of tourism infrastructure (e.g., transportation infrastructure, accommodation amenities, tourists' facilities) allows it to compete with other tourism destinations (Tampakis et al., 2012;

Abdullah et al., 2015; Jovanović & Ilić, 2016). Similarly, Jiang, Li and Xu (2010) found that transportation infrastructure significantly contributes to the successful development of tourism destinations. One of the main reasons to highlight the relationship between tourism infrastructure and sustainable management is because good tourism infrastructure would be an added advantage for the implementation of sustainable management practices and this is seen to reduce the adverse impacts caused by tourism development (Dolnicar & Leisch, 2008; Castellani & Sala, 2010; Escoto, Boza & Madrigal, 2019). Hence, it was hypothesized:

H4: Tourism infrastructure is positively and significantly related to sustainable management.

2.13.2.2 Tourism Infrastructure and Destination Marketing Efforts

Studies in the past have pointed out that the efficiency of tourism infrastructure plays a pivotal role in attracting tourists to the destination (Mazilu & Stancioiu, 2009; Moric, 2013; Seetanah, Sannassee, Teeroovengadum & Nunkoo, 2018), particularly for rural tourism destinations (Goffi, 2013). As highlighted in the study by Yuju-Wang (2007), it was reported that marketing plays a very significant role in getting better destination patronage and increasing visitors' consumption. It was posited that destination marketing efforts play a pivotal role in developing the most appropriate marketing strategy based on the identified needs of the tourists and enhancing the overall travel experience (Sharma, 2013). Realizing the importance of tourism infrastructure in contributing to the tourists' satisfaction (Hosseini, Bostani & Anvari, 2015) and tourism destinations' sustainability and competitiveness (Tardivo, Scilla & Viassone, 2014), thus it is propounded that good tourism infrastructure would function as a key promoting tool in marketing the rural tourism destinations (Karalkova, 2016). In addition, it was found that tourism marketing does

contribute to the competitiveness of tourism destination, especially in the current competitive market (Hannam, 2004; Ajake, 2015). Hence, the above discussion led the researcher to formulate the following hypothesis:

H5: Tourism infrastructure is positively and significantly related to destination marketing efforts.

2.13.2.3 Tourism Infrastructure to Comparative and Competitive Advantage

The tourism infrastructure of a tourism destination is envisaged as the predominant factor for the success of its tourism sector (Naudee & Saayman, 2004; Khadaroo & Seetanah, 2007; Jiang et al., 2010). Past studies have postulated that this is particularly true in the case of rural tourism destinations, as most of the tourists are concerned about the quality of accessibility and transportation infrastructure that serves as the central infrastructure in bringing the tourists from city centre to the very remote destination (Heraty, 1989; Crouch & Ritchie, 2000; Goffi, 2013; Hsueh & Yeh, 2014; Seyidov & Adomaitienė, 2016). It is believed that an excellent quality of tourism infrastructure would enhance the competitiveness of the tourism destination, which includes the comparative and competitive advantage of the destination (Dwyer & Kim, 2003; Wilde & Cox, 2008; Crouch, 2010; Navickas & Malakauskaite, 2009; Bimonte et al., 2015; Nazmfar, Eshghei, Alavi & Pourmoradian, 2019). Moreover, accommodation quality was revealed to be one of the significant components of tourism infrastructure to enhance the overall competitiveness of the tourism destination (Tardivo et al., 2014; Hosseini et al., 2015; Nunes et al., 2018), as good accommodation quality would eventually enhance the tourists' overall visit experience (Nam, Ekinchi & Whyatt, 2011; Ryu, Lee & Kim, 2012) as well as prolong the lengths of

stays by tourists (Downward & Lumsdon, 2000; Muñoz, 2007). Hence, it was hypothesized that:

H6: Tourism infrastructure is positively and significantly related to comparative and competitive advantage.

2.13.3 Service Quality and Destination Competitiveness

2.13.3.1 Service Quality and Sustainable Management

Davidson (2016) highlighted good service quality delivered to visitors plays a crucial role and serves as a fundamental backbone of the tourism industry because it determines tourists' satisfaction and revisit intention (Žabkar et al., 2010; El-refae, 2012; Pakurár et al., 2019). Also, it is important to note that the quality of services experienced by tourists from a tourism destination tends to determine their level of happiness (Al-Ababneh, 2013). The principle of sustainable management is aligned with the sustainable use of local resources for environmental sustainability (Djekic & Vucic, 2007; Petroman et al., 2010; Howes et al., 2017). Thus, it is propounded that if tourists are satisfied with the service quality offered at the destination, they will be happy to contribute to the conservation and preservation activities for the sustainability of the rural tourism destination. Both the service quality and sustainable management of rural tourism destination are interrelated, as a better service quality provided to tourists tend to enhance tourists' participation in sustainable practices in the tourism destination. As stated by Belz and Peattie (2012), offerings of good service quality that increases customer satisfaction will contribute to sustainable practices (Bothe, Schaffner, Jüttner & Schlange, 2016). Hence, it was hypothesized that:

H7: Service quality is positively and significantly related to sustainable management.

2.13.3.2 Service Quality and Destination Marketing Efforts

Fabricius (2001) opined that "experience" is the product sold by tourism destinations rather than tangible or physical products and services (Schlesinger, Cervera-Taulet & Perez-Cabanero, 2020). Fuchs and Weiermair (2003) have highlighted that the effectiveness of tourism facilities and services would provide memorable destination experiences for tourists and this would further lead to the enhancement of tourist satisfaction (Bagri & Kala, 2015; Davidson, 2016). Past studies have repeatedly found that tourist satisfaction has a direct and significant impact on successful destination marketing (Žabkar et al., 2010; Rajesh, 2013; Kanwel et al., 2019), however as stated by Paunović (2014), although tourist satisfaction is one of the marketing tools that would enhance destination competitiveness, it is also important to look at other marketing tools such as destination image, destination loyalty and service quality. Some recent studies have provided evidence that service quality possesses a significant relationship with destination marketing (Akroush, Jraisat, Kurdieh, Al-Faouri & Qatu, 2016; Aunalal, Kadir, Taba & Hamid, 2017) other than its primary function as an essential strategy to enhance customer satisfaction (Osman & Sentosa, 2013). Based on this discussion of the existing research, the following hypothesis was formulated:

H8: Service quality is positively and significantly related to destination marketing efforts.

2.13.3.3 Service Quality to Comparative and Competitive Advantage

Many have debated on the issues of quality in the tourism industry. Some authors investigated the concept of tourism supply quality (Dmitrič & Žabkar, 2010), whereas most

of the other researchers examined the concept of service quality (Moreira & Delgado, 2008; Davidson, 2016; Daskalaki, Voutsa, Christina & Hatzithomas, 2020) on tourism destination competitiveness (Devesa et al., 2010; Cass, 2014; Purnomo et al., 2020). In addition, past studies on tourism research have repeatedly evidenced that service quality plays an important role in enhancing tourism destination's competitive advantage (Moreira & Dias, 2010; Skálová & Peruthová, 2016; Wafik, 2017). Also, a study by Sarwar (2013) highlighted the relationship between destination competitiveness and service quality from the perspective of medical tourists in the context of medical tourism in Malaysia. In a similar vein, Ilić, Đeri, Stamenković and Milićević (2016) have made the point that the provision of high service quality in the travel agencies are pivotal in the current competitive tourism industry. The above discussion led the researcher to formulate the following hypothesis:

H9: Service quality is positively and significantly related to comparative and competitive advantage.

2.13.4 Destination Image and Destination Competitiveness

2.13.4.1 Destination Image and Sustainable Management

Past studies have envisaged that the development of rural tourism destinations should apply the concept of sustainable management, which is the development of the tourism industry that satisfies tourists' needs while conserving the tourism resources for the future use (Muhanna, 2006; Lu & Nepal, 2009). The idea of sustainable management is to eliminate or reduce all the negative impacts of rural tourism development as tourism resources are the core competency for the rural tourism industry (Vitasurya, 2016). As stated by Chon (1990), the objective for most of the marketing strategies is to enhance the positive images of the products or services in the minds of visitors (Pike, 2004). The positive image of a tourism

destination is portrayed to be significant for tourism destinations' sustainable management because a good destination image would affect tourists' feelings and attitudes towards the destination (Almeida-Santana & Moreno-Gil, 2019). It is propounded that tourists visit a tourism destination that has been positively portrayed as environmentally conscious and this would influence their behaviour when they are in the said tourism destination (Tasci & Gartner, 2007). Thus, the proposed hypothesis was:

H10: Destination image is positively and significantly related to sustainable management.

2.13.4.2 Destination Image and Destination Marketing Efforts

The image of a tourism destination does play a pivotal role in bringing various benefits to the tourism destination ranging from enhancing tourists' satisfaction (Vengesayi, 2003), influencing tourists in making decisions for visits (Som, Ibrahim & Sayaka, 2015; Aunalal et al., 2017), encouraging the future revisit intention for existing visitors (Jenkins, 1999) and as well as the key differentiation for destination competitiveness (Mihalic, 2000; Anh, 2012). Past studies have shown that destination image plays a significant role in tourism marketing (Govers, 2005; Dolnicar & Grun, 2013). It was posited that a destination that was positioned in a good image among visitors' minds tends to lead to better success of destination marketing (Echtner & Ritchie, 2003; Ragavan, Subramonian & Sharif, 2014; Diejomaoh, Li & Liu, 2020). In a similar vein, many researchers have also revealed destination image functions as one of the key aspects for successful destination marketing (Roodurmun & Juwaheer, 2010; Almeida, Miranda & Elias-Almeida, 2012; Agapito, Valle & Mendes, 2014; Piramanayagam, Rathore & Seal, 2020). Hence, it was hypothesized that:

H11: Destination image is positively and significantly related to destination marketing efforts.

2.13.4.3 Destination Image to Comparative and Competitive Advantage

In the current competitive tourism industry, it was posited that it is necessary to have studies to identify the factors that could aid in enhancing the competitiveness of tourism destinations (Hassan, 2000; Enright & Newton, 2004; Law & Lo, 2016). Studies in the past have revealed that destination image and destination competitiveness have a highly correlated positive relationship (Wang, Yang, Cheng, Yang & Li, 2010; Chew & Jahari, 2014) as a better destination image tends to enhance tourism destination competitiveness (Maliva & Jani, 2017). As stated by Govers and Go (2003), a good destination image tends to improve the competitiveness of the tourism destination as it functions as a pulling factor that motivate tourists or influences tourist in making the decision to visit (Som et al., 2015; Stankova & Vasenska, 2015; Perles-Ribes et al., 2019). In addition, it is crucial to note that a strong destination image often provides a competitive advantage to the tourism destination in comparison to the other competitors in the same marketplace (Roy & Hoque, 2015; Chetthamrongchai, 2017). Based on the discussion above, the following hypothesis was proposed:

H12: Destination image is positively and significantly related to comparative and competitive advantage.

2.13.5 Knowledge Sharing Moderates Destination Appeal and Destination Competitiveness

2.13.5.1 Knowledge Sharing Moderates Destination Appeal and Sustainable Management

Within the tourism industry, it is observed that there are increasing studies finding that knowledge sharing is an important source of response to change (Molose & Ezeuduji, 2015) and for tourism firms to gain a competitive advantage in the current competitive marketplace (Jasimuddin, 2007; Zhang & Jasimuddin, 2008; Yang & Wu, 2008; Rao et al., 2018). Researches in the past (e.g., Kresis & Prebzac, 2011; Matthew et al., 2011; Karalkova, 2016) has elucidated that tourism destination appeal refers to the cultural, natural, historical and tourists-related activities at the tourism destination. Accordingly, the concept of sustainable management in tourism is much related to the development of the tourism industry to meet tourists' needs while protecting the resources for sustainability over time (Goodwin, 2008). In fact, within the area of knowledge management studies, a few studies have highlighted that the sharing of knowledge is seen to be an important move to ensure sustainable management of competitive advantage (Howell & Annansingh, 2013; Islam, Jasimuddin & Hasan, 2015). Thus, it is propounded that tourists' willingness to share information (Money & Turner, 2004), experiences or knowledge gained from other tourism destinations would eventually help to create communities' knowledge at the destination level (Baggio & Cooper, 2010) and further enhance the efficiency of sustainable management on the resources of destination appeal. The knowledge shared could be on how other tourism destinations preserve destination resources for sustainable management of the destinations. Hence, the proposed hypothesis was:

H13: Knowledge sharing is positively moderating the relationship between destination appeal and sustainable management; such that when knowledge sharing is high the relationship between destination appeal and sustainable management will be stronger.

2.13.5.2 Knowledge Sharing Moderates Destination Appeal and Destination Marketing Efforts

Past studies have repeatedly evidenced that the natural resources and cultural aspects of destination appeal at a tourism destination plays a crucial role in the promotion and marketing efforts of the destination (Crouch & Ritchie, 1999; Murphy et al., 2000; Lai & Vinh, 2013). In today's knowledge-driven economy, innovativeness has proven to be one of the key cornerstones for tourism firms or destinations to stay competitive through the sharing of knowledge (Hu et al., 2009; Ghobadi & D'Ambra, 2011; Odunga et al., 2020). In a simplified term, knowledge sharing is the exchange of knowledge between one individual with another (Charband & Navimipour, 2016) to produce new knowledge for innovation (Baggio & Cooper, 2008). As mentioned in the study by Munar and Jacobsen (2014), tourists tend to share their experiences dealing with tourism destinations through social media and these experiences shared seem to be the vital resources or tourism knowledge for the improvement of tourism destinations to stay competitive. Therefore, it is crucial to note that the tourist is an individual who travels and visits plenty of other tourism destinations of diverse backgrounds (Buhalis, 2000). The willingness of tourists to share their experiences or knowledge gained from other tourism destinations in dealing with the marketing aspects of the tourism destination would strengthen the relationship between rural tourism destination appeal and the tourism destination marketing efforts. For instance, tourists could share their knowledge on how other rural tourism destinations are so successful in marketing the destination with the available existing destination resources or appealing resources. The above discussion led the researcher to formulate the following hypothesis:

H14: Knowledge sharing is positively moderating the relationship between destination appeal and destination marketing efforts; such that when knowledge sharing is high the relationship between destination appeal and destination marketing efforts will be stronger.

2.13.5.3 Knowledge Sharing Moderates Destination Appeal as well as Comparative and Competitive Advantage

As documented by past studies, knowledge is the mixture of experiences, values and contextual information from an individual (Davenport & Prusak, 1998; Puccinelli, 1998). Mihalič (2013) mentioned in his study that there is a need to examine how knowledge could play a role in enhancing the environmental resources for destination competitiveness. Past studies have evidenced that innovative tourism services and experiences are pertinent contributive factors to tourist destination competitive advantage (Ernie, 2003; Jensen, 2003; Vengesayi, 2003). Various studies have provided evidence that the sharing of knowledge between two parties could generate new competencies (Yang & Wan, 2004; Paroutis & Saleh, 2009). Knowledge sharing is recognized as a crucial element in gaining destinations' competitive advantage if it is effectively shared (Bartol, Liu, Zhang & Wu, 2009; Ghobadi & D'Ambra, 2011; Rao et al., 2018). The destination resources of a tourism destination are said to be the appealing factors to enhance the comparative and competitive advantage of the destination in comparison to other tourism destinations (Go & Govers, 2000; Ritchie & Crouch, 2003), thus it is propounded that tourists sharing knowledge with the local community members could possibly enhance the use of destination appeal for tourism destination's comparative and competitive advantage. Hence, it was hypothesized:

H15: Knowledge sharing is positively moderating the relationship between destination appeal as well as comparative and competitive advantage; such that when knowledge sharing is high the relationship between destination appeal as well as comparative and competitive advantage will be stronger.

2.13.6 Knowledge Sharing Moderates Tourism Infrastructure and Destination Competitiveness

2.13.6.1 Knowledge Sharing Moderates Tourism Infrastructure and Sustainable Management

Past studies have envisaged that the pre-requisite for a tourism destination to outperform other competitors in the same industry is to equip itself with good quality tourist infrastructure (Tampakis et al., 2012; Abdullah et al., 2015; Suryawardani et al., 2020). On the other hand, sustainable management practices focus on the preservation, conservation and protection of the resources while meeting the needs of tourists (Goodwin, 2008). It is crucial to note that good and comprehensive tourism infrastructure at a rural tourism destination is needed to support the sustainable management activities of the destination. One obvious example is that unplanned tourism development tends to bring adverse impacts to the location such as vandalism and generating of waste (Gildea & Hanrahan, 2010; Ertuna & Kirbas, 2012). Thus, if the tourism destination is equipped with a comprehensive infrastructure that satisfies tourists such as rubbish bins at every corner will contribute to the sustainable management of the destination. On top of that, knowledge sharing has been recognized as an important element for the sustainability of businesses (Drucker, 2000). Thus, it is crucial to look at the impact when the tourists who are people filled with travel experiences (Kozak, 1999) share their knowledge with the local community members on the development of tourism infrastructure and how this could contribute to the sustainable

management of the rural tourism destination. Based on the above discussion, the hypothesis was developed as follows:

H16: Knowledge sharing is positively moderating the relationship between tourism infrastructure and sustainable management; such that when knowledge sharing is high the relationship between tourism infrastructure and sustainable management will be stronger.

2.13.6.2 Knowledge Sharing Moderates Tourism Infrastructure and Destination Marketing Efforts

Within the tourism studies, the quality of tourism infrastructure has been repeatedly seen as a contributive factor to the promotion and marketing of the tourism destination (Hannam, 2004; Yuju-Wang, 2007; Karalkova, 2016; Virkar & Mallya, 2018). Before visiting a rural tourism destination, tourists will most likely search online and check on the various transportation methods available and accommodation facilities provided at the tourist destination. Hence, the quality of tourism infrastructure could serve as a value-added factor to promote the marketing initiative for the tourism destination (Kanwal et al., 2020). However, due to the increasing competition in the hospitality industry (King, 1995) and tourists who are more demanding (Hu et al., 2009), a more comprehensive tourism infrastructure should be provided that meets the needs and wants of tourists. Tourists, who are travellers who could have potentially visited more than one rural tourism destination, would have gained some useful experiences from other tourism destinations, especially in terms of the infrastructure provided. Both tourism infrastructure and destination marketing efforts are seen to be potential factors to enhance the competitiveness of tourism destination (Navickas & Malakauskaite, 2009; Ye, 2012; Bimonte et al., 2015). Therefore, it is propounded that the knowledge shared with local community members potentially enhance

community's knowledge on developing and providing better infrastructure to meet with the tourists' needs while contributing to the enhancement of destination marketing efforts. The proposed hypothesis was:

H17: Knowledge sharing is positively moderating the relationship between tourism infrastructure and destination marketing efforts; such that when knowledge sharing is high the relationship between tourism infrastructure and destination marketing efforts will be stronger.

2.13.6.3 Knowledge Sharing Moderates Tourism Infrastructure as well as Comparative and Competitive Advantage

Tourism infrastructure of a tourism destination plays a crucial role in contributing to the successful development of the destination (Abdullah et al., 2015; Javanović & Ilić, 2016) as the quality of the tourism infrastructure influences tourist travel decision (Zaei Mansour & Zaei Mahin, 2013) and as well as contributes to the competitiveness of the destination (Prideaux, 2000; Hankinson, 2004). Liao (2003) highlighted that knowledge is an important resource for rural areas, as the availability of knowledge on preserving heritage resources, creating core competences and problem-solving creates a competitive advantage for the destinations (Shaw & Williams, 2009). It is believed that tourists play a pivotal role in the sharing of knowledge with the local community members because they are the ones who are more knowledgeable and experienced when dealing with transportation, booking and staying at different tourism destinations (Kozak, 1999). According to past research (e.g., Kamasak & Bulutlar, 2010; Ghobadi & D'Ambra, 2011), innovation plays a crucial role for the development of competitive advantage; however, without knowledge sharing, the key to innovative development of tourism destination cannot be completely identified (Idrees, 2011; Zaei Mansour & Zaei Mahin, 2014). Therefore, it is propounded that tourists sharing

knowledge with the local community members leads to the better development or provision of tourism infrastructure and tends to enhance its relationship with rural tourism destination competitiveness, namely comparative and competitive advantage. Thus, the proposed hypothesis was:

H18: Knowledge sharing is positively moderating the relationship between tourism infrastructure as well a comparative and competitive advantage; such that when knowledge sharing is high the relationship between tourism infrastructure as well as comparative and competitive advantage will be stronger.

2.13.7 Knowledge Sharing Moderates Service Quality and Destination Competitiveness

2.13.7.1 Knowledge Sharing Moderates Service Quality and Sustainable Management

Studies in the past have posited that there is an indirect relation between service quality and sustainable management of tourism destination (Belz & Peattie, 2012). Various studies have in fact provided evidence that tourists who are satisfied with the service quality provided tend to lead to a number of positive impacts to the tourism destination or businesses (Žabkar et al., 2010; Han & Radder, 2011; El-refae, 2012; Ismail et al., 2013). This is because customers' perceptions towards the quality of services received are higher than expected (Suneeta & Koranne, 2014; Ullah et al., 2016). On the other hand, several authors (e.g., Gunn, 1972; Mayo & Jarvis, 1981) have highlighted in their studies that it is crucial to investigate tourist perception of a destination because knowledge of this would aid in increasing tourist visitations by improving on the unsatisfactory factors (Gnanapala, 2015). Thus, tourists' knowledge sharing would serve as an added advantage to the tourism destination because the knowledge shared with the community members would play a

crucial role in innovation for a better quality of service (Ţiţu, Răulea & Ţiţu, 2016) and sustainable managing of the tourism destination. Moreover, tourists would have a better perception of the tourism destination as their opinions are accepted by the local community members and they are contributing to the development of the tourism destination. Hence, the above discussion led the researcher to formulate the following hypothesis:

H19: Knowledge sharing is positively moderating the relationship between service quality and sustainable management; such that when knowledge sharing is high the relationship between service quality and sustainable management will be stronger.

2.13.7.2 Knowledge Sharing Moderates Service Quality and Destination Marketing Efforts

The existence of the relationship between service quality and destination marketing has been revealed and confirmed in past studies (Akroush, et al., 2016; Aunalal, et al., 2017). One recent study found that it is important for one to try to understand tourist's expectations to provide a better quality of services in the context of the hotel industry (Ţiţu et al., 2016). Thus, it is propounded that tourists' knowledge sharing with the local community members does play a significant role in enhancing the quality of services because the knowledge shared could be the experiences that tourists gained from other tourism destinations. This, in return, is converted into their perceptions as to what the indicators of good service quality should be. In addition to that, good service quality could enhance the effectiveness of tourism destination marketing efforts, if the destination itself managed to capture the knowledge shared by tourists to strengthen the quality of services provided. In the rural tourism context, rural marketing has been defined by Karalkova (2016) as a series of activities that promotes customers to purchase goods or services. Thus, service quality could be one of the potential

factors that enhances the effectiveness of destination marketing efforts in influencing tourists when deciding to visit. Therefore, the proposed hypothesis was:

H20: Knowledge sharing is positively moderating the relationship between service quality and destination marketing efforts; such that when knowledge sharing is high the relationship between service quality and destination marketing efforts will be stronger.

2.13.7.3 Knowledge Sharing Moderates Service Quality as well as Comparative and Competitive Advantage

Within the tourism literature, it is noted that service quality had been repeatedly investigated and found to be a crucial component for the success of tourism industry (Kabir & Carlsson, 2010; El-refae, 2012; Ismail et al., 2013; Astari et al., 2020). It is believed that good service quality provided to the visitors tends to increase tourists' satisfaction, leading to free marketing such as word-of-mouth, subsequently enhancing the competitiveness of the tourism destination (Devesa et al., 2010). Past studies have propounded that quality has become the key indicator for destination competitiveness (Küçükaltan & Pirnar, 2016), especially to the travel and hospitality industry (Tîtu et al., 2016). Moreover, it was posited that both service quality dimensions and knowledge sharing are interrelated (Tan, Wong, Lam, Ooi & Ng, 2010). For example, better service quality tends to enhance knowledge sharing activities in the context of private universities in Malaysia. Thus, it is proposed that tourists' sharing of knowledge about tourism tends to improve the relationship between service quality and rural tourism destinations' comparative and competitive advantage. Hence, the proposed hypothesis was:

H21: Knowledge sharing is positively moderating the relationship between service quality as well as comparative and competitive advantage; such that when knowledge sharing is high the relationship between service quality as well as comparative and competitive advantage will be stronger.

2.13.8 Knowledge Sharing Moderates Destination Image and Destination Competitiveness

2.13.8.1 Knowledge Sharing Moderates Destination Image and Sustainable Management

As stated by Jensen (2003) and proven by a later study (Bertella, 2012), knowledge plays a pivotal role in contributing to the competitiveness of a hospitality organization (Odunga et al., 2020). Past studies have also revealed that knowledge sharing has been recognized as a competitive tool to enhance tourism destination competency (Baggio & Cooper 2008; Šimková, 2009; Liu & Cho, 2011). Authors Parashar et al. (2014) highlighted that both sustainable tourism and rural tourism possess a similar context, which is the emphasis on the sustainable preservation of local tourism resources to meet the needs of future generations. However, a few studies in the past have posited that most of the time, destinations fail to implement sustainable tourism due to a lack of understanding and knowledge on sustainable management (Rainford, 2007; N'Drower, 2014). Accordingly, it is a must to examine tourist's support for sustainable management in the tourism development. Thus, tourist's sharing of knowledge with the local community members could enhance their knowledge in developing rural tourism destination image and sustainable management strategies for destination competitiveness. The above discussion led the researcher to formulate the following hypothesis:

H22: Knowledge sharing is positively moderating the relationship between destination image and sustainable management; such that when knowledge sharing is high the relationship between destination image and sustainable management will be stronger.

2.13.8.2 Knowledge Sharing Moderates Destination Image and Destination Marketing Efforts

Past research (e.g., Govers, 2005; Dolnicar & Grun, 2013) elucidated that tourism destination image is an important factor for tourism marketing, as a better destination image could enhance the effectiveness of destination marketing efforts (Ragavan et al., 2014). As stated by Pinto and Kastenholz (2011), destination marketing enhances tourism destinations' image. A tourism destination that is projected as having a good image to visitors could also function as a push factor to boost the promotion and marketing activities of the destination. It is propounded that when tourists share their knowledge with the local community members about a more efficient way to develop and shape the image of a tourism destination in visitors' minds, this could strengthen the relationship between destination image and destination marketing efforts. It is important to note that tourists are travellers from other destinations and they are deemed to be more suitable to give feedback or comments for improvement because tourists are more knowledgeable (Kozak, 1999; Reisinger, 2009; Dube, Mearns, Mini & Chapungu, 2018) and have experienced different tourism activities, especially for frequent travellers. Hence, it was hypothesized that:

H23: Knowledge sharing is positively moderating the relationship between destination image and destination marketing efforts; such that when

knowledge sharing is high the relationship between destination image and destination marketing efforts will be stronger.

2.13.8.3 Knowledge Sharing Moderates Destination Image as well as Comparative and Competitive Advantage

Studies in the past pointed out that destination image of a tourism destination significantly influenced the development of tourism destination competitiveness (Chew & Jahari, 2014; Roy & Hoque, 2015). This is further supported by the findings of Chetthamrongchai (2017), who stated that a strong destination image tends to enhance the tourism destination's competitive advantage and outperform other competitors in a similar market. On the other hand, the relationship between knowledge sharing and destination image was confirmed in the study by Wu, Chen and Lu (2008). They found that it is important to create a platform for visitors to share their knowledge about a tourism destination as this would lead to the development of a more positive destination image. Tourists' perceptions toward a tourism destination is seen as an important factor in influence tourists' consumption behaviour (Crompton, 1979; Ahmed et al., 2006). Thus, it is believed that when tourists share their knowledge on tourism with local community members, this will strengthen the development of tourism destination image and subsequently lead to the enhancement of destination competitiveness, both comparative and competitive advantage. It was documented by past studies that competitiveness is formed when tourists' knowledge towards a tourism destination image is captured, it can be used for the implementation of effective strategies for better development (Vitouladiti, 2014). The proposed hypothesis was:

H24: Knowledge sharing is positively moderating the relationship between destination image as well as comparative and competitive advantage; such

that when knowledge sharing is high the relationship between destination image as well as comparative and competitive advantage will be stronger.

2.14 Summary

In sum, this chapter discussed the independent, dependent variables and as well as the moderator variable used in this study. Overall, the four independent variables discussed included destination appeals, tourism infrastructure, service quality and destination image. On the other hand, the primary dependent variable was destination competitiveness; specifically, the components that fall under destination competitiveness such as sustainable management, destination marketing efforts, as well as comparative and competitive advantage were further discussed. Additional discussions covered the moderator variable which was knowledge sharing. It also described the underlying theories, namely, Competitiveness Theory, Stakeholder Theory and Social Exchange Theory used to underpin the proposed research framework. The gaps in the literature, theoretical framework and the development of hypotheses were also presented in this chapter. The next chapter will highlight the research methods and procedures used in this study.

CHAPTER 3

METHODOLOGY

3.1 Introduction

This chapter discusses the methods and procedures employed in the present study, which includes the research site, research design, sample, procedures, research questionnaire and measurements and the pilot study. In addition, this chapter also explains the statistical analysis of the data, such as descriptive statistics, factor analysis, reliability analysis and factor independence analysis. Finally, the justifications for all the steps taken in the study are made known.

3.2 Research Sites

This study took place at a few rural tourism destinations located in the state of Sarawak, Malaysia. Sarawak is one of the 13 states in Malaysia and it is one of the states that is popular for its abundant cultural and natural resources (Er & Simon, 2015). A recent post reviewed that Sarawak has become an exciting tourism destination in the region due to its unique natural, cultural and adventurous rural tourism products (Borneo Post, 2016; Zahari, Hanafiah, Ahmad & Zain, 2017). Also, rural tourism in Sarawak is recognized as a crucial income generation activity for the local community residing at remote areas (Chin, Lo, Songan & Nair, 2014). The recent total income generated from the homestay programmes in Sarawak recorded an increase from RM4,324,568.81 in 2018 to RM4,483,226.54 in 2019 (Ministry of Tourism, Arts and Culture Malaysia, 2019). Realising the potential of the rural tourism industry in Sarawak, it is therefore crucial to undertake the proposed research framework for the benefit of rural tourism destinations in Sarawak. On the one hand, if the study succeeds, it could help to enhance the performance and

competitiveness of rural tourism destinations in Sarawak, which can then be beneficial to other rural tourism destinations in Malaysia as a whole.

To collect tourists' data at rural tourism destination, the researcher needed to first identify which sites received a more positive number of tourists over the years. Therefore, one of the criteria for study sites' selection is the study site must be a registered homestay with the Ministry of Tourism, Arts and Culture Malaysia (MOTAC). Figure 3.1 shows the total number of rural tourism destinations with registered homestays in the state of Sarawak.

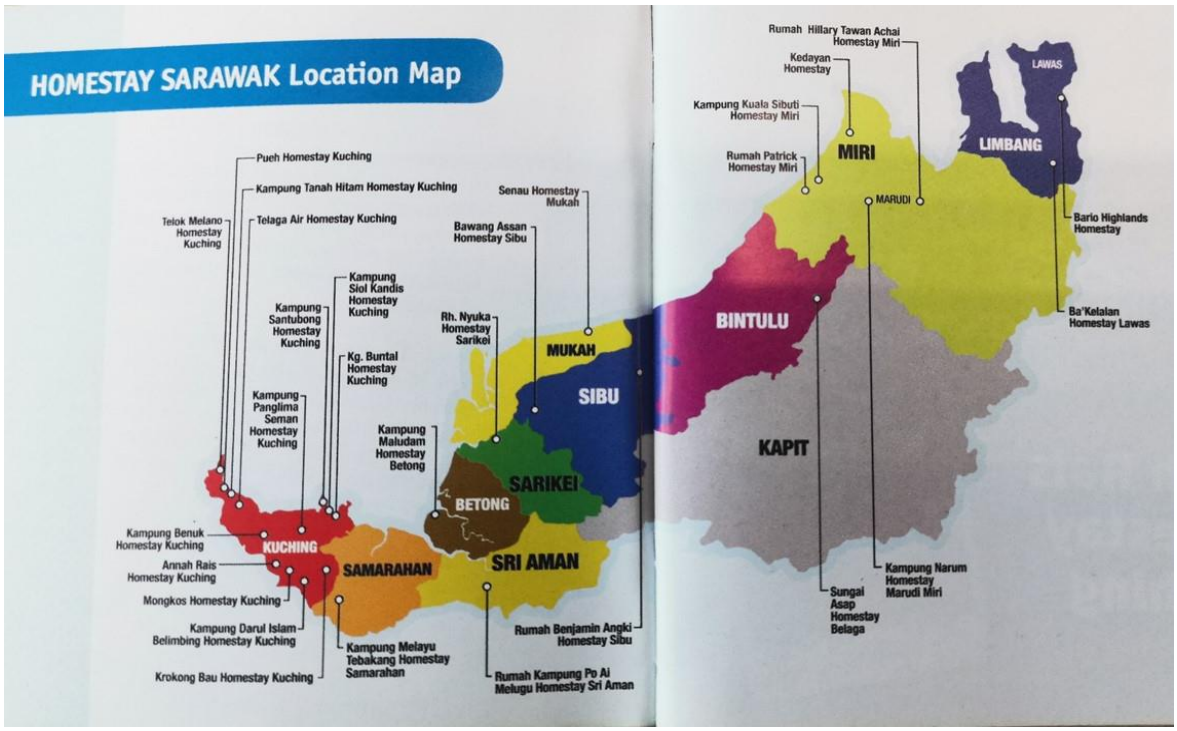


Figure 3.1: Homestay Sarawak Location Map

Source: Sarawak Homestay Directory by Pejabat Kementerian Pelancongan Malaysia Negeri Sarawak, printed brochure.

Data was collected from both domestic and international visitors who visited the selected study rural tourism destinations in Sarawak. The rural tourism destinations in Sarawak selected were (i) Annah Rais Bidayuh Longhouse, (ii) Kampung Po Ai Melugu,

(iii) Rumah Panjang Bawang Assan, (iv) Rumah Benjamin Angki, (v) Bario Kelabit Highlands and (vi) Ba'kelalan Homestay. These sites account for more than 21% of the rural tourism destinations in Sarawak (see Figure 3.1 for Homestay location map in Sarawak). The selected study sites covered the city of Kuching, Sri Aman, Sibu, Lawas and Miri. These cities are among the most popular cities in Sarawak. The choice for the research sites is justified based on the fact that these sites face a similar primary issue with tourism development such as the lack of promotional initiatives for destination competitiveness. For instance, as was highlighted by past researches, tourism destinations such as Bario (Adeyinka-Ojo & Nair, 2019), Ba'kelalan (Cheuk, Atang, Lo, & Ramayah, 2017), Rh Benjamin Angki Homestay (Liman, 2016) and Annah Rais Bidayuh Longhouse (Guri, 2018) still lacked marketing efforts for the development of rural tourism destination competitiveness. Furthermore, although both Kampung Po Ai Melugu and Rh Panjang Bawang Assan were found to be actively involved in rural tourism activities such as homestay programme. Although an initiative was taken to search for the relevant promotional initiatives of the two sites, no relevant information was found. Therefore, these six study locations proved to face a similar issue. which is lack of destination marketing effort for the sustainable development of tourism destination competitiveness. The study locations are shown in Figure 3.2.

On top of that, all the selected study sites are popular rural tourism destinations among local and international tourists. The selection of these sites was based on a several similarities in terms of characteristics and were aligned with the study objectives. For instance, this research study examines the impact of destination appeal resources, tourism infrastructure resources, service quality and image of the destination; thus the selected study sites should possess similar natural and cultural appeal, accommodation, transportation

infrastructure, provided services and are popular among tourists. The uniqueness and similarities among these sites are as indicated in Table 3.1.

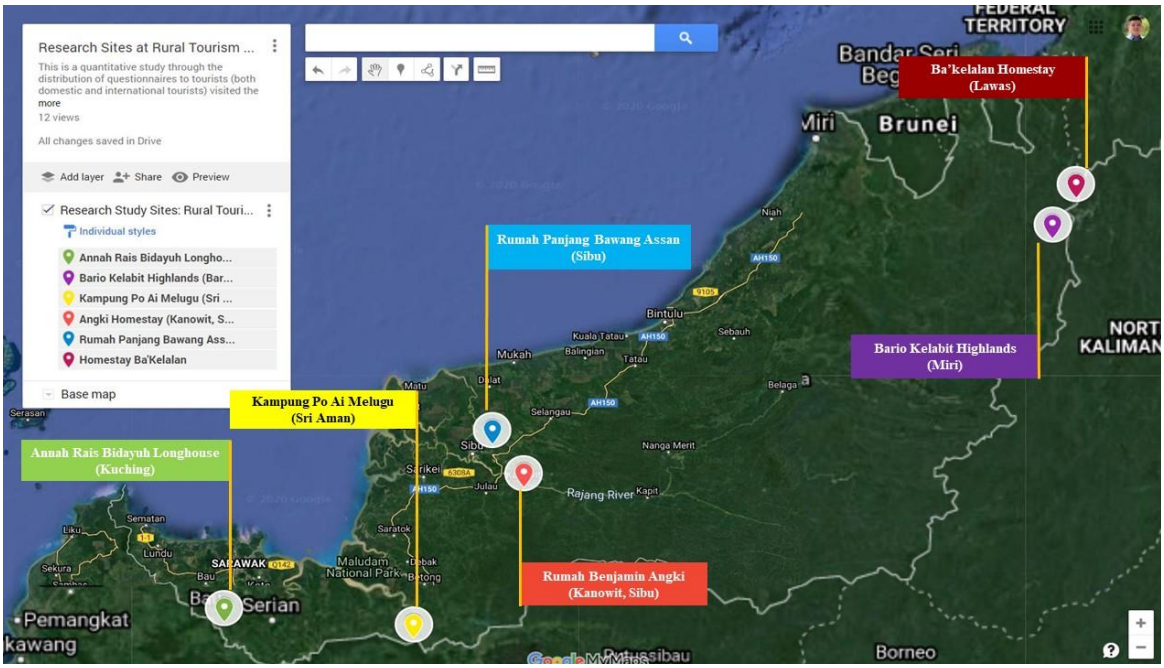


Figure 3.2: The Locations of the Research Sites

Table 3.1: Characteristics of the Selected Research Sites

Study Sites / Character-istics	Annah Rais Bidayuh Longhouse	Kampung Po Ai Melugu	Rumah Panjang Bawang Assan	Rumah Benjamin Angki Homestay	Bario Kelabit Highlands	Ba'kelalan Homestay
Location	Kuching	Sri Aman	Sibu	Kanowit, Sibu	Baram, Miri	Lawas, Miri
Longhouse	Yes	Yes	Yes	Yes	Yes	Yes
Sarawak listed homestay	Yes	Yes	Yes	Yes	Yes	Yes

Table 3.1 continued

Accessibi-lity	Yes (1 ½ hour drive from the city centre of Kuching or 56 km from Kuching town)	Yes (1-hour drive from the city centre of Sri Aman or 25 km from Sri Aman town)	Yes (30 mins drive from the city centre of Sibu or 25 km from Sibu town)	Yes (1-hour drive from the city centre of Sibu or 69 km from Sibu town)	Yes (50 mins flight from Miri to Bario or 8 hours four-wheel drive)	Yes (1 ½ hour flight from Miri to Ba'kelalan or 8 hours four-wheel drive from Lawas)
Ethnicity	Bidayuh	Iban	Iban	Iban	Kelabit	Lun Bawang
Economy	Farming, Homestays Operator, Tourism Activities	Farming, Homestays Operators, Tourism Activities	Farming, Hunter, Homestays Operator, Tourism Activities	Farming, Homestays Operators, Tourism Activities	Farming, Homestays Operator, Tourism Activities	Farming, Homestays Operator, Tourism Activities
Natural Attractions	Yes (Flora & fauna, waterfall, birding)	Yes (Flora & fauna, river)	Yes (Flora & fauna, waterfall, birding)	Yes (Flora & fauna, river)	Yes (Flora & fauna, waterfall, birding)	Yes (Flora & fauna, waterfall, birding)
Cultural Heritage Attractions	Yes (Cultural performance & heritage spot)	Yes (Cultural performance & heritage spot)	Yes (Cultural performance & heritage spot)	Yes (Cultural performance & heritage spot)	Yes (Cultural performanc e & heritage spot)	Yes (Cultural performance & heritage spot)
Outdoor Activities	Yes (Jungle trekking, picnic)	Yes (Jungle trekking, picnic)	Yes (Jungle trekking, picnic)	Yes (Jungle trekking, picnic)	Yes (Jungle trekking, picnic)	Yes (Jungle trekking, picnic)

Table 3.1 continued

Popularity among tourist Visit	Yes	Yes	Yes	Yes	Yes	Yes

Source: Author self-compilation (2019)

Also, the selected sites are similar in terms of the availability of registered homestays. As there is no proper and structured system to record the number of tourist arrivals, it was challenging to collect the total number of tourist arrivals at the destinations. However, if the study sites are a registered homestay with the Ministry of Tourism, Arts and Culture Malaysia, it would ease the process of collecting the total number of tourist arrivals. This was because the registered homestay operators must have a proper recording and filing for the total number of tourist arrivals to be submitted to the ministry on a monthly, quarterly or yearly basis. All the selected study sites were purposely selected based on similarities in terms of natural, cultural and infrastructure resources.

The local community members at the sites are from different ethnic tribes, namely, Bidayuh (Annah Rais Bidayuh Longhouse), Iban (Kampung Po Ai Melugu, Rumah Benjamin Angki Homestay and Rumah Panjang Bawang Assan), Kelabit (Bario Highlands) and Lun Bawang (Ba'kelalan Homestay). However, they are similar in terms of socio-economy activities. Most of the local community members were farmers, with a minority of them taking part in tourism activities. Most importantly, these study locations are currently receiving an increasing number of tourist arrivals. Therefore, it is crucial to include the tourist's perspective in the development of rural tourism destinations and examine the impact of the four proposed predictors on rural tourism destination competitiveness, with knowledge sharing as the moderator variable. It was propounded that the findings could

potentially enhance the performance and competitiveness of rural tourism destinations in the six study locations and the findings could be beneficial to other rural tourism destinations in Sarawak.

3.2.1 Annah Rais Bidayuh Longhouse, Kuching

Annah Rais Bidayuh Longhouse is located about 56 km away from the city centre of Kuching. It is accessible by public transport or car and is a one-and-a-half-hour drive. The main attractions in this study site are the natural flora, fauna, waterfall, bamboo rafting, trekking, cultural dances and experiencing the traditional lifestyle of the Bidayuh. The uniqueness of the Bidayuh longhouse architecture is that it is built on hill tops with 100 door longhouse that accommodates close to 800 community members.



Figure 3.3: Annah Rais Bidayuh Longhouse

(Top: Annah Rais Bidayuh Longhouse. Bottom left: Annah Raish hot spring. Bottom right: Photo with the receptionist and homestay operator at Annah Rais Bidayuh Longhouse)

3.2.2 Kampung Po Ai Melugu, Sri Aman

Kampung Po Ai Melugu is located at Sri Aman, approximately 25 km away from the city centre of Sri Aman. This longhouse comes with 35 door longhouses with a corridor running the entire length of the building that serves as the main street for the community to socialize. The uniques selling point of this site is the traditional farming, flora, fauna, crystal clear river, jungle trekking and the traditional cultural dance – *ngajat* by the Iban.



Figure 3.4: Kampung Po Ai Melugu

(Top: Main entrance to Rumah Panjang Po Ai, Melugu. Bottom left: A corridor or *ruai* of an Iban longhouse at Kampung Po Ai. Bottom right: The making of traditional cuisine – *Kueh Jala* by the wife of Mr. Wilson Bana, village headman and homestay operator)

3.2.3 Rumah Panjang Bawang Assan, Sibu

Rumah Panjang Bawang Assan is located in Sibu and is about 25 km away from the city centre of Sibu. This is a famous rural tourism destination in Sibu for its flora, fauna, waterfall, bird watching, traditional farming, hunting, trekking and also the uniqueness of the Iban lifestyle. The homestays at Bawang Assan regularly receive both domestic and international visitors and booking is made either through their own websites or through travel agents.



Figure 3.5: Rumah Panjang Bawang Assan

(Top: Rumah Panjang Bawang Assan. Bottom left: Traditional musical instrument for welcoming visitors. Bottom right: Discussion with Mr. Marcathy, head of homestay operator)

3.2.4 Rumah Benjamin Angki Homestay, Kanowit, Sibu

Rumah Benjamin Angki is located about 69 km away from the city centre of Sibu, at a town named Kanowit. The majority of the community members are Iban. The location is well-known for its rural tourism activities such as farming, homestays, flora, fauna, river, jungle trekking, fishing along the river and enjoying the traditional Iban dance and musical performance.



Figure 3.6: Rumah Benjamin Angki Homestay

(Top: The main entrance of Rumah Benjamin Angki Homestay. Bottom left: Discussion with Mr. Benjamin Angki, the village headman and homestay operator. Bottom right: The traditional musical instrument and performance by local community)

3.2.5 Bario Kelabit Highlands, Miri

Bario Highlands is located in the remote highlands and is approximately an 8-hour journey using logging roads from the city centre of Miri. Alternatively, it can be reached by a 50-minute flight from Miri, using a twin-otter plane. The ethnic group in Bario is Kelabit. Bario is well-known for its peaceful rural lifestyle, farming, flora, fauna, waterfall, salt making, jungle trekking and also the unique local traditional cultural dances and cuisine.



Figure 3.7: Bario Kelabit Highlands

(Top: Bario Asal from the view of hilltop. Bottom left: Group photo with tourists and homestay operator, Miss Lucy Labang. Bottom right: Discussion with Uncle Panai, a homestay operator at Bario Highlands)

3.2.6 Ba'kelalan Homestay, Lawas, Miri

Ba'kelalan is located at one of the highlands in Sarawak and is very near to the Bario Highlands. It was formed by combining nine villages that belong to Lun Bawang ethnic tribe. This place is attractive to tourists because of its natural scenery, flora, fauna, waterfall, jungle trekking, farming and also the speciality of Lun Bawang ethnic tribe in terms of their culture and traditional cuisine.



Figure 3.8: Ba'kelalan Village

(Top: Beautiful scenery of Ba'kelalan village. Bottom left: Apple lodge – a homestay at Ba'kelalan. Bottom right: Group photo with tourists and candidates for eBKF at Ba'kelalan)

3.3 Research Design and Sample

In the present study, a quantitative approach was adopted for data collection, the use of numerical measurement and analysis was conducted to determine the existence of a possible relationship between the independent variables, moderator variable and dependent variables. This study used a non-probability sampling method, specifically using purposive sampling techniques via distribution of questionnaires for data collection. The population of the present study consisted of tourists, both domestic and international, that visited rural tourism destinations in Sarawak, specifically the study sites in the present study. The prospective respondents were those who visited the selected rural tourism destinations, falling between an age range of 18 to 60 years old. However, participation was based on the respondents' self-willingness to participate and if they had time to participate during his or her visit.

As propounded by Sekaran (2000), the sample size between 30 to 500 is considered an adequate figure for academic research (Sekaran & Bougie, 2010). A few methods were applied to determine the minimum sample size of this study. The methods were (i) a formula to calculate the minimum sample size (Hair, Black, Babin, Anderson & Tatham, 2010), (ii) the "10 times" rule of thumb (Barclay, Higgins, & Thompson, 1995; Chin, 1998) and (iii) *G*power 3.1.9.2* software (Faul, Erdfelder, Buchner, & Lang, 2009). First, a formula developed by Hair et al. (2010) was adopted to calculate the minimum sample size. The formula is as follows (see Equation 3.1):

The minimum sample size is

Variate Value	=	WnXn	Equation 3.1

where,

Wn	=	Observation (Weight determined by the multi variate technique)
Xn	=	Observed variable
Hence,	=	10 x 8 variables
Variate value	=	80 respondents

Next, the "10 times" rule of thumb was used to determine the minimum sample size to provide enough power to estimate the relationships in partial least squares (PLS) analysis. As suggested by Hair, Sarstedt, Pieper and Ringle (2012), a minimum sample size of ten times the maximum number of independent variables in the outer and inner model was used. Thus, the minimum sample size of this study was 80 (8 x 10 times = 80). In addition, the G*power 3.1.9.2 software (Faul et al., 2009) was also used to calculate the minimum sample size. The results indicated that a minimum of 114 respondents was required to test the model as shown in Figure 3.9 [f^2 = 0.15 (medium); α = 0.05; number of predictors = 9; power = 80%].

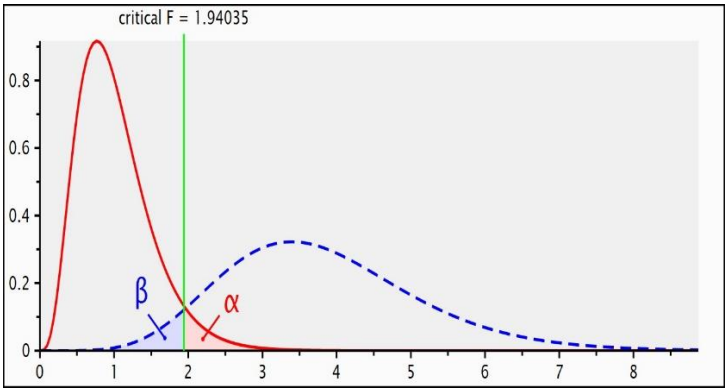


Figure 3.9: G*power Graph

On top of that, WarpPLS (version 6.0) was used to perform the PLS-SEM analysis. One of the options for the WarpPLS is that it allows users to explore statistical power and minimum sample size requirements to analyse the research model developed based on the inverse square root and gamma-exponential (Kock & Hadaya, 2018). To explore the minimum sample size needed to assess the research model developed, the following assumptions were loaded into the software (the minimum absolute significant path coefficient in the model was 0.133, the significance level used for hypothesis testing was 0.05 and the power level required was 0.80), the suggested minimum sample size based on inverse square root method was 350, whereas the suggestion based on Gamma-exponential method was 336 rows of data (see Figure 3.10).

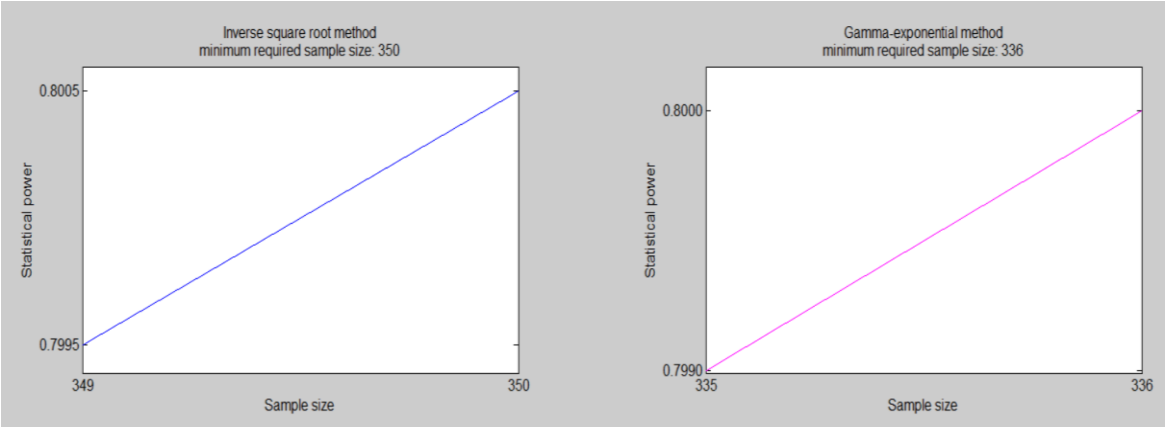


Figure 3.10: Graphs for Inverse Square Root Method and Gamma-exponential Method

In sum, based on the different techniques adopted above to estimate the minimum sample size, the minimum sample size ranged from 80, 114 and a maximum of 350 respondents. Hence, it was concluded that the minimum sample size for this study should be above 350 respondents to provide enough explanatory power to test the study framework. Therefore, a total of 390 rows of data were collected and it is deemed that the total number of data collected was enough to assess the research model developed.

3.3.1 Data Collection Procedure

Firstly, the researcher visited the selected rural tourism destinations and discussed with the local representatives or the village headman (if any) in person to get their consent to proceed for data collection at their sites before commencing actual data collections. The local representatives were well-informed about the objectives of this study, the targeted respondents for this study and that only an average will be taken for reporting on the findings. The benefits of this study to the community as well as to rural tourism destinations in Sarawak were also explained to the community members. Once the approval was obtained and supported by the local representatives or the village headman, the researcher proceeded with another round of face-to-face discussions with the local representatives with the aim to decide on the right time to collect data, which was when the sites would receive the most tourists.

As highlighted in the earlier section, the quantitative approach via a self-administered questionnaire was used for data collection. The researcher approached any tourists aged 18 years old and above, regardless of nationality at the rural tourism destinations. The researcher first gets the consent from the target respondents on their availability and willingness to proceed with a short interview session with them. Those who agreed to

participate was briefed further on the objectives and instructions of this study. Also, the researcher highlighted to respective respondents that their personal information would be kept confidential and only an average was used for reporting of the findings. The questionnaire was prepared in two languages, namely, English and *Bahasa Melayu*. Tourists were given 15 minutes to complete the questionnaire. However, a face-to-face interview was employed to collect the data from part of the domestic tourists, especially to those who were illiterate or of older age.

A total of 480 questionnaires were distributed personally to the tourists from the selected rural tourism destinations. The aim of distributing a large number of questionnaires was to ensure a sufficient number of returned questionnaires. From this, the researcher could gain important insights about tourists' perceptions on destination appeal, tourism infrastructure, service quality, destination image and the moderating impact of knowledge sharing on rural tourism destination competitiveness, specifically on sustainable management, destination marketing efforts, as well as comparative and competitive advantage.

3.3.2 Participatory Approach

This study applied a participatory approach to encourage the local communities from the study sites and also selected tourists visiting the study sites, to share their opinions, ideas and knowledge about the hard measures (i.e., destination appeal and tourism infrastructure), soft measures (i.e., service quality and destination image), knowledge sharing and rural tourism destination competitiveness (i.e., sustainable management, destination marketing efforts, comparative and competitive advantage). This technique was used in this study because it is cost-effective (Simpson, 2007) and is able to gather crucial insights (Valencia-

Sandoval, Flanders, & Kozak, 2010) from the stakeholders for the development of rural tourism destination competitiveness.

In this study, the quantitative approach was adopted. First, the researcher distributed questionnaires and collected the primary data from the tourists' point of view on rural tourism destination competitiveness. Besides, a semi-structured interview technique, one of the participatory approach techniques, was adopted and conducted in further interviews with the selected community members and tourists to gather the information and justification for findings (Catley, Alders & Wood, 2012). This approach is deemed to be an effective bottom-up approach that can turn meaningful insights into practices and lead to better research outcomes (Castellani & Sala, 2010). The semi-structured interviews were conducted in 6 rural tourism destinations in Sarawak, namely, Annah Rais Bidayuh Longhouse, Bawang Assan Homestay, Kampung Po Ai Melugu, Rumah Benjamin Angki, Bario Kelabit Highlands and Ba'kelalan Homestay. During each interview, the participants (both community and tourists) were asked about their perceptions of what contributed the most to the development of rural tourism destination competitiveness, either on destination appeal, tourism infrastructure, service quality, or destination image. Also, the participants' opinions about the potential of tourist's knowledge sharing to enhance the relationship among the proposed predictors to the development of rural tourism destination competitiveness was investigated. Figure 3.11 shows a group photo with community members from Bawang Assan after a semi-interview was conducted with the selected community.



Figure 3.11: A Group Photo with Community Members After a Participatory Approach Session at Bawang Assan

3.4 Development of Research Questionnaire

In the present study, the objective was to examine the impact of destination appeals, tourism infrastructure, service quality and destination image on rural tourism destination competitiveness in terms of sustainable management, destination marketing efforts, as well as comparative and competitive advantage. Moreover, a moderator variable, namely, knowledge sharing, was adopted to examine its moderating impact on the proposed research framework. Thus, a survey questionnaire or self-administered questionnaire was developed to collect the necessary data to determine the factors that affect rural tourism destination competitiveness from tourists' point of view. As highlighted by Rowley (2014), questionnaires are one of the most widely used means to obtain data in social sciences and to undertake appropriate data analysis.

A close-ended questionnaire was developed and the measurement items were adapted from past studies (see Table 3.2). The technique of back translation, as suggested by Brislin (1980), was applied in the development of the questionnaire. The questionnaire

items were first developed in English and then translated into *Bahasa Melayu*. The process of back-translation was used; the questionnaires were first translated into *Bahasa Melayu* before being translated into English by a lecturer from the Language School. The final version of the distributed questionnaires was prepared in two languages (English and *Bahasa Melayu*). The reason for this is because some of the locals or domestic tourists who visited the rural tourism destinations are more familiar with *Bahasa Melayu* as their mother tongue. This is to ensure the respondents can answer the questionnaire with a better understanding of what was being asked.

The questionnaire was designed into two main sections. Section I gathered respondents' perceptions on factors that influenced the development of rural tourism destination competitiveness, while Section II gathered the respondents' demographic characteristics. A multiple scale item measurement scale was adapted from past research (Mo, Howard & Havitz, 1993; Smith, 1994; Crouch & Ritchie, 1999; Hassan, 2000; Murphy et al, 2000; Yoon, 2002; Dwyer & Kim, 2003; Van Den Hoof, Vijvers & De Ridder, 2003; Beerli & Martin, 2004; Hankinson, 2004; Liao, Chang, Cheng & Kuo, 2004; Collins, 2005; Gutierrez, Lamoureux, Matus & Sebunya, 2005; Chi & Qu, 2008; Getz, 2008; Cracolici & Nijkamp, 2009; Canny & Hidayat, 2012; Agapito, Valle & Mendes, 2013; Song, Su & Li, 2013; Assaker, 2014; Cho, Byun & Shin, 2014; Zainuddin et al., 2015; Basaran, 2016; Azzopardi & Nash, 2016; Hussain, Konar & Ali, 2016; Mohamed, 2017; Nunes et al., 2018; Akguna et al., 2020; Mustafa et al., 2020; Šebrek, 2020) and slightly amended to suit the Malaysian context (refer to Appendix D for details).

In sum, a pool of measurement items related to tourism settings and representing destination appeals, tourism infrastructure, service quality, destination image, knowledge sharing, sustainable management, destination marketing efforts, as well as comparative and

competitive advantage was generated from different frames of reference. Multiple scale items were adapted from different frames of reference because of the cultural differences and diverse nature of settings for rural tourism destinations in the state of Sarawak, Malaysia. Thus, the measurement items adopted but were found to be ambiguous or judged not suitable to be applied to the Sarawak context was either rewritten, omitted, or modified to adapt to the Sarawak rural tourism context.

The questionnaire consisted of 63 statements for all sections. In Section II, 7 questions were used to collect respondents' profiling (demographic profile). For Section I, a total of 56 close-ended statements were used to measure the impact of destination appeal, tourism infrastructure, service quality and destination image on sustainable management, destination marketing efforts, as well as comparative and competitive advantage with knowledge sharing as the moderator variable. The 7-point Likert scale was employed in the present study. Respondents were asked to respond to each statement by using a seven-point Likert scale (ranging from 1 = *strongly disagree* to 7 = *strongly agree*) for each statement arising from destination appeal, tourism infrastructure, service quality, destination image and knowledge sharing. On the other hand, respondents were asked to rate their perceptions for each of the statements on sustainable management, destination marketing efforts and comparative and competitive advantage based on seven-point Likert scale (ranging from 1 = *strongly disagree* to 7 *strongly agree*). A technique of mixing around all the items from Section I was employed to avoid respondents from identifying the items measuring the same constructs of the variable to avoid bias or common method variance.

Table 3.2: Summary of the Measurement of the Constructs

Section	Dimensions	Number of items	Sources	Rating Scale
I	Destination Appeal	7	Dwyer & Kim, 2003; Gutierrez et al., 2005; Cracolici & Nijkamp, 2009; Chi & Qu, 2008; Getz, 2008; Zainuddin et al., 2015; Mustafa et al., 2020	1=Strongly disagree and 7=Strongly agree
	Tourism Infrastructure	6	Mo et al, 1993; Smith, 1994; Murphy et al, 2000; Dwyer & Kim, 2003; Hankinson, 2004; Collins, 2005; Chi & Qu, 2008; Canny & Hidayat, 2012; Mustafa et al., 2020	1=Strongly disagree and 7=Strongly agree
	Service Quality	5	Parasuraman et al., 1988; Su, Hsu & Swanson, 2017; Šebrek, 2020	1=Strongly disagree and 7=Strongly agree
	Destination Image	8	Beerli & Martin, 2004; Chi & Qu, 2008; Agapito et al., 2013; Song et al., 2013; Assaker, 2014;	1=Strongly disagree and 7=Strongly agree

Table 3.2 continued

			Basaran, 2016; Akguna et al., 2020	
	Knowledge Sharing	5	Van Den Hoof et al., 2003; Liao et al., 2004; Hussain, Konar, & Ali, 2016; Mohamed, 2017	1=Strongly disagree and 7=Strongly agree
	Destination Competitiveness			1=Strongly disagree and 7=Strongly agree
	Sustainable Management	6	Yoon, 2002; Dwyer & Kim, 2003; Azzopardi & Nash, 2016; Nunes et al., 2018	
	Destination Marketing Efforts	5	Yoon, 2002; Dwyer & Kim, 2003; Azzopardi & Nash, 2016; Nunes et al., 2018	
	Comparative and Competitive Advantage	14	Crouch & Ritchie, 1999; Hassan, 2000; Dwyer & Kim, 2003; Azzopardi & Nash, 2016; Nunes et al., 2018	

Table 3.2 continued

II	Demographic Characteristics	7		

3.5 Measures

In this study, a total of eight constructs with each of the respective measures were adapted to measure the proposed research framework. A multiple-item measurement scale was adapted from past research and slightly amended to adapt to the Malaysian context, particularly the rural tourism context. The constructs are destination appeal, tourism infrastructure, service quality, destination image, knowledge sharing, sustainable management, destination marketing efforts, as well as comparative and competitive advantage. Moreover, the demographic information relating to age, gender, highest education level, monthly income, number of visits to the destination, place visited and country of origin was also collected.

3.5.1 Destination Appeal

A total of seven items were adapted from different sources such as Dwyer and Kim (2003), Gutierrez et al. (2005), Cracolici and Nijkamp (2009), Chi and Qu (2008), Getz (2008), Zainuddin et al. (2015) and Mustafa et al. (2020) to measure tourists' perception on destination appeal in rural tourism destination. A 7-point Likert scale was used to assess the items. Respondents were asked to rate their perceptions using a 7-point Likert scale in which 1 = strongly disagree, 2 = disagree, 3 = slightly disagree, 4 = neutral, 5 = slightly agree, 6 = agree and 7 = strongly agree, for all the seven items. The tourists who responded with a high score indicated that they are of the opinion that destination appeal plays a crucial role in contributing to the development of rural tourism destination competitiveness.

3.5.2 Tourism Infrastructure

Tourism infrastructure was measured according to six items taken from different sources (Mo et al, 1993; Smith, 1994; Murphy et al, 2000; Dwyer & Kim, 2003; Hankinson, 2004; Collins, 2005; Chi & Qu, 2008; Canny & Hidayat, 2012; Mustafa et al., 2020). A 7-point Likert scale was used to assess the items. Respondents were asked to rate their perceptions using a 7-point Likert scale; 1 = strongly disagree, 2 = disagree, 3 = slightly disagree, 4 = neutral, 5 = slightly agree, 6 = agree and 7 = strongly agree, for all the six items. The tourists who responded with a high score indicated that they are of the opinion that tourism infrastructure plays a crucial role in contributing to the development of rural tourism destination competitiveness.

3.5.3 Service Quality

Service quality was measured by five items extracted from the study of Parasuraman et al. (1988), Su, Hsu and Swanson (2017) and Šebrek (2020). A 7-point Likert scale was used to assess the items. Respondents were asked to rate their perceptions using a 7-point Likert scale; 1 = strongly disagree, 2 = disagree, 3 = slightly disagree, 4 = neutral, 5 = slightly agree, 6 = agree and 7 = strongly agree, for all the five items. The tourists who responded with a high score indicated that they are of the opinion that service quality plays a crucial role in contributing to the development of rural tourism destination competitiveness.

3.5.4 Destination Image

Destination image was measured by eight items derived from the concepts of cognitive, affective and conative and were collected from different studies (Beerli & Martin, 2004; Chi & Qu, 2008; Agapito et al., 2013; Song et al., 2013; Assaker, 2014; Basaran, 2016; Akguna et al., 2020). A 7-point Likert scale was used to access the items. Respondents were

asked to rate their perceptions using a 7-point Likert scale; 1 = strongly disagree, 2 = disagree, 3 = slightly disagree, 4 = neutral, 5 = slightly agree, 6 = agree and 7 = strongly agree, for all the eight items. The tourists who responded with a high score indicated that they are concerned about the destination image of the rural tourism destinations when making travel decisions. This is also the factor contributing to the development of rural tourism destination competitiveness.

3.5.5 Knowledge Sharing

Knowledge sharing was chosen as the moderator variable in the present study. The five items in the questionnaire were selected from the quantitative attribute-based measurement approach that was taken from multiple sources. The items were taken from the work of Van Den Hoof et al. (2004), Liao et al. (2004), Hussain et al. (2016) and Mohamed (2017). A 7-point Likert scale was used to assess the items. Respondents were asked to rate their perceptions using a 7-point Likert scale; 1 = strongly disagree, 2 = disagree, 3 = slightly disagree, 4 = neutral, 5 = slightly agree, 6 = agree and 7 = strongly agree, for all the five items. The tourists who responded with a high score indicated that they are of the opinion that knowledge sharing moderates the relationship between the proposed independent variables and rural tourism destination competitiveness, whereby when the knowledge sharing is high, the relationship between the proposed independent variables and dependent variables will be stronger.

3.5.6 Sustainable Management

A total of six items were arranged in random order in the questionnaire to measure the perceptions of the tourists on sustainable management of rural tourism for the development of destination competitiveness. The items were collected from multiple sources

(Yoon, 2002; Dwyer & Kim, 2003; Azzopardi & Nash, 2016; Nunes et al., 2018) and were presented in Appendix D. A 7-point Likert scale was used to assess the items. Respondents were asked to rate their perceptions using a 7-point Likert scale; 1 = strongly disagree, 2 = disagree, 3 = slightly disagree, 4 = neutral, 5 = slightly agree, 6 = agree and 7 = strongly agree, for all the six items. A high score indicated that tourists were of the opinion that sustainable management is an important factor for the development of rural tourism destination competitiveness.

3.5.7 Destination Marketing Efforts

A total of five items were adapted from the works of Yoon (2002), Dwyer and Kim (2003), Azzopardi and Nash (2016) and Nunes et al. (2018) and arranged in random order in the questionnaire to measure the perceptions of the tourists on destination marketing efforts (see Appendix D). A 7-point Likert scale was used to assess the items. Respondents were asked to rate their perceptions using a 7-point Likert scale; 1 = strongly disagree, 2 = disagree, 3 = slightly disagree, 4 = neutral, 5 = slightly agree, 6 = agree and 7 = strongly agree, for all the five items. A high score indicated that tourists were of the opinion that destination marketing efforts are an important factor for rural tourism destination competitiveness.

3.5.8 Comparative and Competitive Advantage

As for the construct on comparative and competitive advantage, a total of fourteen multiple-scale items in the questionnaire were modelled according to the quantitative attribute-based measurement approach that was taken from the works of Crouch and Ritchie (1999), Hassan (2000), Dwyer and Kim (2003), Azzopardi and Nash (2016) and Nunes et al. (2018). A 7-point Likert scale was used to assess the items. Respondents were asked to

rate their perceptions using a 7-point Likert scale; 1 = strongly disagree, 2 = disagree, 3 = slightly disagree, 4 = neutral, 5 = slightly agree, 6 = agree and 7 = strongly agree, for all the fourteen items. A high score indicated that tourists were of the opinion that the constructs of comparative and competitive advantage are one of the important factors for rural tourism destination competitiveness.

3.5.9 Demographic Profile

As shown in Appendix D, Section II of the questionnaire focused on the respondent's selected demographic characteristics. The demographic information collected was age, gender, highest education level, monthly income, number of visits to the destination, destination visited and country of origin. During the data collection process, the respondents were informed that this information would be kept confidential and was solely meant for analysis purposes and that only an average result will be reported. It is believed that some of the items like monthly income was deemed sensitive to some of the respondents. Thus, the demographic information collected was useful and beneficial for the researcher to gain a better understanding of each of the respective respondents' profiling.

3.6 Pre-test

The purpose of the pre-test was to make sure the final distributed questionnaires were free from ambiguity, with no chance for confusion, to ensure the reliability and validity of the questionnaire items and to make sure the questionnaires work with the target respondents (Wu & Zhu, 2012). The questionnaire developed and used in this study was adapted from the western-context and redesigned to meet the current research objectives. Thus, a pre-test was conducted in July 2017, prior to the actual data collection. As suggested by Zaltman and Burger (1975), the sample size for the pre-test can be "small"; hence a total of 20 respondents

or best addressed as tourists aged 18 years old and above (both local and international) were selected as the target respondents to proceed with pre-testing the questionnaire. The pre-testing took place at one of the rural tourism destinations in Sarawak, namely, Kampung Annah Rais Bidayuh Longhouse due to its popularity among tourists.

During the pre-testing, the respondents were first requested to answer the questionnaire given based on their honest opinions. At the same time, the respondents were also asked to give their comments on the content, layout, wording and understandability of the questions in the questionnaire. These comments were then remarked at the column allocated at the end of each question. The feedback was used to refine the initial measurement items and develop the final version of the questionnaire items. The researcher also took down the time consumed by each of the respondents to complete the questionnaire and an average was calculated to determine the total time needed to complete this questionnaire. Out of the 20 respondents approached, five of them were selected to discuss the questionnaire in further detail. The outcome of the discussions is shown in Table 3.3. The questionnaire was amended based on the comments of the respondents and the final version was developed. Prior to the actual data collection, the questionnaire developed was first submitted to the supervisor to get her comments and approval.

Table 3.3: Outcomes of Pre-testing Questionnaire

Section & (Item No.)	Respondent 1	Respondent 2	Respondent 3	Respondent 4	Respondent 5	Comments / Changes Made
I (27) It is my pleasure to share my knowledge	Who do you referring to when you mentioned	I don't really understand the word stakeholder	Are myself or tourist also the tourism stakeholder?	Can you please explain who I should share my	What type of knowledge you are asking here?	It is my pleasure to share my knowledge (or

Table 3.3 continued

with the tourism stakeholders	"tourism stakeholders "?	in this case.		knowledge with?		experience) with the tourism stakeholders (e.g., local host communities , government agency and other tourism industry players).
I (33) Sensible use of natural resources for tourism development in the destination.	It would be good if you can provide some example of natural resources.	Question quite vague.	Can the natural resources refer to bamboo?	What do you mean by sensible use in this context?	Confused.	This place has plenty of tourist's facilities that built from natural resources (e.g., bamboos, woods, rocks & etc.).
I (34) Environmental considerations in the marketing of tourism in the destination.	What type of environmental considerations you mean for?	What do you mean by environmental consideration in marketing the tourism destination?	It would be good if you can provide some example of environmental consideration in this context.	Can you rephrase your question?	Don't really get what you wanted to ask in the rural tourism context.	This place promotes green concept as one of the marketing initiatives.

Table 3.3 continued

I (37) Environmental training of tourism staff in the destination.	Do we have staff in rural tourism?	What type of environmental training?	Quite confused with the question asked.	It would be good if you can change the word "staff" to some other better word.	How do I know whether the staff do get any environmental training or not?	I feel that the tourism development in this place indicate the local host communities are well-trained in term of environmental conscious.

3.7 Statistical Analyses

In this study, both Statistical Package for Social Sciences (SPSS) version 23.0 for Microsoft Windows and WarpPLS (version 6.0) were employed to assess the data collected. Firstly, SPSS 23.0 was used to analyse the respondents' demographic profiles. The types of analyses performed were descriptive analysis (e.g., mean, standard deviation, maximum and minimum), multicollinearity analysis and Harman's single factor test to assess the common method variance. Next, WarpPLS 6.0 software was used to perform partial least squares-structural equation modeling (PLS-SEM) analysis to assess the developed model with path modelling, followed by bootstrapping.

3.7.1 Descriptive Statistics

In the present study, descriptive statistics was the summary tool used to report the demographic characteristics of the respondents. The calculations involved and reported were frequency, percentages, mean and standard deviation to describe the respondents'

demographic data. The data analyses included age, gender, highest education level, monthly income, number of visits to the destination, place visited and country of origin. The means was used to measure the average ages of the respondents, the maximum and minimum age. Apart from that, the frequency and percentage reported other factors like gender, highest education level, estimated monthly income, number of visits to the destination, place visited and country of origin. In this study, a series of descriptive statistics was calculated to report the frequency, percentages, mean and standard deviation for respondents' demographic profile.

3.7.2 Common Method Variance (CMV)

As stated by Nunally (1978), method biases are problems due to measurement error. There are a few different interpretations for common method variance (CMV). One of the interpretations of CMV is by Podsakoff, MacKenzie, Lee and Podsakoff (2003), who mentioned in their study that common method variance (CMV) as a variance that is attributable to the measurement method rather than to the constructs the measurers represent. On the other hand, Richardson, Simmering and Sturman (2009) explained CMV as the systematic error variance occurring due to measuring the variables with the same method or source. It is believed that CMV could create a false internal consistency that may either inflate or deflate the observed relationships between the constructs (Chang, Witteloostuijn & Eden, 2010). CMV occurred largely due to data collected from a survey instrument such as self-reporting questionnaires and the data was collected from a single source (Podsakoff & Todor, 1985; Podsakoff & Organ, 1986).

Past studies have highlighted that the measurement error could influence item validities, item reliabilities (Spector, 1987; Bagozzi & Yi, 1991; MacKenzie & Podsakoff, 2012) and subsequently affect the inference made between the study constructs. In the study

by Podsakoff et al. (2003), four approaches were shared to address the issue of CMV. Harman's single-factor test is one of the remedies suggested by Podsakoff et al. (2003) to address the issue of CMV. This is done by loading all the variables in the study into an exploratory factor analysis (EFA) or known as factor analysis and to check whether there is either a single factor emerging or one general factor accounting for more than 50 per cent of the variance resulting from the factor analysis (Aulakh & Gencturk, 2000; Winkelbach & Walter, 2015). In sum, an issue of CMV occurs if a single factor is loaded more than 50 per cent of the variance. Thus, in this study, Harman's single factor analysis was adopted to address the issue of CMV.

3.7.3 Reliability Analysis

The reliability analysis is used to measure the stability and internal consistency of the items in measuring the study constructs (Haque & Khatibi, 2005). It is important to verify the scales employed in this study to make sure that it was not ambiguous, free of random or unstable errors and that all the items used were measuring the same underlying dimensions. Cronbach's coefficient alpha is one of the measures to measure the items' internal consistency (Cronbach, 1951). The coefficient values which are closer to 1 indicate higher internal consistency reliability (Cronbach, 1951). As suggested by Sekaran (1992), the ideal coefficient alpha is 0.7. It was also highlighted in the study by Nunally and Bernstein (1994), that the coefficient alpha which is less than 0.60 should be considered poor, the values in between 0.61 to 0.79 is deemed to be acceptable and any value which is more than 0.80 is considered good. Hence, in the present study, the researcher followed the coefficient alpha of 0.7 (Sekaran, 1992) as the minimum accepted level of reliability value. This was to ensure that the multi-item scales developed in the questionnaire consistently reflect the constructs (i.e., destination appeals, tourism infrastructure, service quality, destination image,

knowledge sharing, sustainable management, destination marketing efforts and comparative and competitive advantage) and concepts measured.

3.7.4 Multicollinearity Statistics

In a multiple regression analysis, the issue of multicollinearity is one of the factors that affect the standard error of a partial regression coefficient; this is when two or more independent variables are highly correlated with each other (Meyer & Allen, 1997). The tolerance value and variance inflation factor (VIF) analyses were performed to assess the level of collinearity for the studied variables. Hair, Hult, Ringle and Sarstedt (2014) suggested that in the context of partial least square (PLS), the cut-off point of tolerance value of 0.20 or lower and a VIF value of 5.00 indicated that the measurement used for each of the variables in this study was valid and free from collinearity issue (Hair, Hult, Ringle & Sarstedt, 2016). On the other hand, authors Neter, Kutner, Wasserman and Nachtsheim (1996) have recommended that any VIF values below 10 show an indication that no multicollinearity exists among the constructs (Bock et al., 2005), Thus, the multicollinearity analysis was performed in this study to address the issue of multicollinearity.

3.7.5 Structural Equation Modeling – Partial Least Square (SEM-PLS)

Structural Equation Modeling (SEM) is a second-generation multivariate data analysis method to test and evaluate the multivariate causal relationships (Haenlein & Kaplan, 2004; Fan et al., 2016). Unlike first-generation techniques (e.g., multiple regression or ANOVA), SEM is able to examine a complex model, that is it can simultaneously examine the relationships between multiple independent and dependent constructs (Hanushek & Jackson, 1977; Bodoff & Ho, 2016). Initially, SEM techniques developed the causal modelling based on path analysis, however, factor analysis was integrated into the SEM soon

and after demands were made from the social sciences (Wright, 1921). The confirmatory factor analysis and path analysis are the two-main analysis for SEM. On the one hand, as stated by Wright (1920), path analysis was developed to quantify the relationships among multiple variables, whereas, on the other hand, a confirmatory factor analysis measures the latent variables based on the correlated variations of the dataset (Kline, 2010; Hoyle, 2011; Byrne, 2013).

SEM has quickly gained popularity for being one of the most widely used methods in various fields of studies such as for analyzing behavioural data in information systems (Bodoff & Ho, 2016), tourism research (Nunkoo, Ramkissoon & Gursoy, 2013; Valle & Assaker, 2016), ecological studies (Fan et al., 2016), as well as business and social sciences' studies (Henseler, Hubona & Ray, 2016). SEM was further divided into two main approaches, that is (i) covariance-based SEM (CB-SEM) and (ii) component-based or variance-based SEM (Bodoff & Ho, 2016). First, the main aim of CB-SEM is to emphasize the overall fit of the observed covariance matrix with the hypothesized covariance model. The common software that supports CB-SEM is LISREL, AMOS, EQS and Mplus. Next, the variance-based SEM, or commonly referred to as partial least squares-structural equation modeling (PLS-SEM), is mainly used to explain the variance. There are a few softwares that support PLS-SEM, namely, PLS-Graph, VisualPLS, WarpPLS and SmartPLS. SmartPLS and WarpPLS are one of the most widely used software to perform PLS-SEM.

As for CB-SEM, four fundamental rules are applied to compromise the validity of the results. These rules are the multivariate normality of data, minimum sample size, reflective constructs and strong theoretical knowledge about the model being tested (Jöreskog & Wold, 1982). In contradiction to CB-SEM, PLS-SEM does not restrict with

these rules; hence, PLS-SEM is suggested as the alternative technique to examine causality relationship among the latent variables. Thus, this study adopted PLS-SEM as the approach to examine the proposed research model. There are a few reasons for the selection of PLS-SEM as the approach for this study. Firstly, PLS can be used to examine the structural models with small sample size (Chin & Newsted, 1999). As the study sites took place in rural tourism destinations, the total amount of tourists visiting the sites could be limited. Second, PLS modelling can measure both reflective and formative measurement models at once (Diamantopoulos & Winklhofer, 2001). Lastly, PLS modelling could run the analysis with non-normal data (Lohmöller, 1989; Vinzi, Trinchera, & Amato, 2010). The reason is that most of the data derived from social sciences studies are not normal unless normality is required, then a big sample size is needed.

In PLS, two-steps analyses were performed, namely, the measurement model and the structural model to assess the proposed research model (Barroso, Cepeda & Roldán, 2010; Roldán & Sánchez-Franco, 2012; Real, Roldán & Leal, 2014; Felipe, Roldán & Leal-Rodríguez, 2016). First, confirmatory factor analysis (CFA) via PLS Algorithm was conducted to test item reliability, convergent validity and discriminant validity of the measurement scales (Westerlund & Rajala, 2010). As suggested by Gefen, Straub and Boudreau (2000), all the item loadings should exceed the minimum cut-off point of 0.50 to achieve internal consistency (Chin, 2010). In terms of convergent validity, all the composite reliability (CR) values should be above 0.70 (Chin, 2010) and the average variance extracted (AVE) values should meet the minimum criteria of 0.50 (Fornell & Larcker, 1981). For discriminant validity, the Fornell-Larcker criterion was used to analyse the ratio of the correlations (Henseler, Ringle & Sarstedt, 2015; Voorhees, Brady, Calantone & Ramirez, 2016). Once the measurement model meets all the requirements, it is considered to have

achieved satisfactory results and provided enough evidence in terms of reliability, convergent validity and discriminant validity.

Next, to assess the structural model, bootstrapping (5,000 resamples) was performed to generate the standard errors, p-values and *t*-statistics for the proposed hypotheses tested. As this is a one-tailed hypotheses testing; thus the t-values should either exceed the minimum cut-off point of 1.645 ($p < 0.05$) or $t > 2.33$ ($p < 0.01$). The R^2 values for the endogenous constructs were also reported. In a recent study, it was suggested that to report Q^2 for the predictive relevance of the research model (Roldán & Sánchez-Franco, 2012). The predictive relevance of the structural model was assessed by performing a blindfolding procedure (Chin, 1998). Table 3.4 and Table 3.5 shows the detailed description for each of the criterion ranging from assessing the measurement models to structural models.

WarpPLS (version 6.0) [Kock, 2019] was used to perform the PLS estimation procedure to examine the hypotheses developed. WarpPLS is the software that provides both the classic PLS algorithms and factor-based PLS algorithms that generate estimates of both true composites and factors for SEM (Kock, 2017). In addition, the research model developed comes 24 hypotheses, specifically 12 direct hypotheses and 12 moderation hypotheses; thus WarpPLS is known as the better suited software to analyse the complex research model developed, especially with moderation hypotheses. Therefore, WarpPLS (version 6.0) was used to analyse the research model developed in this research study.

Table 3.4: Assessing Measurement Models

Criterion	Description
Composite reliability (p_c)	$p_c = (\sum\lambda_i)^2 / [(\sum\lambda_i)^2 + \sum Var(\varepsilon_i)]$, where λ_i is the outer (component) loading to an indicator and $Var(\varepsilon_i) = 1 - \lambda_i^2$ in case of standardized indicators. The composite reliability is a measure of internal consistency and must not be lower than 0.6.
Indicator reliability	Absolute standardized outer (component) loadings should be higher than 0.7.
Average variance extracted (AVE)	$AVE = (\sum\lambda_i^2) / [\sum\lambda_i^2 + \sum Var(\varepsilon_i)]$, where λ_i^2 is the component loading to an indicator and $Var(\varepsilon_i) = 1 - \lambda_i^2$ in case of standardized indicators. The average variance extracted should be higher than 0.5.
Fornell-Larcker criterion	In order to ensure discriminant validity, the AVE of each latent variable should be higher than the squared correlations with all other latent variables. Thereby, each latent variable shares more variance with its own block of indicators than with another latent variable representing a different block of indicators.
Cross-loadings	Cross-loadings offer another check for discriminant validity. If an indicator has a higher correlation with another latent variable than with its respective latent variable, the appropriateness of the model should be reconsidered.

Sources: (Henseler, Ringle, & Sinkovics, 2009)

Table 3.5: Assessing Structural Models

Criterion	Description
R^2 of endogenous Latent variables	R^2 values of 0.67, 0.33, or 0.19 for endogenous latent variables in the inner path model are described as substantial, moderate, or weak by Chin (1998, p.323).
Estimates for path coefficients	The estimated values for path relationships in the structural model should be evaluated in terms of sign, magnitude and significance (the latter via bootstrapping).
Prediction relevance (Q^2 and q^2)	The Q^2 is calculated based on the blindfolding procedure: $Q^2 = 1- (\sum_D SSE_D)/(\sum_D SSO_D)$. *D* is the omission distance, SSE is the sum of squares of prediction errors and SSO is the sum of squares of observations. Q^2 – values above zero give evidence that the observed values are well reconstructed and that the model has predictive relevance (Q^2 –values below zero indicate a lack of predictive relevance). In correspondence of f^2, the relative impact of the structural model on the observed measures for latent dependent variables can be assessed: $q^2 = (Q^2_{included} - Q^2_{excluded})/(1 - Q^2_{included})$.

Sources: (Henseler et al, 2009)

3.7.5.1 Average Variance Extracted (AVE)

Average variance extracted (AVE) is to test the convergent validity by measuring the variance indicators relative to the measurement errors (Fornell & Larcker, 1981; Barclay et al., 1995). As suggested by Bagozzi and Yi (1988) and Rodgers and Pavlou (2003), the minimum cut-off point for AVE is 0.50; thus any reported AVE values of less than 0.50 are deemed insufficient because there is more error variance than indicator variance. The calculation of the AVE (see Equation 3.2) is as follows (Fornell & Larcker, 1981):

$$\text{AVE} = \frac{(\sum \lambda_i^2)}{[\sum \lambda_i^2 + \sum Var(\varepsilon_i)]}. \qquad \text{Equation 3.2}$$

Note: λ_i indicates the loading of indicator variable *i* of a latent variable

ε_i indicates the measurement error of indicator variable *i*

Thus, in the present study, the average variance extracted (AVE) for each of the variables were calculated to check and make sure that all of the AVE values were above the minimum cut-off point of 0.50.

3.7.5.2 Composite Reliability (CR)

To assess the internal consistency of a measurement scale, composite reliability (CR) is adopted to examine which the items are free from random errors (Werts, Linn & Jöreskog, 1974; Chin, 1998; Riquelme & Rios, 2010). Gotz, Liehr-Gobbers and Kraff (2010) propounded that the CR values could range from 0 to 1; however, the higher the CR value is, the more reliable it is. The minimum cut-off point for CR is varied by researchers, Nunally (1978) suggested that the CR value should be above 0.60, whereas Churchill (1979) mentioned that a minimum of 0.70 is considered an ideal CR value (Fornell & Larcker, 1981; Chin, 2010). The calculation of the CR (see Equation 3.3) is as follows (Fornell & Larcker, 1981):

$$\text{Composite reliability} = \frac{(\sum \lambda_i)^2}{[(\sum \lambda_i)^2 + \sum Var(\varepsilon_i)]} \qquad \text{Equation 3.3}$$

Note: λ_i indicates the loading of indicator variable *i* of a latent variable

ε_i indicates the measurement error of indicator variable *i*

j represents the flow index across all reflective measurement models

In the present study, the composite reliability (CR) for each of the variables were calculated to check and make sure that all of the CR values were above the minimum cut-off point of 0.70 to achieve the internal consistency of measurement scale.

3.7.5.3 Cronbach's Alpha

Cronbach's alpha coefficient value is one of the classical indexes in reliability analysis to assess the SEM measure of internal consistency (Esposito Vinzi, Squillacciotti, Trinchera & Tenenhaus, 2008). The Cronbach's coefficient alpha value should be larger than 0.70 to achieve confirmatory levels (Cronbach, 1951; Nunally, 1978; Vinzi, Wynne, Chin, Henseler & Wang, 2008). Although, McNeish (2017) has argued that there is no longer a need to assess the coefficient alpha, however, in contrast to the findings by Raykov and Marcoulides (2019), it was propounded that there is still a need to measure coefficient alpha as a reliability index under certain empirically examinable conditions. Thus, it is still important to measure Cronbach's coefficient alpha in this study. The calculation of the Cronbach's alpha (see Equation 3.4) is as follows (Gotz et al., 2010):

Cronbach's alpha: $\alpha = \left(\frac{N}{N-1}\right) * \left(1 - \frac{\sum_{i=1}^{N} \sigma_i^2}{\sigma_t^2}\right)$ Equation 3.4

Note: N is equivalent to the number of indicators assigned to the factor

σ_i^2 is the variance of indictor *ì*

σ_i^2 is the variance of indicator *ì*

σ_t^2 is the variance of the sum of all the assigned indicator's scores

Thus, in the present study, the Cronbach's alpha for each of the variables was calculated to check and make sure that all of the CR values were above the minimum cut-off point of 0.70 to achieve confirmatory levels.

3.7.5.4 Convergent Validity

In terms of convergent validity, both composite reliability (CR) and average variance extracted (AVE)were utilized to measure both indicator's reliability and construct reliability and (Bagozzi & Philips, 1982). The minimum cut-off point should be 0.70 and 0.50 respectively for CR and AVE (Fornell & Larcker, 1981; Teo & Koh, 2010). This rule of thumb was applied to the research study as well, to make sure that the study framework passed the convergent validity test.

3.7.5.5 Discriminant Validity

For discriminant validity, Fornell-Larcker criterion was analysed to measure the degree to which items differentiate among constructs and to assess the correlations between the measures of potentially overlapping constructs (Fornell, Tellis & Zinkhan, 1982). To assess the discriminant validity, the square root of the AVE for given constructs were compared with the correlations between the constructs and all other constructs (Fornell et al., 1982). Thus, the discriminant validity was achieved if the square roots of the AVEs were greater than the off-diagonal elements in the corresponding rows and columns (Chin, 2010). In short, the Fornell-Larcker criterion was applied to the current research study to conclude that the study research framework is free from the issue of discriminant validity.

3.7.5.6 Coefficient of Determination (R^2)

The coefficient of determination (R^2) was also reported in this study (Hair et al., 2012). Cohen (1988) suggested that the R^2 value of 0.67, indicating a substantial model,

whereas the R^2 value of 0.33 is moderate and considered a weak model where the $R2 = 0.19$. The R^2 was reported in this study to determine whether the model was a substantial model, moderate model, or a weak model.

3.7.5.7 Predictive Relevance (Q^2)

A blindfolding procedure was performed to get predictive relevance (Q^2) value. As suggested by Hair et al. (2016), the Q^2 value should be reported together with the R^2 in explaining the predictive relevance. The value of Q^2 should be above zero value. Thus, in the present study, a blindfolding procedure was performed to calculate the Q^2 of the research model to explain the predictive relevance of the research model.

3.7.5.8 Effect Size (f^2)

The purpose of calculating and reporting the effect size (f^2) is to measure the strength of each independent (predictor or exogenous) variable in explaining the dependent variable (endogenous) [Chin, 1998]. As suggested by Cohen (1988), the effect size values of 0.02, 0.15 and 0.35 are considered small, medium and large effects respectively (Henseler et al., 2009; Kura, 2016). In PLS-SEM, it is essential to report the values of the effect size because although you have statistically proven that the relationship between two variables is significantly related, but it can be a meaningless effect due to the low effect size. As propounded by Hair, Hult, Ringle and Sarstedt (2017), the effect size is a piece of additional and meaningful information to strengthen the quality of the PLS path model estimations. The effect size for the study research model was reported to show if the strength of the relationship among variables were strengthened or weakened with the moderator variable.

3.7.5.9 Variance Inflation Factors (VIF)

The purpose of calculating and reporting on variance inflation factor (VIF) value is to check whether there are multicollinearity issues among the proposed constructs. As suggested by Bock et al. (2005), the VIF value should be less than 10 to be considered as having no multicollinearity existing among the constructs. The VIF values for variables in this study were reported to show that there is no issue on multicollinearity for the study constructs.

3.8 Summary

In sum, this chapter discussed a series of methodologies used in this study. This chapter started by discussing the study locations, procedures for data collections, measurement items adaptation and questionnaire development, followed by a pre-test. In addition to that, it also highlighted the statistical analysis and software used in this study, namely, Statistical Package for Social Sciences (SPSS) version 23.0 for Microsoft Windows and WarpPLS (version 6.0). On the one hand, the demographic profiles of the respondents were analysed using SPSS 23.0, on the other hand, WarpPLS was used to perform a two-steps analysis, that is PLS Algorithm for testing the measurement models, followed by the Bootstrapping procedure to test the structural models. The findings of this study are reported in the next chapter.

CHAPTER 4

RESULTS

4.1 Introduction

This chapter presents the results of the data analysis performed. The two main softwares used to analyse the collected data were Statistical Package for Social Science (SPSS) version 23.0 and the WarpPLS (version 6.0) [Kock, 2019]. SPSS 23.0 was deployed to perform a few analyses that included (i) data screening to ensure that the collected data was free from missing values and that there were no issues of straight lining; (ii) Harman Single Factor Test to check on the issue of Common Method Bias (CMV); and (iii) to analyse and generate the results for descriptive statistics, specifically with regards to the demographic profiles of the respondents. Next, WarpPLS (version 6.0) was used to perform the PLS-SEM estimation procedure to examine the hypotheses developed.

4.2 Profile of Respondents

A total of 480 questionnaires were distributed to tourists from the six selected rural tourism destinations in Sarawak, Malaysia; namely, (i) Annah Rais Bidayuh Longhouse, (ii) Kampung Po Ai Melugu, (iii) Bawang Assan Homestay, (iv) Rumah Benjamin Angki, (v) Bario Kelabit Highlands and (vi) Homestay Ba'kelalan. Out of the 480 questionnaires distributed, 409 were returned, indicating a response rate of 85.21%. The high response rates indicated that the results are free from response error as suggested by Nulty (2008), who noted that a response rate of over 70% can be seen to be free from response error. Prior to the measurement and structural analyses, a preliminary analysis was conducted via Statistical Package for Social Science 23.0 to eliminate those with missing data, outliers and straight lining. Out of the 409 questionnaires collected, 19 questionnaires were discarded

because of the excessive missing data and issues with outliers. The remaining sample size was 390 respondents. Table 4.1 presents the demographic profile of the respondents.

Table 4.1: Demographic Profile of the Respondents

		Respondents (N = 390)	
Demographic Variable	**Category**	**Frequency (*n*)**	**Percentage (%)**
Gender	Male	217	55.6
	Female	173	44.4
Education Level	High school or below	66	16.9
	Diploma	169	43.3
	Degree or professional qualification	126	32.3
	Postgraduate	9	2.3
	Others	20	5.1
Monthly Income (in RM)	Less than RM1,500	50	12.8
	Between RM1501 and RM3,000	29	7.4
	Between RM3,001 and RM4,500	56	14.4
	Between RM4,501 and RM6,000	79	20.3
	Between RM6,001 and RM7,500	132	33.8
	Between RM7,501 and RM9,000	40	10.3
	RM9,001 and above	4	1.0
No of Visit	One	320	82.1
	Two	48	12.3
	Three	22	5.6

Table 4.1 continued

Destination Visited	Annah Rais Bidayuh Longhouse		96	24.6
	Bawang Assan Homestay		60	15.4
	Rumah Benjamin Angki		59	15.1
	Kampung Po Ai Melugu		40	10.3
	Ba'kelalan Homestay		40	10.3
	Bario Kelabit Highlands		95	24.4
Country of Origin	Domestic		240	61.5
	International		150	38.5
Respondent's profile (N=390)	Mean	SD	Minimum	Maximum
Age (in years)	36.9	11.9	18	60

Firstly, out of the 390 respondents who participated in the survey, 217 (55.6%) were male and the remaining 173 (44.4%) were female. The majority of the respondents were domestic tourists (within Malaysia) which totalled to 240 respondents (61.5%), while the remaining 150 respondents (38.5%) were international visitors. In term of the number of visitations to the rural tourism destination study sites, a total of 320 respondents responded that this was their first visit to the destination, which is as high as 82.1%. However, 48 respondents noted that this was their second time visiting and 22 of the tourists stated that this was their third visit to the destination.

In terms of education levels, a large number of respondents hold a Diploma certification with a percentage of 43.3% (169 respondents). Next, respondents with Degree

or professional qualifications amounted to 126 respondents or 32.3%, followed by 66 respondents with high school or below qualifications and 9 respondents had postgraduate education (2.3%). However, there were 20 people or 5.1% of the total respondents who opted for "others" without a clear indication of their education background.

The respondent's monthly income ranged from less than RM1,500 to RM9,001 and above. Out of the 390 respondents, the majority earned between RM6,001 and RM7,500 (132 respondents or 33.8%). Predictively, this can be linked to the fact that many respondents were either a Diploma or Degree related profession holder. There were 79 respondents (20.3%) earning between RM4,501 and RM6,000. Furthermore, 56 respondents (14.4%) earned RM3,001 and RM4,500 per month, 50 respondents (12.8%) had a monthly salary of less than RM1,500, 40 respondents (10.3%) earned between RM7,501 and RM9,000 and 29 respondents (7.4%) earning between RM1,501 and RM3,000. The remaining four respondents (1.0%) were earning RM9,001 and above.

The standard deviation for respondents' age was 11.9 years, with a minimum age of 18 years old and the maximum age of 60 years old. In term of the destination visited, 96 respondents (24.6%) were visitors from Annah Rais Bidayuh Longhouse and 95 respondents (24.4%) were visitors from Bario Kelabit Highlands. Bawang Assan Homestay recorded a total number of 60 respondents (15.4%) whereas Rumah Benjamin Angki recorded a total number of 59 respondents (15.1%). Moreover, 40 of the respondents (10.3%) were the visitors who visited Kampung Po Ai Melugu and the remaining 40 respondents (10.3%) were the visitors from Ba'kelalan Homestay.

4.3 Common Method Variance (CMV)

To address the issue of Common Method Variance, there are several statistical techniques developed to control the effect of CMV in research design, such as Harman single-factor test and Market variance technique (Pavlou, Liang & Xue, 2007; Jarvenpaa & Majchrzak, 2008; Sharma, Philip & Crawford, 2009). In the present study, Harman's single-factor test was used to address the issue of CMV. SPSS 23.0 was used to perform Harman's single-factor test; all the measures are inserted into an exploratory factor analysis with the assumption that the first factor loading should not exceed 50% (Aulakh & Gencturk, 2000). The results (see Table 4.2) indicated that the first factor loading only accounted for 21.19%, which did not exceed 50%; thus it is deemed that the results were free from the method biases problem.

4.4 The Statistical Overview of the Variables

A preliminary analysis, or best known as data screening, was conducted prior to the measurement and structural model analyses to avoid the issue of missing values and straight lining. This was to ensure that the data was fit to proceed to the measurement test, followed by the structural analysis for hypotheses testing. First, the researcher ran the frequencies test with SPSS 23.0 via descriptive statistics analysis to check on any issues of missing values in the data set. The results indicated that the data was free from issues pertaining to missing value.

Next, a standard deviation was calculated to check the issue of straight lining. The standard deviation value of equal to 0 is considered to have issues of straight lining because the respondents answered the questionnaire with the same value throughout the whole set of

questionnaires. The results of standard deviation indicated that all values were above 0; thus the results showed that the data was free from the issue of straight lining.

Table 4.2: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	11.868	21.192	21.192	11.868	21.192	**21.192**
2	4.898	8.746	29.939	4.898	8.746	29.939
3	3.192	5.700	35.639	3.192	5.700	35.639
4	2.844	5.078	40.717	2.844	5.078	40.717
5	2.348	4.192	44.909	2.348	4.192	44.909
6	2.265	4.044	48.953	2.265	4.044	48.953
7	1.784	3.185	52.138	1.784	3.185	52.138
8	1.707	3.048	55.186	1.707	3.048	55.186
9	1.590	2.840	58.026	1.590	2.840	58.026
10	1.490	2.662	60.688	1.490	2.662	60.688
11	1.298	2.319	63.006	1.298	2.319	63.006
12	1.169	2.088	65.095	1.169	2.088	65.095
13	1.064	1.900	66.995	1.064	1.900	66.995
14	1.021	1.824	68.819	1.021	1.824	68.819
15	.916	1.635	70.453			
16	.870	1.554	72.007			
17	.849	1.517	73.524			
18	.799	1.427	74.951			
19	.766	1.368	76.318			
20	.701	1.251	77.569			
21	.673	1.202	78.771			
22	.664	1.185	79.957			
23	.620	1.107	81.064			
24	.609	1.087	82.151			
25	.587	1.049	83.199			
26	.550	.982	84.182			
27	.527	.942	85.123			
28	.503	.899	86.022			
29	.494	.882	86.904			
30	.478	.854	87.758			
31	.465	.830	88.588			
32	.436	.779	89.368			
33	.418	.746	90.113			
34	.409	.731	90.844			
35	.393	.703	91.546			
36	.375	.670	92.217			
37	.351	.626	92.843			
38	.334	.597	93.439			
39	.309	.552	93.992			
40	.293	.523	94.515			
41	.281	.502	95.018			
42	.272	.486	95.504			
43	.260	.464	95.968			
44	.253	.452	96.419			
45	.229	.410	96.829			
46	.225	.402	97.231			
47	.214	.381	97.612			
48	.201	.359	97.971			
49	.195	.348	98.318			
50	.172	.307	98.625			
51	.151	.270	98.895			
52	.144	.257	99.152			

Table 4.2 continued

53	.144	.257	99.409
54	.121	.216	99.624
55	.113	.202	99.827
56	.097	.173	100.000

Extraction Method: Principal Component Analysis.

On the other hand, the researcher also calculated the arithmetic mean (AM), or best known as mean or average, to check the central tendency of the data. It is to summarize the average responses responded by the respondents. Standard deviation values were also reported to monitor the dispersion of the data. Table 4.3 illustrates the results of the descriptive statistics, specifically on reporting the mean and standard deviation for each of the item.

The mean and standard deviation for this study were analysed based on 393 valid responses. All the independent variables, moderator and dependent variables are rated on a 7-point Likert scale. The findings demonstrated that the highest mean was in destination appeal 2 (DestAppeal_02), with 5.359, indicating that on average, the respondents rated 5.359 for destination appeal 2. The standard deviation of destination appeal 2 was 0.990, showing that only a few respondents had different opinions about the aspect of destination appeal 2.

Table 4.3: Mean and Standard Deviation

					Respondents (N = 390)
Item(s)	Mean	Standard Deviation	**Item(s)**	Mean	Standard Deviation
DestAppeal_01	5.228	0.989	**SustManage_01**	4.782	1.321
DestAppeal_02	5.362	0.991	**SustManage_02**	4.577	1.462
DestAppeal_03	5.354	1.067	**SustManage_03**	4.410	1.491

Table 4.3 continued

DestAppeal_04	5.392	0.933	**SustManage_04**	4.967	1.116
DestAppeal_05	5.277	1.037	**SustManage_05**	4.844	1.051
DestAppeal_06	5.128	1.063	**SustManage_06**	4.903	1.102
DestAppeal_07	5.144	1.042	**DME_01**	4.903	1.078
TouInfras_01	4.633	1.295	**DME_02**	4.564	0.946
TouInfras_02	4.726	1.219	**DME_03**	4.923	0.985
TouInfras_03	4.744	1.385	**DME_04**	4.982	1.084
TouInfras_04	4.510	1.381	**DME_05**	5.054	0.929
TouInfras_05	4.705	1.410	**C_CAdv_01**	5.108	0.993
TouInfras_06	4.613	1.456	**C_CAdv_03**	5.046	1.094
ServQual_01	4.562	1.345	**C_CAdv_04**	4.933	1.029
ServQual_02	5.013	1.060	**C_CAdv_05**	5.031	1.096
ServQual_03	4.910	1.080	**C_CAdv_06**	4.933	1.088
DestImage_05	5.292	1.112	**C_CAdv_07**	4.833	1.181
DestImage_06	4.831	0.995	**C_CAdv_08**	4.944	1.045
DestImage_07	4.985	0.898	**C_CAdv_10**	4.782	1.040
DestImage_08	5.144	0.875			
KnowSha_01	4.962	1.196			
KnowSha_02	4.639	1.322			
KnowSha_03	4.710	1.303			
KnowSha_04	4.556	1.259			
KnowSha_05	4.669	1.189			

Notes: Scale for independent variables, moderator and dependent variables used 1=Strongly Disagree to 7=Strongly Agree.

4.4.1 Assessment of the Measurement Model

The research model for the present study is shown in Figure 4.1, which demonstrates both the direct and moderating relationship among the proposed constructs. The model consists of four independent variables (destination appeal, tourism infrastructure, service quality and destination image), three constructs (sustainable management, destination marketing efforts, as well as comparative and competitive advantage) representing the main dependent variable of destination competitiveness and a moderator variable – knowledge sharing.

The Partial Least Square – Structural Equation Modeling (PLS-SEM) method was applied in this study because PLS-SEM modelling measures both the reflective and formative measurement models at once (Diamantopoulos & Winklhofer, 2001) and requires non-normal distributed data (Vinzi et al., 2010). The WarpPLS (version 6.0) (Kock, 2019) was adopted to perform the Partial Least Square – Structural Equation Modeling (PLS-SEM) analysis. The reason why WarpPLS software was adopted to perform the PLS-SEM analysis to assess the developed model is because WarpPLS provides both the classic PLS algorithms and factor-based PLS algorithms that generate estimates of both true composites and factors for SEM (Kock, 2017). The total row of data collected were about 393 (considered small) and the data is non-normal distributed. Thus, the PLS-SEM approach was used to perform the data analysis. Table 4.4 presents the Skewness and Excess Kurtosis of the data and the pattern of responses for skewness is +-1 and kurtosis of +-1, which are considered non-normal (Hair et al., 2017).

A confirmatory factor analysis (CFA) [Thurstone, 1931] was applied to assess the model developed (see Figure 4.1) to check on the reliability, convergent validity and discriminant validity of the scales. As was suggested by Chin (1998), the minimum outer loading for each of the items should be above 0.70 for it to be considered acceptable (Hair, William, Barry & Anderson, 2010). However, Henseler et al. (2009) confirmed that the minimum accepted value for item loading is between 0.40 and 0.70. As highlighted by Gefen et al. (2000), items loading should be above 0.50. Next, composite reliability (CR) was applied to assess the internal consistency of the construct. CR is deemed to be a better measure for internal consistency compared to Cronbach's alpha because it employs the standardized loadings of the manifest variables (Fornell & Larcker, 1981; Memon & Rahman, 2014). As suggested by Hair, Ringle and Sarstedt (2011), the minimum cut off point for CR should be 0.70 and above for it to be considered "modest". Lastly, the Average Variance Explained (AVE) was also applied to assess the constructs. The acceptance for AVE value is 0.5 and above (Bagozzi & Yi, 1988). Thus, in this research study, the criteria for the item loadings should be above 0.50, CR must exceed 0.70 and AVE of 0.50 and above is needed for the data to be considered acceptable. However, as suggested by Fornell and Larcker (1981), if the AVE value is below 0.50 but larger than 0.40, this would still be acceptable with the condition that the CR values must larger than 0.60.

This research followed the suggestion stated by Gefen et al. (2000), which is that items loading below 0.50 should be removed in order to ensure the internal consistency of the model is achieved before proceeding to the structural analysis. Based on the above criteria, the researcher evaluated the measurement model and a total of 12 items (i.e., ServQual_04, ServQual_05, DestImage_01, DestImage_02, DestImage_03, DestImage_04, C&CAdv_02, C&CAdv_09, C&CAdv_11, C&CAdv_12, C&CAdv_13 and C&CAdv_14)

were deleted due to low loading. Table 4.5 summarizes the first and final iterations only. The results on the first iteration were before deletion and the results for the final iterations were after deletion. Hence, the final iteration presents a better measurement model before proceeding to the assessment of the structural model.

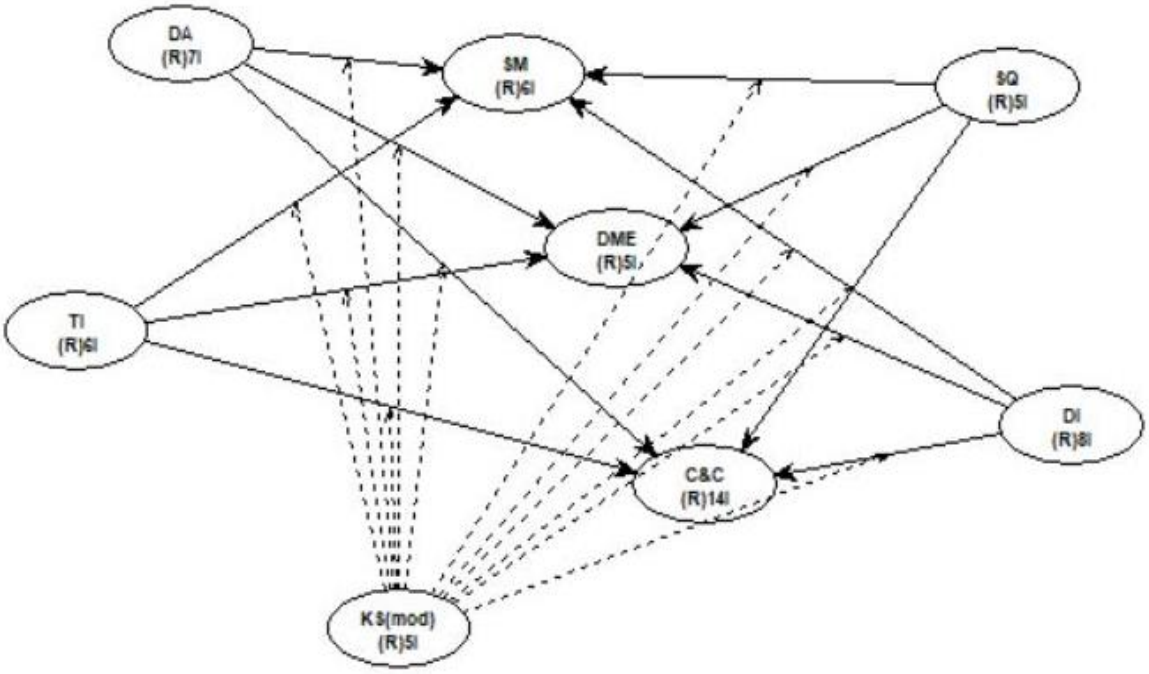


Figure 4.1: Research Model

Table 4.4: The Skewness and Excess Kurtosis

	DA	TI	SQ	DI	KS(Mod)	SM	DME	C&CAdv
Skewness	0.097	-0.700	-0.208	-0.086	-1.022	-0.946	-0.132	-0.181
Exc. kurtosis	-0.579	0.014	-0.162	0.087	1.426	0.836	0.535	0.123

Table 4.5: The Results of Measurement Model

Model Construct	Measurement Item	Loading	CR[a]	AVE[b]	Loading	CR[a]	AVE[b]
		First iteration			Final iteration		
Destination Appeal (DA)	DestAppeal_01	0.768	0.885	0.525	0.768	0.885	0.525
	DestAppeal_02	0.764			0.764		
	DestAppeal_03	0.689			0.689		
	DestAppeal_04	0.722			0.722		
	DestAppeal_05	0.799			0.799		
	DestAppeal_06	0.672			0.672		
	DestAppeal_07	0.645			0.645		
Tourism Infrastructure (TI)	TouInfras_01	0.764	0.938	0.717	0.764	0.938	0.717
	TouInfras_02	0.842			0.842		
	TouInfras_03	0.893			0.893		
	TouInfras_04	0.875			0.875		
	TouInfras_05	0.860			0.860		
	TouInfras_06	0.840			0.840		
Service Quality (SQ)	ServQual_01	0.746	0.792	0.458	0.767	0.873	0.697
	ServQual_02	0.785			0.844		
	ServQual_03	0.871			0.888		
	ServQual_04	0.283			Omitted		
	ServQual_05	0.529			Omitted		
Destination Image (DI)	DestImage_01	0.462	0.744	0.314	Omitted	0.853	0.593
	DestImage_02	0.177			Omitted		
	DestImage_03	0.158			Omitted		

Table 4.5 continued

	DestImage_04	0.252			Omitted		
	DestImage_05	0.728			0.710		
	DestImage_06	0.775			0.812		
	DestImage_07	0.788			0.840		
	DestImage_08	0.654			0.708		
Sustainable Management (SM)	SustManage_01	0.786	0.850	0.492	0.786	0.850	0.493
	SustManage_02	0.809			0.809		
	SustManage_03	0.823			0.823		
	SustManage_04	0.593			0.593		
	SustManage_05	0.533			0.533		
	SustManage_06	0.611			0.611		
Knowledge Sharing [KS(mod)]	KnowSha_01	0.800	0.909	0.667	0.800	0.909	0.667
	KnowSha_02	0.806			0.806		
	KnowSha_03	0.819			0.819		
	KnowSha_04	0.823			0.823		
	KnowSha_05	0.835			0.835		
Destination Marketing Efforts (DME)	DME_01	0.594	0.814	0.473	0.594	0.814	0.473
	DME_02	0.496			0.500		
	DME_03	0.755			0.755		
	DME_04	0.740			0.741		
	DME_05	0.800			0.800		
Comparative &	C_CAdv_01	0.650	0.840	0.327	0.651	0.899	0.530
	C_CAdv_02	0.296			Omitted		
	C_CAdv_03	0.771			0.768		

Table 4.5 continued

Competitive Advantage (C&C)	C_CAdv_04	0.759			0.780		
	C_CAdv_05	0.791			0.816		
	C_CAdv_06	0.714			0.735		
	C_CAdv_07	0.718			0.736		
	C_CAdv_08	0.734			0.741		
	C_CAdv_09	0.541			Omitted		
	C_CAdv_10	0.597			0.565		
	C_CAdv_11	0.148			Omitted		
	C_CAdv_12	0.083			Omitted		
	C_CAdv_13	0.118			Omitted		
	C_CAdv_14	0.122			Omitted		

Note: Items ServQual_04, ServQual_05, DestImage_01, DestImage_02, DestImage_03, DestImage_04, C&CAdv_02, C&CAdv_09, C&CAdv_11, C&CAdv_12, C&CAdv_13 and C&CAdv_14 were deleted due to low loadings.

4.4.1.1 Loading and Cross Loading

The items loading and cross loading were demonstrated to test the model's internal consistency (Chin, 2010; Lee & Chen, 2010). There are a few different recommendations for internal consistency and as was suggested by Anderson and Gerbing (1988), the internal consistency value should be greater than 0.50 (Bagozzi, Yi & Philipps, 1991), or greater than 0.60 (Chin, 1998; Hair et al., 2006), or even above 0.70 (Fornell & Larcker, 1981; Hulland, 1999). This study applied the recommendation by Bagozzi et al. (1991), in that the item loading value of 0.50 must be reached to achieve internal consistency. Table 4.6 shows the

loadings and cross loadings of the items by constructs. The values indicated that the internal consistency was achieved and the validity of the construct was confirmed.

Table 4.6: Loadings and Cross Loadings

	DA	TI	SQ	DI	KS(mod)	SM	DME	C&C
DestAppeal_01	**0.768**	0.006	0.076	0.023	-0.050	0.056	-0.145	0.055
DestAppeal_02	**0.764**	-0.114	0.244	0.054	0.040	0.001	-0.133	0.109
DestAppeal_03	**0.689**	0.100	0.112	0.020	0.028	-0.101	-0.228	0.051
DestAppeal_04	**0.722**	-0.134	0.147	0.084	0.094	-0.005	-0.215	0.083
DestAppeal_05	**0.799**	-0.036	-0.115	0.001	-0.013	0.079	0.012	-0.005
DestAppeal_06	**0.672**	0.088	-0.265	-0.136	-0.111	0.047	0.352	-0.184
DestAppeal_07	**0.645**	0.124	-0.246	-0.066	0.010	-0.100	0.431	-0.145
TouInfras_01	0.200	**0.764**	-0.106	0.006	0.042	-0.013	0.155	-0.203
TouInfras_02	-0.013	**0.842**	-0.121	0.079	0.005	-0.062	-0.032	-0.003
TouInfras_03	-0.041	**0.893**	0.135	0.037	0.014	-0.008	-0.158	0.035
TouInfras_04	-0.032	**0.875**	-0.064	-0.120	-0.013	0.046	0.002	0.025
TouInfras_05	-0.039	**0.860**	0.027	-0.004	-0.003	-0.055	-0.004	0.084
TouInfras_06	-0.052	**0.840**	0.113	0.004	-0.042	0.091	0.062	0.039
ServQual_01	0.024	0.410	**0.767**	-0.003	-0.029	0.271	0.140	-0.254
ServQual_02	-0.002	-0.178	**0.844**	-0.008	-0.005	-0.213	-0.072	0.140
ServQual_03	-0.019	-0.185	**0.888**	0.011	0.030	-0.031	-0.053	0.086
DestImage_05	-0.058	0.045	0.175	**0.710**	0.164	0.221	-0.107	-0.005
DestImage_06	-0.024	0.066	-0.030	**0.812**	-0.003	-0.143	0.095	-0.089
DestImage_07	-0.022	-0.105	-0.095	**0.840**	-0.071	-0.212	0.188	0.075
DestImage_08	0.113	0.004	-0.028	**0.708**	-0.076	0.193	-0.224	0.019
KnowSha_01	-0.033	-0.023	0.077	-0.010	**0.800**	-0.064	-0.036	0.071
KnowSha_02	-0.007	-0.042	-0.025	-0.041	**0.806**	0.054	0.008	-0.042
KnowSha_03	-0.029	0.068	-0.019	0.203	**0.819**	-0.004	-0.078	0.070

Table 4.6 continued

KnowSha_04	0.042	0.013	0.007	-0.046	**0.823**	-0.028	-0.019	-0.026
KnowSha_05	0.026	-0.018	-0.038	-0.103	**0.835**	0.041	0.123	-0.071
SustManage_01	-0.007	-0.002	0.207	0.024	0.032	**0.786**	-0.290	0.108
SustManage_02	0.062	-0.194	0.292	-0.049	-0.025	**0.809**	-0.254	-0.118
SustManage_03	0.097	-0.149	0.258	-0.029	0.014	**0.823**	-0.324	0.010
SustManage_04	0.159	-0.061	-0.033	0.214	0.069	**0.593**	-0.276	0.018
SustManage_05	-0.220	0.219	-0.486	-0.085	-0.033	**0.533**	0.734	0.053
SustManage_06	-0.168	0.328	-0.543	-0.060	-0.064	**0.611**	0.772	-0.058
DME_01	-0.177	0.245	-0.473	-0.125	-0.044	0.172	**0.594**	-0.009
DME_02	-0.130	0.257	-0.522	0.089	-0.162	-0.015	**0.500**	-0.338
DME_03	0.114	0.032	-0.221	-0.057	-0.034	0.268	**0.755**	-0.426
DME_04	0.029	-0.166	0.543	0.019	0.086	-0.216	**0.741**	0.317
DME_05	0.077	-0.214	0.375	0.073	0.085	-0.169	**0.807**	0.321
C_CAdv_01	0.091	-0.120	0.186	0.090	0.038	-0.076	0.344	**0.651**
C_CAdv_03	0.035	0.086	-0.085	0.012	-0.047	-0.102	0.027	**0.768**
C_CAdv_04	0.022	0.066	-0.104	-0.024	-0.038	-0.020	-0.069	**0.780**
C_CAdv_05	-0.054	0.004	0.088	-0.063	0.042	0.026	-0.004	**0.816**
C_CAdv_06	-0.084	-0.062	-0.038	0.054	-0.043	0.051	-0.143	**0.735**
C_CAdv_07	0.060	0.066	-0.077	-0.026	0.008	0.210	-0.078	**0.736**
C_CAdv_08	0.009	-0.083	0.198	-0.004	0.008	-0.094	-0.195	**0.741**
C_CAdv_10	-0.086	0.027	-0.191	-0.028	0.046	-0.001	0.210	**0.565**

Note:

DA = Destination Appeal

TI = Tourism Infrastructure

SQ = Service Quality

DI = Destination Image

SM = Sustainable Management

KS(mod) = Knowledge Sharing

DME = Destination Marketing Efforts

C&C = Comparative & Competitive Advantage

4.4.1.2 Convergent Validity

Both composite reliability (CR) and average variance extracted (AVE) were used to test the validity of the constructs in the proposed research model. The results are presented in Table 4.5 (the final iteration). The minimum values of AVE and CR need to be 0.50 (Fornell & Larcker, 1981; Bagozi & Yi, 1998; Rodgers & Pavlou, 2003) and 0.70 (Churchill, 1979; Chin, 2010) respectively to achieve convergent validity. It is important to achieve the minimum value of 0.50 and above for AVE because it indicates that the average for the total items explains a minimum 50% of a construct. However, as suggested by Fornell and Larcker (1981), if the AVE value is below 0.50 but larger than 0.40, this is still acceptable with the condition that the CR values must be larger than 0.60.

The AVE value for destination appeal was 0.525, tourism infrastructure was 0.717, service quality was 0.697, destination image was 0.593, sustainable management was 0.493, knowledge sharing was 0.667, destination marketing efforts was 0.473, as well as comparative and competitive advantage was 0.530. Although the AVE values for sustainable management and destination marketing efforts were below 0.50, however they were larger than 0.40, which is considered acceptable because the CR values were larger than 0.60. As suggested by Fornell and Larcker (1981), if the AVE values were below 0.5, but larger than 0.4, this would still be acceptable with the condition that the CR values were larger than 0.6. In terms of composite reliability, the value for destination appeal was 0.885, tourism infrastructure was 0.938, service quality was 0.873, destination image was 0.853, sustainable management was 0.850, knowledge sharing was 0.909, destination marketing efforts was 0.814, as well as comparative and competitive advantage was 0.899. In sum, all the CR and AVE values for each of the construct have achieved a satisfactory level and meets with the

suggested minimum requirements; thus the variables were validated and the convergent validity was satisfied.

4.4.1.3 t-Value

Table 4.7 shows the summary results of the t-value for constructs. The purpose of reporting the t-values of each construct is to measure the significance of each variable (Komiak & Benbasat, 2006).

Table 4.7: Summary Results of the Model Constructs

Model Construct	**Measurement Item**	**Standardized Estimate**	***t*-value**
Destination Appeal	DestAppeal_01	0.768	16.864
	DestAppeal_02	0.764	16.754
	DestAppeal_03	0.689	14.963
	DestAppeal_04	0.722	15.757
	DestAppeal_05	0.799	17.606
	DestAppeal_06	0.672	14.566
	DestAppeal_07	0.645	13.922
Tourism Infrastructure	TouInfras_01	0.764	16.753
	TouInfras_02	0.842	18.664
	TouInfras_03	0.893	19.945
	TouInfras_04	0.875	19.493
	TouInfras_05	0.860	19.130
	TouInfras_06	0.840	18.611

Table 4.7 continued

Service Quality	ServQual_01	0.767	16.841
	ServQual_02	0.844	18.724
	ServQual_03	0.888	19.820
Destination Image	DestImage_05	0.710	15.457
	DestImage_06	0.812	17.934
	DestImage_07	0.840	18.623
	DestImage_08	0.708	15.415
Sustainable Management	SustManage_01	0.786	17.285
	SustManage_02	0.809	17.865
	SustManage_03	0.823	18.209
	SustManage_04	0.593	12.710
	SustManage_05	0.533	11.335
	SustManage_06	0.611	13.129
Knowledge Sharing	KnowSha_01	0.800	17.627
	KnowSha_02	0.806	17.774
	KnowSha_03	0.819	18.098
	KnowSha_04	0.823	18.211
	KnowSha_05	0.835	18.503
Destination Marketing Efforts	DME_01	0.594	12.729
	DME_02	0.500	10.403
	DME_03	0.755	16.543
	DME_04	0.741	16.211
	DME_05	0.800	17.820

Table 4.7 continued

Comparative & Competitive Advantage	C_CAdv_01	0.651	14.067
	C_CAdv_03	0.768	16.868
	C_CAdv_04	0.780	17.149
	C_CAdv_05	0.816	18.035
	C_CAdv_06	0.735	16.068
	C_CAdv_07	0.736	16.082
	C_CAdv_08	0.741	16.213
	C_CAdv_10	0.565	12.066

4.4.1.4 Discriminant Validity

To test the discriminant validity, the values of AVE were square rooted and tested against the intercorrelations of the construct with other constructs in the research model (Komiak & Benbasat, 2006; Chin, 2010). The results a presented in Table 4.8, shows that the values should be greater than each of the construct correlations (Fornell & Larcker, 1981; Fornell & Bookstein, 1982; Chin, 2010). The square root of AVE for destination appeal was 0.725, tourism infrastructure was 0.847, service quality was 0.835, destination image was 0.770, sustainable management was 0.817, knowledge sharing was 0.702, destination marketing efforts was 0.688, as well as comparative and competitive advantage was 0.728. Overall, all the square root of AVE values exceeded the correlations with other variables; hence, the discriminant validity was achieved.

Table 4.8: Discriminant Validity of Constructs

	DA	TI	SQ	DI	SM	KS(mod)	DME	C&C
DA	**0.725**	0.273	0.259	-0.036	-0.121	0.084	0.331	0.468
TI	0.273	**0.847**	0.650	0.208	0.118	0.579	0.475	0.491
SQ	0.259	0.650	**0.835**	0.284	0.070	0.561	0.639	0.489
DI	-0.036	0.208	0.284	**0.770**	0.093	0.379	0.266	0.161
SM	-0.121	0.118	0.070	0.093	**0.817**	0.151	0.057	0.060
KS(mod)	0.084	0.579	0.561	0.379	0.151	**0.702**	0.556	0.511
DME	0.331	0.475	0.639	0.266	0.057	0.556	**0.688**	0.542
C&C	0.468	0.491	0.489	0.161	0.060	0.511	0.542	**0.728**

Note: Diagnosals represent the square root of the average variance extracted (AVE) while the other entries represent the correlation.

DA = Destination Appeal
TI = Tourism Infrastructure
SQ = Service Quality
DI = Destination Image
SM = Sustainable Management
KS(mod) = Knowledge Sharing
DME = Destination Marketing Efforts
C&C = Comparative & Competitive Advantage

4.4.1.5 Reliability Test

A reliability test was conducted to validate the reliability of the study constructs. Cronbach's alpha was used to validate the reliability of the constructs. The minimum cut off point for Cronbach's alpha is 0.70 (Cronbach, 1951; Nunally, 1978). The Cronbach's alpha values were presented in Table 4.9. The value for destination appeal was 0.848, tourism infrastructure was 0.920, service quality was 0.780, destination image was 0.768, sustainable management was 0.787, knowledge sharing was 0.875, destination marketing efforts was

0.712, as well as comparative and competitive advantage was 0.871. Overall, all the constructs exceeded the recommended cut off point of 0.70.

Table 4.9: Results of the Reliability Test

Model Construct	Measurement Item	Cronbach' alpha	Loading range	Number of Items
Destination Appeal	DestAppeal_01 DestAppeal_02 DestAppeal_03 DestAppeal_04 DestAppeal_05 DestAppeal_06 DestAppeal_07	0.848	0.645 – 0.799	7(7)
Tourism Infrastructure	TouInfras_01 TouInfras_02 TouInfras_03 TouInfras_04 TouInfras_05 TouInfras_06	0.920	0.764 – 0.893	6(6)
Service Quality	ServQual_01 ServQual_02 ServQual_03	0.780	0.769 – 0.884	3(5)
Destination Image	DestImage_05 DestImage_06 DestImage_07 DestImage_08	0.768	0.767 – 0.888	4(8)

Table 4.9 continued

Sustainable Management	SustManage_01 SustManage_02 SustManage_03 SustManage_04 SustManage_05 SustManage_06	0.787	0.533 – 0.823	6(6)
Knowledge Sharing	KnowSha_01 KnowSha_02 KnowSha_03 KnowSha_04 KnowSha_05	0.875	0.800 – 0.835	5(5)
Destination Marketing Efforts	DME_01 DME_02 DME_03 DME_04 DME_05	0.712	0.500 – 0.800	5(5)
Comparative & Competitive Advantage	C_CAdv_01 C_CAdv_03 C_CAdv_04 C_CAdv_05 C_CAdv_06 C_CAdv_07 C_CAdv_08 C_CAdv_10	0.871	0.565 – 0.816	8(14)

*Final items numbers (initial numbers)

4.4.1.6 Coefficient of Determination (R^2)

The coefficient of determination (R^2) was reported in this study, with the purpose of measuring if the existence of the model was either substantial, moderate, or weak in predicting the approximate real data points (Cohen, 1988; Hair et al., 2012). The R^2 value for sustainable management was 0.408 (moderate), destination marketing efforts was 0.474 (moderate), as well as comparative and competitive advantage was 0.424 (moderate). Table 4.10 shows the R^2 values for each of the dependent variables.

Table 4.10: The R^2 Values (R-squared)

Construct(s)	R-squared value
Sustainable Management	0.408
Destination Marketing Efforts	0.474
Comparative and Competitive Advantage	0.424

4.4.1.7 Predictive Relevance (Q^2)

The Q^2 values for the dependent variables were reported to explain the predictive relevance of the data. The requirement for Q^2 should be above zero value (Hair et al., 2016). Here, all the Q^2 values met the requirement, in which the Q^2 value for sustainable management was 0.485, destination marketing efforts was 0.531, as well as comparative and competitive advantage was 0.442. Table 4.11 shows the Q^2 values for each of the dependent variables.

Table 4.11: The Q^2 Values (Q-squared)

Dependent Variable(s)	Q-squared value
Sustainable Management	0.485
Destination Marketing Efforts	0.531
Comparative & Competitive Advantage	0.442

4.5 Assessment of the Structural Model

Based on the research model developed, a total of 12 directional hypotheses and 12 moderation hypotheses were developed. The findings from the hypotheses testing were presented in the following sections.

4.5.1 Hypothesis Testing

In the previous section, a confirmatory factor analysis was conducted to validate the reliability, convergent validity and discriminant validity of the measurement model. The results showed that it achieved satisfactory levels and the data was adequate to proceed for structural analyses or hypotheses testing.

There are several methods available to test the hypotheses developed. This includes R^2 to explain the exogenous-endogenous relationships and average variance accounted (AVA) in the model, regression weights, bootstrap critical ratios (t-values) and p-value statistics (Fornell & Larcker, 1981; O'Cass, 2002; Cramer & Howitt, 2004). In this research, R^2, t-values and p-values statistics were used and reported for the hypotheses testing. In general, for one-tailed hypothesis testing, a hypothesis is supported if the p-value statistics is < 0.05 when t value > 1.645 or p-value is < 0.01 when t-value > 2.33 (Nunally, 1978;

Chin, 1998; O'Cass & Grace, 2003; Gelman, 2012) with the individual R^2 greater than 0.10 (10 percent) [Falk & Miller, 1992].

In addition, effect size (f^2) was also calculated and reported in the following sections. The purpose of reporting on the effect size was to measure the strength of each independent variable in explaining the dependent variable (Chin, 1998). The criteria for effect size values were 0.02, 0.15 and 0.35 which were considered small, medium and large effects respectively (Cohen, 1988, Henseler et al., 2009; Kura, 2016). As highlighted by Hair et al. (2017), it is relatively important to report both the effect size and t-values for hypothesis testing, because it needs to be shown that you have statistically proven the relationship between two variables that are significantly related and at the same time the effect must be at least 0.02 and above to avoid meaningless effect of your findings.

Lastly, the variation inflation factor (VIF) values were also reported to check whether there was the existence of multicollinearity issue among the constructs. It was observed that the VIF value must be less than 10 (Bock et al., 2005).

4.5.2 Findings of Hypothesis Testing

Table 4.12 presents the results of the hypotheses testing and Figure 4.2 shows the research model with path coefficient, t-values and p-values statistics.

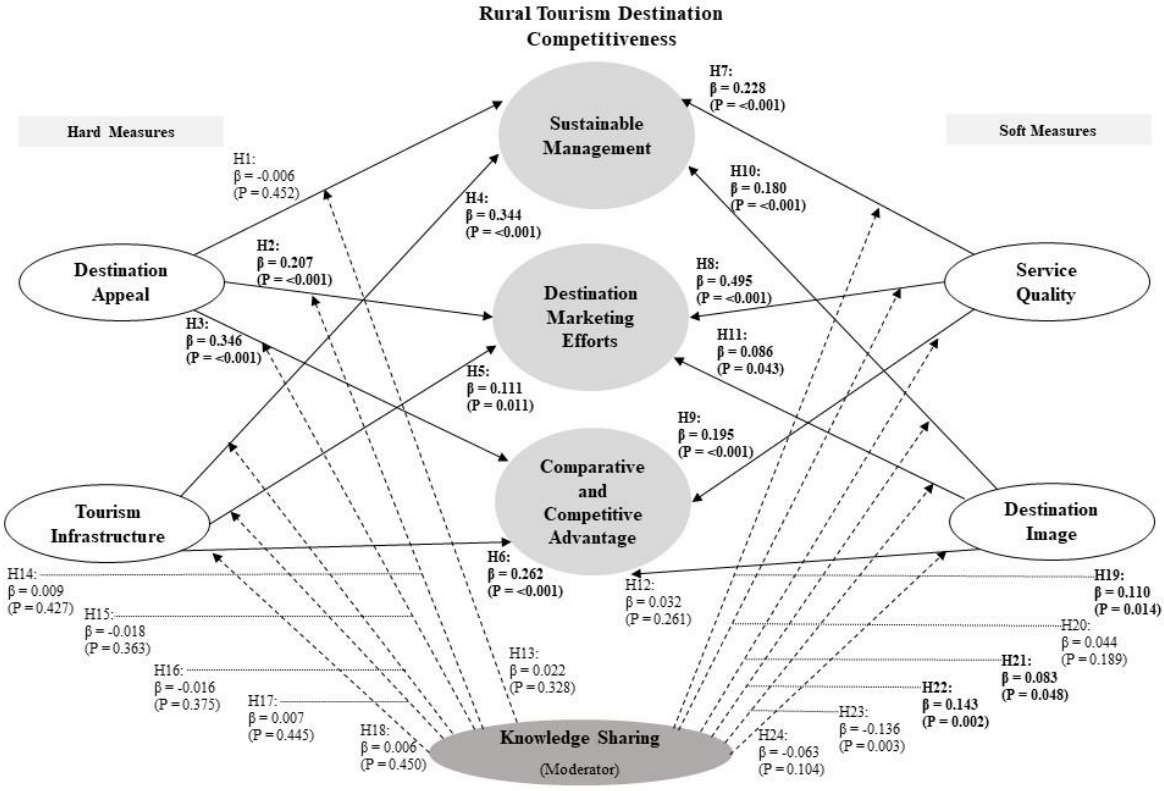


Figure 4.2: Research Model with Path Coefficient and P-values

Table 4.12: Path Coefficients and Hypotheses Testing

H	Relationship	Standard Beta	P-value	t-value	Decision	VIF	f^2
H1	Destination Appeal → Sustainable Management	-0.006	0.452	-0.121	Not Supported	1.089	0.001
H2	Destination Appeal → Destination Marketing Efforts	0.207	**<0.001**	**4.211****	**Supported**	1.190	0.084

Table 4.12 continued

H3	Destination Appeal → Comparative & Competitive Advantage	0.346	**<0.001**	**7.173****	**Supported**	1.195	0.175
H4	Tourism Infrastructure → Sustainable Management	0.344	**<0.001**	**7.121****	**Supported**	2.230	0.204
H5	Tourism Infrastructure → Destination Marketing Efforts	0.111	**0.013**	**2.234***	**Supported**	1.766	0.054
H6	Tourism Infrastructure → Comparative & Competitive Advantage	0.262	**<0.001**	**5.366****	**Supported**	1.706	0.138
H7	Service Quality → Sustainable Management	0.228	**<0.001**	**4.654****	**Supported**	2.232	0.131

Table 4.12 continued

H8	Service Quality → Destination Marketing Efforts	0.495	**<0.001**	**10.475****	**Supported**	1.675	0.329
H9	Service Quality → Comparative & Competitive Advantage	0.195	**<0.001**	**3.962****	**Supported**	1.731	0.096
H10	Destination Image → Sustainable Management	0.180	**<0.001**	**3.647****	**Supported**	1.164	0.069
H11	Destination Image → Destination Marketing Efforts	0.086	**0.043**	**1.717***	**Supported**	1.238	0.024
H12	Destination Image → Comparative & Competitive Advantage	0.032	0.261	0.641	Not Supported	1.144	0.005

Table 4.12 continued

H13	Knowledge Sharing moderates Destination Appeal → Sustainable Management	0.022	0.328	0.445	Not Supported	1.657	0.004
H14	Knowledge Sharing moderates Destination Appeal → Destination Marketing Efforts	0.009	0.427	0.184	Not Supported	1.088	0.001
H15	Knowledge Sharing moderates Destination Appeal → Comparative & Competitive Advantage	-0.018	0.363	-0.352	Not Supported	1.128	0.002

Table 4.12 continued

H16	Knowledge Sharing moderates Tourism Infrastructure → Sustainable Management	-0.016	0.375	-0.318	Not Supported	2.448	0.006
H17	Knowledge Sharing moderates Tourism Infrastructure → Destination Marketing Efforts	0.007	0.445	0.138	Not Supported	1.612	0.001
H18	Knowledge Sharing moderates Tourism Infrastructure → Comparative & Competitive Advantage	0.006	0.450	0.125	Not Supported	1.691	0.001

Table 4.12 continued

H19	Knowledge Sharing moderates Service Quality → Sustainable Management	0.110	**0.014**	**2.214***	**Supported**	2.012	0.043
H20	Knowledge Sharing moderates Service Quality → Destination Marketing Efforts	0.044	0.189	0.884	Not Supported	1.788	0.010
H21	Knowledge Sharing moderates Service Quality → Comparative & Competitive Advantage	0.083	**0.048**	**1.665***	**Supported**	1.793	0.017

Table 4.12 continued

H22	Knowledge Sharing moderates Destination Image → Sustainable Management	0.143	**0.002**	**2.875****	**Supported**	1.429	0.038
H23	Knowledge Sharing moderates Destination Image → Destination Marketing Efforts	-0.136	0.003	-2.746	Not Supported	1.434	0.029
H24	Knowledge Sharing moderates Destination Image → Comparative & Competitive Advantage	-0.063	0.104	-1.260	Not Supported	1.248	0.006

Note: $p < 0.01$** = $t > 2.33$; $p < 0.05$ = $t > 1.645$* (H = Hypothesis)

4.5.2.1 Destination Appeal to Sustainable Management

Hypothesis 1 examines the relationship between destination appeal and sustainable management. Contrary to expectations, the empirical results revealed that destination appeal

had no significant impact on sustainable management (β = -0.006; p = 0.452; t = -0.121) and thus H1 was not supported. The effect size and variation inflation factor (VIF) values for H1 were 0.001 and 1.089, respectively.

4.5.2.2 Destination Appeal to Destination Marketing Efforts

Hypothesis 2 investigated the direct impact of destination appeal on destination marketing efforts. The results demonstrated that destination appeal had a significant impact on destination marketing efforts (β = 0.207; $p < 0.001$; t = 4.211); hence, H2 was supported. The effect size and variation inflation factor (VIF) values for H2 were 0.084 and 1.190, respectively.

4.5.2.3 Destination Appeal to Comparative and Competitive Advantage

Hypothesis 3 examined the relationship between destination appeal as well as comparative and competitive advantage. The results demonstrated that destination appeal had a significant impact on comparative and competitive advantage (β = 0.346; $p < 0.001$; t = 7.173); thus H3 was supported. The effect size and variation inflation factor (VIF) values for H3 were 0.175 and 1.195, respectively.

4.5.2.4 Tourism Infrastructure to Sustainable Management

The relationship between tourism infrastructure and sustainable management was investigated under hypothesis 4. As expected, the empirical results showed that tourism infrastructure had a significant impact on sustainable management (β = 0.344; $p < 0.001$; t = 7.121) and thus hypothesis 4 was supported. The effect size value and variation inflation factor (VIF) values for H4 were 0.204 and 2.230, respectively.

4.5.2.5 Tourism Infrastructure to Destination Marketing Efforts

Hypothesis 5 tested the direct impact of tourism infrastructure on destination marketing efforts. The results demonstrated that tourism infrastructure had a significant impact on destination marketing efforts (β = 0.111; p = 0.013; t = 2.234) and H5 was supported. The effect size value and variation inflation factor (VIF) values for H5 were 0.054 and 1.766, respectively.

4.5.2.6 Tourism Infrastructure to Comparative and Competitive Advantage

Hypothesis 6 examined the direct impact of tourism infrastructure on comparative and competitive advantage. Interestingly, the empirical results showed that tourism infrastructure had a significant impact on comparative and competitive advantage (β = 0.262; p < 0.001; t = 5.366) and H6 was supported. The effect size value and variation inflation factor (VIF) values for H6 were 0.138 and 1.706, respectively.

4.5.2.7 Service Quality to Sustainable Management

Hypothesis 7 investigated the direct impact of service quality on sustainable management. As expected, the statistical results for this hypothesis indicated that service quality had a significant impact on sustainable management (β = 0.228; p < 0.001; t = 4.654), supporting H7. The effect size value and variation inflation factor (VIF) values for H7 were 0.131 and 2.232, respectively.

4.5.2.8 Service Quality to Destination Marketing Efforts

Hypothesis 8 examines the relationship between service quality and destination marketing efforts. As expected, the empirical results showed that service quality had a significant impact on destination marketing efforts (β = 0.495; p < 0.001; t = 10.475) and H8

was supported. The effect size value and variation inflation factor (VIF) values for H8 were 0.329 and 1.675, respectively.

4.5.2.9 Service Quality to Comparative and Competitive Advantage

Hypothesis 9 investigated the relationship between service quality as well as comparative and competitive advantage. As predicted, the empirical results showed that service quality had a significant impact on comparative and competitive advantage (β = 0.195; $p < 0.001$; $t = 3.962$) and thus H9 was supported. The effect size value and variation inflation factor (VIF) values for H8 were 0.096 and 1.731, respectively.

4.5.2.10 Destination Image to Sustainable Management

Hypothesis 10 investigated the direct impact of destination image on sustainable management. As expected, the statistical results for this hypothesis indicated that destination image had a significant impact on sustainable management ($\beta = 0.180$; $p < 0.001$; $t = 3.647$) and H10 was supported. The effect size value and variation inflation factor (VIF) values for H8 were 0.024 and 1.238, respectively.

4.5.2.11 Destination Image to Destination Marketing Efforts

Hypothesis 11 examines the relationship between destination image and destination marketing efforts. As expected, the empirical results showed that destination image had a significant impact on destination marketing efforts ($\beta = 0.086$; $p = 0.043$; $t = 1.717$) and H11 was supported. The effect size value and variation inflation factor (VIF) values for H11 were 0.024 and 1.238, respectively.

4.5.2.12 Destination Image to Comparative and Competitive Advantage

Hypothesis 12 investigated the relationship between destination image as well as comparative and competitive advantage. Contrary to expectations, the empirical results revealed that destination image had no significant impact on comparative and competitive advantage (β = 0.032; *p* = 0.261; *t* = 0.641) and thus H12 was not supported. The effect size and variation inflation factor (VIF) values for H12 were 0.005 and 1.144, respectively.

4.5.2.13 Knowledge Sharing Moderates Destination Appeal and Sustainable Management

Hypothesis 13 examined the moderating impact of knowledge sharing on destination appeal and sustainable management. A somewhat surprising result was disclosed by the path coefficients, in that knowledge sharing had no significant impact in moderating destination appeal on sustainable management (β = 0.022; *p* = 0.328; *t* = 0.445) and thus H13 was not supported. The effect size and variation inflation factor (VIF) values for H13 were 0.004 and 1.657, respectively.

4.5.2.14 Knowledge Sharing Moderates Destination Appeal and Destination Marketing Efforts

Hypothesis 14 examined the moderating impact of knowledge sharing on destination appeal and destination marketing effects. Another unexpected result occurred as the statistical analysis conducted for this hypothesis indicated that knowledge sharing had no significant impact in moderating destination appeal and destination marketing efforts (β = -0.009; *p* = 0.427; *t* = 0.184) and thus H14 was not supported. The effect size and variation inflation factor (VIF) values for H14 were 0.001 and 1.088, respectively.

4.5.2.15 Knowledge Sharing Moderates Destination Appeal as well as Comparative and Competitive Advantage

Hypothesis 15 examined the moderating impact of knowledge sharing on destination appeal as well as comparative and competitive advantage. Contrary to expectations, the statistical results showed that knowledge sharing had no significant moderating impact on destination appeal as well as comparative and competitive advantage (β = -0.018; p = 0.363; t = -0.352); thus H15 was not supported. The effect size and variation inflation factor (VIF) values for H15 were 0.002 and 1.128, respectively.

4.5.2.16 Knowledge Sharing Moderates Tourism Infrastructure and Sustainable Management

Hypothesis 16 examined the moderating impact of knowledge sharing on tourism infrastructure and sustainable management. Contrary to expectations, the empirical results revealed that knowledge sharing had no moderating impact on tourism infrastructure and sustainable management (β = -0.016; p = 0.375; t = -0.318); thus H16 was not supported. The effect size and variation inflation factor (VIF) values for H12 were 0.006 and 2.448, respectively.

4.5.2.17 Knowledge Sharing Moderates Tourism Infrastructure and Destination Marketing Efforts

Hypothesis 17 examined the moderating impact of knowledge sharing on tourism infrastructure and destination marketing efforts. Contrary to expectations, the results showed that knowledge sharing had no significant moderating impact on tourism infrastructure and destination marketing efforts (β = 0.007; p = 0.445; t = 0.138) and thus H17 was not supported. The effect size and variation inflation factor (VIF) values for H17 were 0.001 and 1.612, respectively.

4.5.2.18 Knowledge Sharing Moderates Tourism Infrastructure as well as Comparative and Competitive Advantage

Hypothesis 18 examined the moderating impact of knowledge sharing on tourism infrastructure as well as comparative and competitive advantage. Another unexpected result occurred as the statistical analysis conducted for this hypothesis indicated that knowledge sharing had no significant impact in moderating tourism infrastructure as well as comparative and competitive advantage ($\beta = 0.006$; $p = 0.450$; $t = 0.125$) and thus H18 was not supported. The effect size and variation inflation factor (VIF) values for H18 were 0.001 and 1.691, respectively.

4.5.2.19 Knowledge Sharing Moderates Service Quality and Sustainable Management

Hypothesis 19 examined the moderating impact of knowledge sharing on service quality and sustainable management. Interestingly, the empirical results showed that knowledge sharing moderated the relationship between service quality and sustainable management ($\beta = 0.110$; $p = 0.014$; $t = 2.214$) and thus H19 was supported. The effect size and variation inflation factor (VIF) values for H19 were 0.043 and 2.012, respectively. Figure 4.3 shows the smooth 3D graph on the moderating effect. The statistical results showed that when knowledge sharing is high, the relationship between service quality and sustainable management is strengthened.

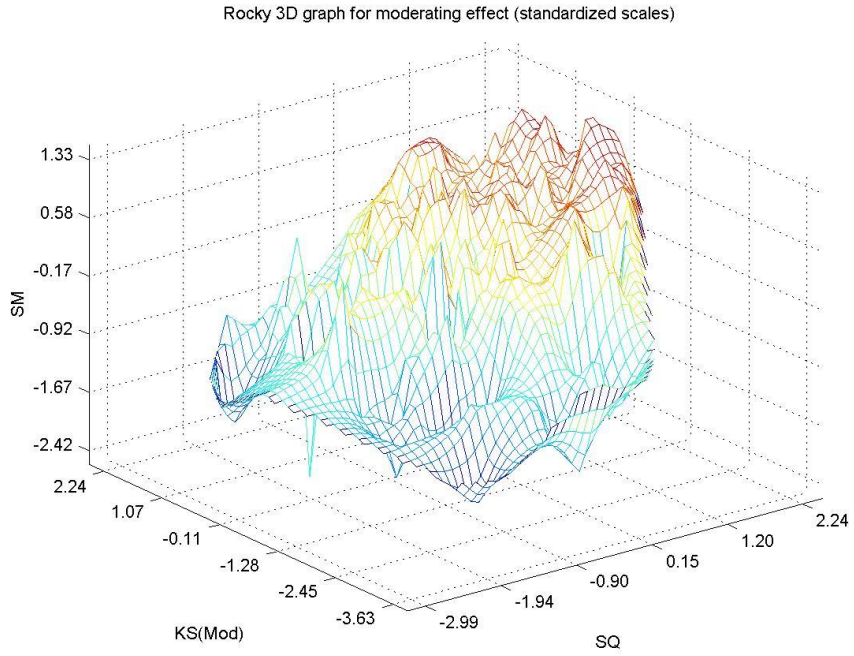


Figure 4.3: 3D Graph for Moderating Effect for H19 (SQ*KS*SM)

4.5.2.20 Knowledge Sharing Moderates Service Quality and Destination Marketing Efforts

Hypothesis 20 examined the moderating impact of knowledge sharing on service quality and destination marketing efforts. Contrary to expectations, the results showed that knowledge sharing had no significant moderating impact on service quality and destination marketing efforts (β = 0.044; p = 0.189; t = 0.884) and thus H20 was not supported. The effect size and variation inflation factor (VIF) values for H20 were 0.010 and 1.788, respectively.

4.5.2.21 Knowledge Sharing Moderates Service Quality as well as Comparative and Competitive Advantage

Hypothesis 21 examined the moderating impact of knowledge sharing on service quality as well as comparative and competitive advantage. Interestingly, the empirical results showed that knowledge sharing moderated the relationship between service quality as well

as comparative and competitive advantage (β = 0.083; *p* = 0.048; *t* = 1.665) and thus H21 was supported. The effect size and variation inflation factor (VIF) values for H21 were 0.017 and 1.793, respectively. Figure 4.4 shows the smooth 3D graph on the moderating effect. The statistical results showed that when knowledge sharing is high, the relationship between service quality and comparative & competitive is strengthened.

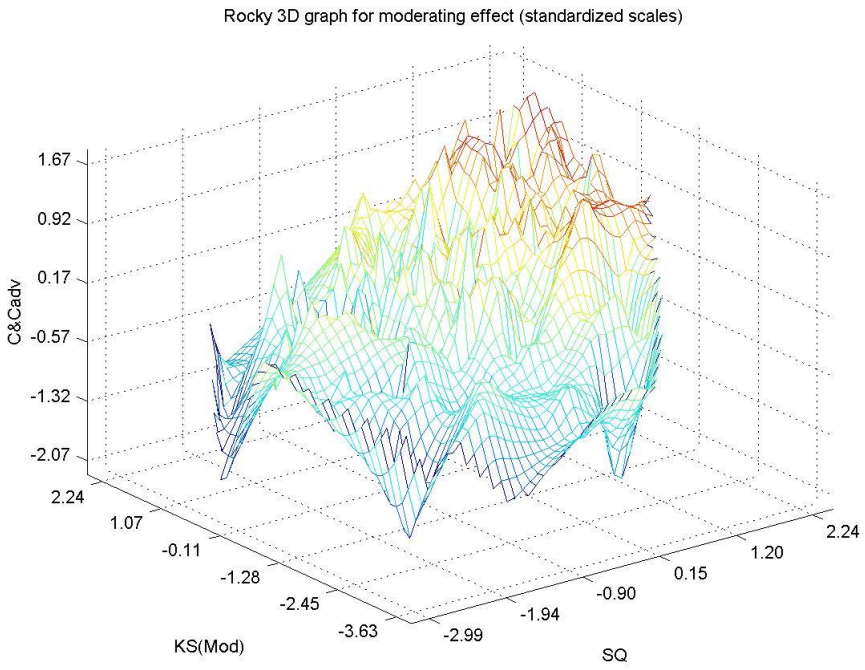


Figure 4.4: 3D Graph for Moderating Effect for H21 (SQ*KS*C&CAdv)

4.5.2.22 Knowledge Sharing Moderates Destination Image and Sustainable Management

Hypothesis 22 examined the moderating impact of knowledge sharing on destination image and sustainable management. Interestingly, the empirical results showed that knowledge sharing moderated the relationship between destination image and sustainable management (β = 0.143; *p* = 0.002; *t* = 2.875) and thus H22 was supported. The effect size and variation inflation factor (VIF) values for H22 were 0.038 and 1.429, respectively. Figure 4.5 shows the smooth 3D graph on the moderating effect. The statistical results

showed that when knowledge sharing is high, the relationship between destination image and sustainable management is strengthened.

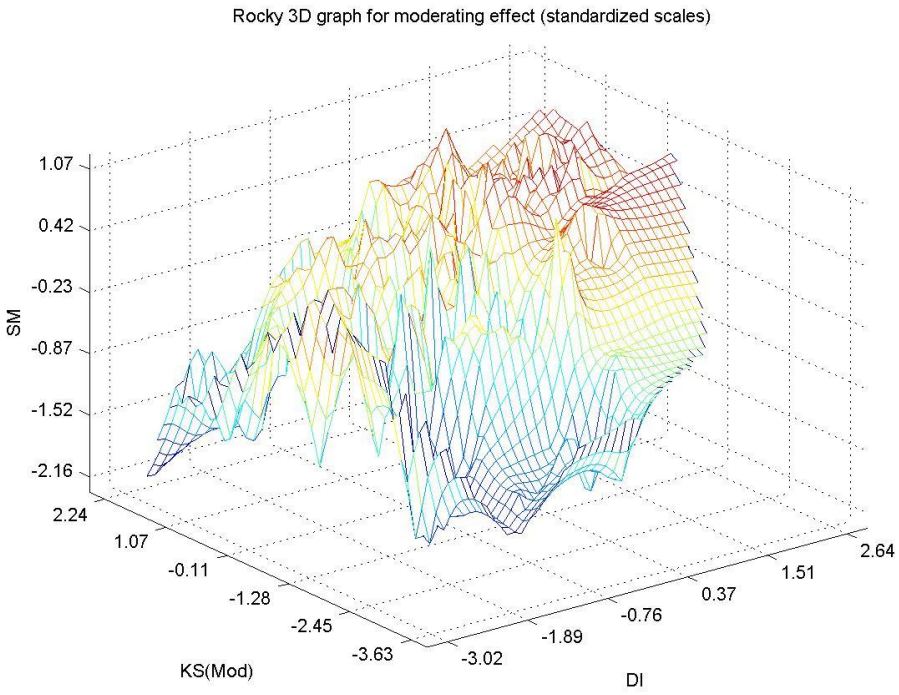


Figure 4.5: 3D Graph for Moderating Effect for H22 (DI*KS*SM)

4.5.2.23 Knowledge Sharing Moderates Destination Image and Destination Marketing Efforts

Hypothesis 23 examined the moderating impact of knowledge sharing on destination image and destination marketing efforts. Contrary to expectations, the results showed that knowledge sharing had no significant moderating impact on destination image and destination marketing efforts (β = -0.136; p = 0.003; t = -2.746) and thus H23 was not supported. The effect size and variation inflation factor (VIF) values for H23 were 0.029 and 1.434, respectively.

4.5.2.24 Knowledge Sharing Moderates Destination Image as well as Comparative and Competitive Advantage

Hypothesis 24 examined the moderating impact of knowledge sharing on destination image as well as comparative and competitive advantage. Surprisingly, the results showed that knowledge sharing had no significant moderating impact on destination image as well as comparative and competitive advantage (β = -0.063; p = 0.104; t = -1.260) and thus H24 was not supported. The effect size and variation inflation factor (VIF) values for H24 were 0.006 and 1.248, respectively.

4.5 Summary

In short, this study showed satisfactory evidence of reliability, convergent validity and discriminant validity for hypotheses testing. The findings of the hypotheses testing revealed that 13 hypotheses were supported, namely, H2, H3, H4, H5, H6, H7, H8, H9, H10, H11, H19, H21 and H22, whereas H1, H12, H13, H14, H15, H16, H17, H18, H20, H23 and H24 were not supported. The next chapter discusses the results of hypotheses tested.

CHAPTER 5

DISCUSSION AND CONCLUSION

5.1 Introduction

In the present study, the results of the analyses were reported in the previous chapter. The current chapter summarises the research objectives and research questions, as well as the discusses and justifies findings of the research. Next, both the theoretical and practical implications of the research are highlighted in this chapter. The current chapter also outlines the limitations and recommendations for future research.

5.2 The Backdrop

The current study investigated the impact of both hard measures (destination appeal and tourism infrastructure) and soft measures (service quality and destination image) on rural tourism destination competitiveness (i.e., sustainable management, destination marketing efforts, as well as comparative and competitive advantage) in rural areas of Sarawak, Malaysia. There were five main objectives in this study. The first objective was to investigate the relationships between destination appeal and destination competitiveness (i.e., sustainable management, destination marketing efforts, as well as comparative and competitive advantage) in rural areas of Sarawak. The second aim of this study was to examine the relationship between tourism infrastructure and destination competitiveness (i.e., sustainable management, destination marketing efforts, as well as comparative and competitive advantage) in rural areas of Sarawak.

The third objective was to explore the relationship between service quality and destination competitiveness (i.e., sustainable management, destination marketing efforts, as

well as comparative and competitive advantage) in rural areas of Sarawak. The fourth objective was to determine the relationship between destination image and destination competitiveness (i.e., sustainable management, destination marketing efforts, as well as comparative and competitive advantage) in rural areas of Sarawak. The finally, the fifth objective was to explore the moderating impact of knowledge sharing in enhancing the relationship among the proposed hard and soft measures on tourism destination competitiveness (i.e., sustainable management, destination marketing efforts, as well as comparative and competitive advantage). To meet with these objectives, this study attempted to answer a few research questions namely:

(i) Does destination appeal (i.e., natural resources, cultural heritage and outdoor activities) affect the sustainable management, destination marketing efforts, as well as comparative and competitive advantage of the rural tourism development of destination competitiveness in rural areas of Sarawak?

(ii) Does tourism infrastructure (i.e., transportation, accommodation and tourists' facilities) affect the sustainable management, destination marketing efforts, as well as comparative and competitive advantage of the rural tourism development of destination competitiveness in rural areas of Sarawak?

(iii) Does service quality (i.e., reliability, assurance, empathy and responsiveness) affect the sustainable management, destination marketing efforts, as well as comparative and competitive advantage of the rural tourism development of destination competitiveness in rural areas of Sarawak?

(iv) Does destination image (i.e., cognitive, affective and conative beliefs) affect the sustainable management, destination marketing efforts, as well as comparative

and competitive advantage of the rural tourism development of destination competitiveness in rural areas of Sarawak?

(v) Does knowledge sharing have a positive moderating effect on destination appeals, tourism infrastructure, service quality and destination image towards the sustainable management, destination marketing efforts, as well as comparative and competitive advantage of the rural tourism development of destination competitiveness in rural areas of Sarawak?

In this study, destination appeal, tourism infrastructure, service quality and destination image were selected as independent variables, whereas tourism destination competitiveness with the sub-dimensions - sustainable management, destination marketing efforts, as well as comparative and competitive advantage was grouped as the dependent variables. Destination appeal was made up of the dimensions on natural resources, cultural heritage attraction and outdoor activities. Tourism infrastructure, on the other hand, was made up of the dimensions on transportation, accommodation and facilities. Furthermore, service quality was conceptualized based on the intangibility components such as reliability, assurance, empathy and responsiveness. Next, destination image was the conceptualized from a combination of three main components, namely, cognitive, affective and conative beliefs. On top of that, knowledge sharing referred to tourists' sharing their knowledge or experiences with the local community for the better development of rural tourism destination's competitiveness, specifically when looking at how knowledge sharing could play a role in enhancing the relationship between predictors and dependent variables. Aside from that, tourism destination competitiveness was grouped into three main dimensions,

namely, sustainable management, destination marketing efforts, as well as comparative and competitive advantage.

To determine the reliability and validity of the data collected in supporting the hypotheses developed, a series of statistical analyses were performed. The findings are discussed in the following sections.

5.3 Discussion

Studies on both hard measures (i.e., destination appeal and tourism infrastructure) and soft measures (i.e., service quality and destination image) in a single framework and its causal relationship with the development of rural tourism destination competitiveness (i.e., sustainable management, destination marketing efforts and comparative as well as competitive advantage) are conspicuously absent from the academic literature. This research is the first to include and measure tourists' perspective on both the hard and soft measures on rural tourism destination competitiveness. As such, the results of the path analysis to support the empirical findings of the present study raised several crucial points for discussion in this section. Firstly, the present study is unique as it conceptualizes both hard and soft measures as the fundamental contributive factors for developing the competency of rural tourism destinations. Despite the plethora of studies investigating predictors such as environmental appeal, service quality, image and its impacts on tourism destinations, little has been done on integrating both hard and soft measures in a single framework, especially in the context of rural tourism destinations in Sarawak. As noted by Qu et al. (2011), both tangible (hard) and intangible (soft) assets in a tourism destination are significant in building up a tourist destination. Notably, hard services provide physical satisfaction to tourists, whereas soft services provide psychological satisfaction and often functions as a pulling

factor to attract tourists in visiting (Apostolopous & Gayle, 2002). Given the fact that there is lack of existing studies pertaining to the highlighted model, this research is the first to include and examine the proposed predictors (hard and soft measures) on tourism destination competitiveness in the context of rural tourism destination in Sarawak, Malaysia.

Besides, one of the propositions that have been debated is the role of knowledge as one of the key competitive resources for the tourism and hospitality organizations to stay competitive (Hu et al., 2009; Bertella, 2012; Odunga et al., 2020). This study contributes to the research and practice of rural tourism destination competitiveness by delving into the effect of knowledge sharing on the proposed predictors and rural tourism destination competitiveness. Jain et al. (2007) stated that knowledge is divided into two main categories, namely, explicit knowledge (i.e., systematically documented and stored) and tacit knowledge (i.e., knowledge that is deeply rooted and gained from experience). Past studies have evidenced that knowledge sharing is known as one of the prerequisite factors to boost innovation and innovativeness in the tourism and hospitality industry (Hoarau & Kline, 2014) and shows a strong linkage to destination competitive advantage (Hawkins, 2006; Aubke, Wöber et al., 2014; Rao et al., 2018). In realising the importance of knowledge sharing and its contribution to destination competitiveness, this research is the first to include and test the moderating role of knowledge sharing to enhance the relationship between hard measures and soft measures on rural tourism destination competitiveness (i.e., sustainable management, destination marketing efforts and comparative as well as competitive advantage). In this respect, the results of this research add to the growing body of research on the development of rural tourism destination competitiveness, specifically from the demand point of view, by linking the hard and soft measures as well as the moderating role

of knowledge sharing in a single research model, using rural tourism destinations of Sarawak as the study context.

Overall, this study attempted to examine whether the proposed predictors, namely hard measures (i.e., destination appeal and tourism infrastructure) and soft measures (i.e., service quality and destination image) contribute to the development of rural tourism destination competitiveness (i.e., sustainable management, destination marketing efforts and comparative as well as competitive advantage) in rural tourism destinations of Sarawak, Malaysia. Having support from tourists in terms of the sharing of experience or knowledge they gained or learned from visiting other rural tourism destinations is important, especially for future successful marketing efforts and development of tourism destination competitiveness. The experience or knowledge shared by tourists could possibly serve as added value to the community for tourism destination development. Hence, this study has explored the moderating role of knowledge sharing as the factor that could possibly enhance the role of predictors and lead to better development of rural tourism destination competitiveness (i.e., sustainable management, destination marketing efforts and comparative as well as competitive advantage).

To summarize the findings, the present study has formulated 24 hypotheses; specifically, 12 direct hypotheses and 12 moderating hypotheses were tested. Out of the 12 direct hypotheses tested, the results of the path analysis indicated that 10 of the hypotheses were supported. Four of the hypotheses, namely, H2, H5, H8 and H11, were found to have a direct and positive relationship with destination marketing efforts. Three of the hypotheses, namely, H4, H7 and H10, were found to have a direct and positive relationship with sustainable management. Also, three of the hypotheses, namely, H3, H6 and H9, were found

to have a direct and positive relationship with comparative as well as competitive advantage. Interestingly, out of the 12 moderating hypotheses proposed and tested, three of the hypotheses were found to have a positive and moderating impact on the proposed model; specifically, the significant contributions from soft measures to the components on tourism destination competitiveness. Knowledge sharing was found to have a positive moderating impact on service quality and sustainable management (H19). Also, knowledge sharing was found to positively moderate the relationship between service quality to comparative and competitive advantage (H21). Knowledge sharing was also found to have a positive moderating impact on destination image to sustainable management (H22). Based on these findings, this research provided a series of justifications for the supported and unsupported hypotheses.

5.3.1 Destination Appeal and Rural Tourism Destination Competitiveness

Previous studies have proven that destination appeal is a fundamental factor for tourism destination competitiveness (Abolfazl, 2012; Ndivo et al., 2012; Hanafiah & Zulkifly, 2019). Based on the conclusions drawn from the findings, this section aims to answer the first research question: Does destination appeal (i.e., natural resources, cultural heritage and outdoor activities) affect the sustainable management, destination marketing efforts, as well as comparative and competitive advantage of the development of rural tourism destination competitiveness in rural areas of Sarawak, Malaysia? The discussion of the findings is further elaborated in the next few sections, specifically to discuss the results for H1, H2 and H3.

5.3.1.1 Destination Appeal and Sustainable Management (H1)

This section covers the study on hypothesis one (H1): Destination appeal is significantly related to the sustainable management of rural tourism destination. Surprisingly, the results for hypothesis 1 indicated that destination appeal had no significant impact on sustainable management of rural tourism destinations in Sarawak. Although, studies in the past have elucidated that quality of destination appeal plays an important role on the sustainable management of tourism destination for competitiveness (Wilde & Cox, 2008; Chambers, 2010); however, the current study shows a contradictory finding. The natural environment, traditional and cultural heritage are a few of the mentioned components under destination appeal which plays a vital and an equal role to increase the competency of tourist attractions (Bulatović & Rajović, 2017; Fernández et al., 2020). However, the statistical findings of the present study indicated that there is no significant relationship between destination appeal and sustainable management. The reason for this could be because of there is a need for the preservation of environmental resources to ensure the sustainability of the destination's resources for destination competitiveness (Dávid, 2011; Eusébio, Kastenholz & Breda, 2014). For example, during the interviews with tourists at Bario, the researcher asked them about their perceptions on the important of preservation the natural and cultural resources at rural tourism destination and the possible impact on destination sustainability. Tourists are of the opinion that the absence of strategic planning for long-term preservation of destination resources could adversely affect the sustainability of destination resources and indirectly impact the sustainable management of rural tourism destination for better development of destination competitiveness. Therefore, local communities or local tourism players should first pay close attention to the preservation of valuable local tourism resources. By doing so, these appealing resources could then function

as core components for the sustainable development of rural tourism destinations and to stay competitive in the market.

5.3.1.2 Destination Appeal and Destination Marketing Efforts (H2)

This section covers the study on hypothesis two (H2): Destination appeal is significantly related to destination marketing efforts in rural tourism destinations of Sarawak. The results of the statistical analysis in this study indicated that destination appeal is found to have a significant positive relationship with destination marketing efforts. The findings are congruent with past studies (e.g., Wilde & Cox, 2008; Ndivo et al., 2012; Karalkova, 2016; Sheresheva et al., 2020) which revealed that both variables, destination appeal and destination marketing, show a strong relationship with each other. This means that better appealing destination factors tend to lead to better implementation of marketing activities. Destination marketing aims to promote the destination and to increase its visibility to prospective or potential visitors. To successfully promote tourism destinations, both tangible and intangible aspects of the destination play a vital role in enhancing the effectiveness and efficiency of marketing efforts. Thus, it is justifiable that destination appeal of a tourism destination (i.e., natural resources, cultural heritage and outdoor activities) plays an important role in strengthening the tangible aspect of the tourism destination and indirectly enhances the destination marketing activity at the tourism destination (Lai & Vinh, 2013).

5.3.1.3 Destination Appeal and Comparative as well as Competitive Advantage (H3)

This section covers the study on hypothesis three (H3): Destination appeal is significantly related to comparative and competitive advantage of rural tourism destinations. The results of the statistical analysis show that hypothesis 3 is supported; destination appeal

is found to have a significant positive impact on comparative and competitive advantage of rural tourism destinations in Sarawak. The findings are in line with previous research, such as Dugulan et al. (2010), Taylor et al. (2014), Zainuddin et al. (2015) and Nyaboro et al. (2020) who found that the components of destination appeal are crucial in determining tourism destination's comparative and competitive advantage. The findings of this hypothesis can be justified by the fact that to achieve destination comparative and competitive advantage, the availability of appealing destination resources is of the most concern. Mr Marcathy, the head homestay operator at Bawang Assan village, shared that over the years most of the tourists, either domestic or international, visited Bawang Assan mainly because they are attracted to the natural wonders, Iban cultural dances and cuisine and also jungle trekking. He believed these local attractions are the main factors contributing to the development of rural tourism for competitiveness. In fact, it was proven that the presence of a destination's natural resources (i.e., flora and fauna), culture and ethnicity, as well as outdoor activities play a significant role in enhancing the rural tourism destinations' comparative and competitive advantage (Lane, 2009; Alberti & Giusti, 2012; Oye et al., 2013; Patti, 2019). Thus, the findings signified that to develop and maintain the comparative and competitiveness of a rural tourism destination, it is important for the destination to ensure the preservation of local natural and cultural resources.

5.3.2 Tourism Infrastructure and Rural Tourism Destination Competitiveness

This section aims to answer the second research question: Does tourism infrastructure (i.e., transportation, accommodation and tourists' facilities) affect the sustainable management, destination marketing efforts, as well as comparative and competitive advantage of the development of rural tourism destination competitiveness in

rural areas of Sarawak? The discussions of the findings are presented in the next few sections, specifically to discuss the findings for H4, H5 and H6.

5.3.2.1 Tourism Infrastructure and Sustainable Management (H4)

This section covers the study on hypothesis four (H4): Tourism infrastructure is significantly related to the sustainable management of tourism destination in rural tourism destinations of Sarawak. The results of the statistical analysis show that hypothesis 4 is supported; tourism infrastructure (i.e., transportation, accommodation and tourists' facilities) was found to have a significant positive impact on the sustainable management of rural tourism destinations in Sarawak. The findings are in line with previous research (e.g., Dolnicar & Leisch, 2008; Castellani & Sala, 2010; Escoto, Boza & Madrigal, 2019), which propounded that good tourism infrastructure would add value to the implementation of sustainable management practices for rural tourism destinations. The findings of this hypothesis can justify that the quality of tourism infrastructure would act as an added-value for a rural tourism destination to compete with other tourism destinations, especially when it comes to the sustainable development of a tourism destination. For example, during the interviews with tourists at Bario and Ba'kelalan, the researcher asked them about their perceptions on the effect of tourism infrastructure quality on managing of rural tourism destinations. Questions such as "If there is limited access to the rural tourism destination that you have visited but the journey is an adventure, would you still visit and why?" were asked. From this interview, most of the tourists said they would think twice before visiting these rural tourism destinations, especially if there is no proper tourism infrastructure as safety measures, as this is also one of their concerns when travelling to rural tourism destinations. Most of the tourists are of the opinion that for sustainable development of rural tourism destinations, it is crucial to have good connectivity of transport infrastructure and an

acceptable level of accommodation facilities that could sustain tourists' visit. Therefore, local communities or local tourism players should focus on the quality of tourism infrastructure as it is the key to the sustainable management of rural tourism destinations for destination competitiveness.

5.3.2.2 Tourism Infrastructure and Destination Marketing Efforts (H5)

This section covers the study on hypothesis five (H5): Tourism infrastructure is significantly related to destination marketing efforts of tourism destination in rural tourism destinations of Sarawak. As hypothesized, the findings show that tourism infrastructure has a significant positive relationship with destination marketing efforts of rural tourism destinations, which supports H5. The findings are also in line with previous research (Karalkova, 2016), which found that good tourism infrastructure would indirectly function as promotional tools and enhanced destination marketing efforts for tourism destinations. Past studies have evidenced that the efficiency of tourism infrastructure (i.e., transportation and accommodation) at a tourism destination tends to increase the visitation rate (Goffi, 2013; Moric, 2013; Seetanah et al., 2018). It is justifiable to postulate that to successfully promote a rural tourism destination, tourism infrastructure plays a crucial role in making this a success. The reason could be because with the availability of quality tourism infrastructure, tourists are more convinced with the good experiences when dealing with these infrastructures and this would lead to a positive word of mouth (WOM) and gain more visits or revisits of tourists to the destination. In the long run, the effort to promote the tourism destination will be a success, as the marketing mechanisms runs on its own through tourists spreading good reviews of the destination.

5.3.2.3 Tourism Infrastructure and Comparative as well as Competitive Advantage (H6)

This section covers the study on hypothesis six (H6): Tourism infrastructure is significantly related to comparative and competitive advantage of tourism destination in rural tourism destinations of Sarawak. Consistent with previous studies, the findings of this study revealed that tourism infrastructure had a significant positive impact on comparative and competitive advantage of rural tourism destinations, thus supporting hypothesis 6. For example, Bimonte et al. (2015), Hosseini et al. (2015) and Nazmfar et al. (2019) found a positive link between tourism infrastructure and competitiveness of tourism destinations in their research studies. The overall competitiveness of a tourist destination, particularly in a rural tourism setting, is heavily dependent on the quality of tourism infrastructure as it is visualised as one of the predominant key factors in mobilizing tourists from one corner to another. On top of that, the facilities at the accommodation provided also function as an experience booster to enhance tourists' overall experience during their visit at a rural tourism destination. The reason is that usually, tourists would have spent more than 50% of their time resting at the homestay. So, with the provision of good accommodation amenities, tourists could have enjoyed themselves more than they expected, which indirectly turns into an added-value to enhance tourism destination competitiveness. Therefore, it is believed that for a tourism destination to stay comparative and competitive in the industry, more concern should be placed on the aspect of tourism infrastructure.

5.3.3 Service Quality and Rural Tourism Destination Competitiveness

This section aims to answer the third research question: Does service quality (i.e., reliability, assurance, empathy and responsiveness) affect the sustainable management, destination marketing efforts, as well as comparative and competitive advantage of the rural

tourism development of destination competitiveness in rural areas of Sarawak? The discussion of the findings is presented in the next few sections, specifically to discuss the findings for H7, H8 and H9.

5.3.3.1 Service Quality and Sustainable Management (H7)

This section covers the study on hypothesis seven (H7): Service quality is significantly related to the sustainable management of tourism destinations in rural tourism destinations of Sarawak. As hypothesized, the findings show that service quality has a significant positive relationship with sustainable management of rural tourism destinations and thus H7 is supported. A few studies have noted the importance of providing high service quality to tourists in the hospitality and tourism industry (Al-Ababneh, 2013; Davidson, 2016) as it is the core fundamental component that leads to tourists' satisfaction and revisit intention (El-refae, 2012; Pakurár et al., 2019). Tourists' believe that the quality of services provided by local tourism players does play a crucial role in enhancing their satisfaction level and positive experiences (Bothe et al., 2016). The feeling of satisfaction among the tourists towards the respective services provided at the local destination is important as this would lead to a sense of belonging to the destination. This would further lead to the willingness of tourists to contribute to sustainable activities such as conservation and preservation of local resources. Thus, service quality is one of the fundamental components that build up sustainable management practices and indirectly enhances the competitiveness of rural tourism destinations.

5.3.3.2 Service Quality and Destination Marketing Efforts (H8)

This section covers the study on hypothesis eight (H8): Service quality is significantly related to destination marketing efforts at rural tourism destinations of Sarawak.

As hypothesized, the findings show that service quality has a significant positive relationship with destination marketing efforts of rural tourism destinations and thus supporting H8. The results of this study are congruent with past studies (e.g., Paunović, 2014; Aunalal et al., 2017) showing a significant positive relationship between service quality and destination marketing efforts. Notably, the quality of tangible elements alone will not build up a tourism destination, as the integration of intangible aspects is essential and will be an added advantage to the development of competitiveness for the rural tourism destination. For instance, the study by Blazeska, Milenkovska and Stojmirova (2016) elucidated that the quality of the hotel products depends on both objects as well as the expertise and kindness of the staff. Considering that tourists place a very high emphasis on the experiences gained during their visits (Davidson, 2016) and want to ensure that their stay is worth the expenditure they spend, it can be surmised that the provision of better service quality would lead to better destination marketing effort. Therefore, with a better quality of services provided by the local community and local industry players the marketing initiatives of the rural tourism destination would be strengthened as service quality is one of the marketing tools for destination marketing (Akroush et al., 2016; Kanwel et al., 2019).

5.3.3.3 Service Quality and Comparative as well as Competitive Advantage (H9)

This section covers the study on hypothesis nine (H9): Service quality is significantly related to comparative and competitive advantage of tourism destination in rural tourism destinations of Sarawak. As hypothesized, the findings show that service quality has a significant positive relationship with comparative and competitive advantage of rural tourism destinations and thus H9 is supported. The findings are in line with previous research, such as Cass (2014), Davidson (2016) and Purnomo et al. (2020), who found that service quality has a strong linkage with tourism competitiveness (i.e., comparative and

competitive advantage). The findings of this hypothesis is justified as the success of a tourism industry heavily depends on both tangible resources and intangible services provided by local tourism industry players to shape unique and valuable experiences for visitors. One of the reasons tourists travel to other destinations is to escape from their everyday routine and to experience new things at destination new place. Thus, the quality of services provided at the destination itself should be of the highest quality possible to guarantee satisfaction for visitors. A better quality of services at a rural tourism destination would better position the location for comparative and competitive advantage (Ilić et al., 2016; Daskalaki et al., 2020).

5.3.4 Destination Image and Rural Tourism Destination Competitiveness

This section aims to answer the fourth research question: Does destination image (i.e., cognitive, affective and conative beliefs) affect the sustainable management, destination marketing efforts, as well as comparative and competitive advantage of the rural tourism destination for competitiveness in rural areas of Sarawak? The discussion of the findings is presented in the next few sections, specifically to discuss the findings for H10, H11 and H12.

5.3.4.1 Destination Image and Sustainable Management (H10)

This section covers the study on hypothesis ten (H10): Destination image is significantly related to the sustainable management of rural tourism destination at Sarawak. As hypothesized, the findings show that destination image has a significant positive relationship with sustainable management of rural tourism destinations and thus supporting H10. According to one of the tourists in Bario Highlands, Ms. Claudia, she commented that the image of a rural tourism destination would be their first criteria when filtering tourist locations and deciding on places to visit. The rationale behind this is that tourists believe in

destinations that have successfully positioned themselves as being green, filled with nature and is pollution free would top their list of places to visit. The results of this analysis can be justified as if the image of a tourism destination was portrayed as being environmentally conscious, tourists would be attracted to visit. Thus, tourists believe that how a destination image is portrayed in the eye of tourists is important, as a destination with a good image would indirectly cultivate community's attitude towards sustainable management of tourism destination, especially in the rural tourism context (Tasci & Gartner, 2007; Almeida-Santana & Moreno-Gil, 2019).

5.3.4.2 Destination Image and Destination Marketing Efforts (H11)

This section covers the study on hypothesis eleven (H11): Destination image is significantly related to destination marketing efforts of tourism destination at rural tourism destinations of Sarawak. As hypothesized, the findings show that destination image has a significant positive relationship with destination marketing efforts of rural tourism destinations and thus H11 is supported. One of the propositions that have been debated is how the role of the destination image functions as a marketing tool for destination marketing or promotion (Ryglova & Turcinkova, 2007; Michaelidou, Siamagka, Moraes & Micevski, 2013; Bilim & Bilim, 2014). The findings of this study are justifiable by the fact that tourists believe that the good image of a rural tourism destination is important and the positive image portrayed would indirectly help in the marketing of the tourism destination (Diejomaoh, Li & Liu, 2020). For instance, rural tourism destinations in Sarawak are portrayed as destinations with an abundance of natural and cultural heritage resources and these lush resources have attracted many tourists seeking natural scenery to relax and escape from the everyday urban lifestyle. For tourists to decide to visit a destination, they are heavily reliant on existing advertisements or promotional activities that create awareness and interest. From

the available information on hand, these tourists act upon their interest and make the decision to visit a location. Thus, a good destination image of a rural tourism destination plays a crucial role in the better implementation of destination marketing efforts to promote the destination.

5.3.4.3 Destination Image and Comparative as well as Competitive Advantage (H12)

This section covers the study on hypothesis twelve (H12): Destination image is significantly related to comparative and competitive advantage of tourism destination in rural tourism destinations of Sarawak. Surprisingly, the findings show that destination image has no significant relationship with comparative and competitive advantage of rural tourism destinations; therefore H12 is not supported. According to past research (e.g., Chew & Jahari, 2014; Chetthamrongchai, 2017; Maliva & Jani, 2017; Perles-Ribes et al., 2019), destination image was widely tested and found to be one of the predominant factors to enhance tourism destination competitiveness. However, these contradictory findings show that destination image will not lead to better development of rural tourism destination competitiveness, both comparative and competitive advantage. In fact, one of the recent studies propounded that destination image was a powerful tool for the tourism industry to achieve competitiveness (Foroudi et al., 2018). The contradicting findings could be because of the notion of heterogeneity (Dolnicar & Hyubers, 2010) within the rural tourism destinations. Undeniably, different tourists may have different interests for travelling and they target different tourism experiences. For instance, the tourists who visited the selected rural tourism destinations of Sarawak might be of the opinion that the current developed image of those tourism destinations is not to their level of satisfaction yet. Thus, in the current scenario, tourists believed that the image of the tourism destinations could not lead to comparative and competitive advantage of rural tourism destinations. Hence, a series of

strategic promotional tools should be adopted to better develop the image of rural tourism destinations, as a better destination image would enhance tourism destination competitiveness.

5.3.5 Knowledge Sharing Moderates Destination Appeal and Rural Tourism Destination Competitiveness

This section aims to answer the fifth research question: Does knowledge sharing have a positive moderating effect on destination appeal, tourism infrastructure, service quality and destination image towards the sustainable management, destination marketing efforts, as well as comparative and competitive advantage of the rural tourism development of destination competitiveness in rural areas of Sarawak? In this section, the discussion of the findings is focused on the role of knowledge sharing to enhance the relationship between destination appeal and tourism destination competitiveness (i.e., sustainable management, destination marketing efforts, as well as comparative and competitive advantage) and is presented in the following hypotheses developed, namely, H13, H14 and H15.

5.3.5.1 Knowledge Sharing Moderates Destination Appeal and Sustainable Management (H13)

This section covers the study on hypothesis thirteen (H13): Knowledge sharing moderates destination appeal and sustainable management of tourism destination at rural tourism destinations of Sarawak. The resulting analysis for hypothesis thirteen indicates that knowledge sharing has no moderating impact on destination appeal and sustainable management; thus H13 is not supported. Previous studies have shown that knowledge sharing is seen as an important move for sustainable management of destination competitive advantage (Islam et al., 2015; Rao et al., 2018) as well as an important source of responses to change in the current competitive market (Molose & Ezeuduji, 2015). The contradictory

findings may be due to the fact that tourists believe that during their interaction and engagement with the local community or related local tourism players, there is still a lack of awareness on the practices of knowledge sharing, therefore they don't see the possibility that the sharing of their knowledge can facilitate positive outcome for sustainable tourism development (Miller & Twining-Ward, 2005). During the interview, most of the tourists, especially international tourists, opined that tourists would be able to share the experiences gained or learned on sustainable practices to preserve the local natural, cultural and heritage resources for sustainable management of destination competitiveness from visiting other rural tourism destinations. However, they are also of the opinion that the local community lack the awareness on the importance of acquisition and accepting new skills and knowledge that will lead to better management of the environment and resources; thus it seems impossible to gain maximum benefits from the knowledge sharing process. In sum, it is suggested that the local community or tourism players need to better position themselves and cultivate a knowledge-sharing culture to benefit from tourists who could serve as the knowledge provider to the local community at rural tourism destinations.

5.3.5.2 Knowledge Sharing Moderates Destination Appeal and Destination Marketing Efforts (H14)

This section covers the study on hypothesis fourteen (H14): Knowledge sharing moderates destination appeal and destination marketing efforts of tourism destination at rural destinations of Sarawak. The resulting analysis for hypothesis fourteen indicates that knowledge sharing has no moderating impact on destination appeal and destination marketing efforts and thus H14 is not supported. Earlier studies found that when tourists share their experience and knowledge gained from visiting other rural tourism destinations, specifically on how other rural tourism destinations present and promote local resources to

enhance tourists' visit experiences, these experiences or knowledge could be potentially benefit to the current tourism destinations they are sharing with (Odunga et al., 2020). This is especially important when they share information on strategizing the development of better marketing strategies for the current tourism destination (Buhalis, 2000). However, the present study found that tourists believe sharing of knowledge and experiences with the local community or local tourism players would not strengthen the relationship between destination appeal to improve destination marketing efforts of rural tourism destinations in Sarawak.

The contradictory finding may seem possible due to the fact that tourists believe the community itself lacks resource mobilization (Aref, Ma'rof & Sarjit, 2010; Telfer & Sharpley, 2016). Although tourists might be able to share some knowledge on how other rural tourism destinations have maximized leveraging local resources in boosting the destination's marketing initiatives to attract tourists, however, the locals themselves might not be able to capture the ideas shared, or have the ability to identify the right resources for tourism development at their own place. According to Uncle Panai, who is the pioneer homestay operator in Bario, he shared that not all of the local community members are active in homestay or rural tourism activities in Bario. The rationale behind this is that part of the local communities is seen to be more introverted and some are not able to fully identify and utilize the local resources to maximize and engage themselves in the rural tourism industry. Therefore, it is suggested that a series of training should be given to the local community or local tourism players to enhance their ability in identifying the right local resources for maximizing the development of destination marketing at the respective rural tourism destination in Sarawak. In fact, the majority of rural tourism destinations in Sarawak own similar local resources; however, some might be more unique compared to another, in terms

of their cultural, natural or heritage resources. Thus, the ability to identify the right resources to leverage on would be an added advantage for better development of marketing initiatives especially for rural tourism destinations.

5.3.5.3 Knowledge Sharing Moderates Destination Appeal and Comparative as well as Competitive Advantage (H15)

This section covers the study on hypothesis fifteen (H15): Knowledge sharing moderates destination appeal and comparative as well as competitive advantage of tourism destination at rural destinations of Sarawak. Contrary to expectations, the resulting analysis for hypothesis fifteen indicates that knowledge sharing has no moderating impact on destination appeal and comparative as well as competitive advantage and thus H15 is not supported. One plausible explanation for this contrary finding is that due to contextual factors (Abbas, Sajid & Mumtaz, 2018). The appealing elements of rural tourism destinations in the current study refer to cultural, natural and heritage resources. Tourists believe that the knowledge or experiences gained from other rural tourism destinations might not be applicable and work well at rural tourism destinations in Sarawak due to contextual differences, especially from the cultural aspect. For instance, cultural differences in how communities at other rural destinations present their cultural activities to tourists may not be accepted by the local communities in Sarawak due to the different cultural practices of the communities. Therefore, the sharing of knowledge might not help in the development of these resources for the development of comparative and competitive advantage of rural tourism destinations. A study by Sindhu (2009) looked at the performance of the tourism sector and concluded that it is vital to identify the type of resources needed for better development of the tourism industry. This is done through internal and external context analysis to identify the right resources for tourism development. Therefore, it is suggested

that the local tourism industry players should learn the essential know-how in order to perform internal and external analysis to identify resources needed for rural tourism development. Once the local community or local tourism players are able to identify resources needed for tourism development by leveraging on knowledges shared by tourists, they will be able to absorb what ideas are useful and relevant and eliminate knowledge that is less practical. They will also be able to take new ideas or knowledge and create knowledge that can be applied within the context of rural tourism destinations in Sarawak. The knowledge created is for better developing the destination appeal that enhances the comparative as well as the competitiveness of the rural tourism destination.

5.3.6 Knowledge Sharing Moderates Tourism Infrastructure and Rural Tourism Destination Competitiveness

This section also aims to answer the fifth research question: Does knowledge sharing have a positive moderating effect on destination appeal, tourism infrastructure, service quality and destination image towards the sustainable management, destination marketing efforts, as well as comparative and competitive advantage of the rural tourism development of destination competitiveness in rural areas of Sarawak? However, the discussion of the findings presented in this section is specifically focused on the role of knowledge sharing to enhance the relationship between tourism infrastructure to tourism destination competitiveness (i.e., sustainable management, destination marketing efforts, as well as comparative and competitive advantage) and are presented in three hypotheses developed, namely, H16, H17 and H18.

5.3.6.1 Knowledge Sharing Moderates Tourism Infrastructure and Sustainable Management (H16)

This section covers the study on hypothesis sixteen (H16): Knowledge sharing moderates tourism infrastructure and sustainable management of tourism destination at rural destinations of Sarawak. Surprisingly, the resulting analysis for hypothesis sixteen indicates that knowledge sharing has no moderating impact on tourism infrastructure and sustainable management and thus H16 is rejected. A past study propounded that good tourist infrastructure is needed to enhance a tourism destination competitiveness (Suryawardani et al., 2020). Mr Marcathy, the head homestay operator at Bawang Assan village, revealed that one of the reasons why tourists were not in favour of the idea that their knowledge sharing with the local community or tourism players would enhance the better development of tourism infrastructure for sustainable management at the rural tourism destination was because of the concern that the involvement of only two stakeholders (i.e., tourist and local community) is not sufficient. Better cooperation and involvement among other tourism stakeholders is needed for improved development of rural tourism destination competitiveness. Tourism infrastructure is associated to components like transportation amenities and facilities which involve higher development costs, hence local community or local tourism players who are currently operating the business on a smaller scale might not be able to absorb the ideas shared by tourists with them for the better representation of the tourism infrastructure due to the high development cost. Therefore, to take up the knowledge shared by tourists with the community on ways for better development of tourism infrastructure, it is crucial to have the involvement from other tourism stakeholders, especially government related authorities such as tourism departments, to ensure the knowledge or experiences shared among tourists with locals are turned into practices.

5.3.6.2 Knowledge Sharing Moderates Tourism Infrastructure and Destination Marketing Efforts (H17)

This section covers the study on hypothesis seventeen (H17): Knowledge sharing moderates tourism infrastructure and destination marketing efforts of tourism destination at rural destinations of Sarawak. The resulting analysis for hypothesis seventeen indicates that knowledge sharing has no moderating impact on tourism infrastructure and destination marketing efforts and thus H17 is rejected. The contradicting findings could be justified by the fact that the success of knowledge sharing depends on the type of relationship forged between tourists and local community members or local tourism players (Boer, Berends & van Baalen, 2011; Jeon, Young & Joon, 2011). The relationship between the local community and the tourist who is visiting the destination for the first time can be described as one of a service provider and client and this relationship may not influence one's intention to share knowledge among the parties further. This is because the sharing of knowledge takes time and opportunity. Tourists might not be willing to, or find it appropriate to comment or share knowledge and experiences with the local community on the way to improve their homestay services and to have a better marketing approach to promote the services due to the short visit time. Tourists might feel that this is not the right time to comment on the infrastructure (e.g., transport, accommodation and facilities), as this might let down the community. Therefore, in this instance, a tourist's knowledge sharing will not enhance the relationship between tourism infrastructure development and destination marketing efforts.

5.3.6.3 Knowledge Sharing Moderates Tourism Infrastructure and Comparative as well as Competitive Advantage (H18)

This section covers the study on hypothesis eighteen (H18): Knowledge sharing moderates tourism infrastructure and comparative as well as competitive advantage of tourism destination at rural destinations of Sarawak. The resulting analysis for hypothesis

eighteen indicates that knowledge sharing has no moderating impact on tourism infrastructure and comparative as well as competitive advantage and thus H18 is rejected. The contradictory results are to be expected, as this could be due to the issue of community of practice (CoP). CoP is explained as a group of people who share information and experiences due to a common interest in a specific area (Indriati, Tjakraatmadja, Rudito & Thoha, 2016). The main objective for tourists to visit a rural tourism destination is to experience nature and the cultural heritage of the destination. Transportation is not the main interest for tourists who are visiting a rural tourism destination; cultural and natural aspects are their main interest. Thus, it is justifiable that the tourist and the local community or local tourism players do not have a common interest to further discuss the infrastructure of the destination. Therefore, knowledge sharing here is found to not strengthen the relationship between tourism infrastructure and comparative as well as competitive advantage of the rural tourism destinations in Sarawak.

5.3.7 Knowledge Sharing Moderates Service Quality and Rural Tourism Destination Competitiveness

This section also aims to answer the fifth research question: Does knowledge sharing have a positive moderating effect on destination appeal, tourism infrastructure, service quality and destination image towards the sustainable management, destination marketing efforts, as well as comparative and competitive advantage of the rural tourism development of destination competitiveness in rural areas of Sarawak? The discussion of the findings presented in this section is focused on the role of knowledge sharing to enhance the relationship between service quality to tourism destination competitiveness (i.e., sustainable management, destination marketing efforts, as well as comparative and competitive advantage) and is presented in three hypotheses developed, namely, H19, H20 and H21.

5.3.7.1 Knowledge Sharing Moderates Service Quality and Sustainable Management (H19)

This section covers the study on hypothesis nineteen (H19): Knowledge sharing moderates service quality and sustainable management of tourism destination at rural destinations of Sarawak. Interestingly, the resulting analysis for hypothesis nineteen indicates that knowledge sharing has a positive significant moderating impact on service quality and sustainable management and thus H19 is supported. The findings of the present study support the proposed hypothesis, whereby it was found that when tourists share their knowledge with the local community or local tourism players, this would strengthen the relationship between service quality and sustainable management of rural tourism destinations. One of the reasons justifying this is that the sharing of knowledge would strengthen the relationship between quality of services offers and sustainable management of rural tourism destination. This is possibly due to the fact that tourists are the sole representatives from the demand side, hence their perceptions and feelings towards the services offered is the most important to ensure that the tourism destination development is compatible, attractive to visitors and is able to provide them with memorable experiences (Zainuddin, Radzi & Zahari, 2016). For instance, tourists could tell local tourism players that the preparation of a welcoming drink or other extra basic amenities for visitors could enhance the visitors' experience. Therefore, for the sustainable management and development of the rural tourism destination, local tourism operators could consider preparing a welcoming drink or other additional amenities to enhance tourist's visitation experience. Mr Marcathy, the head of homestay operator in Bawang Assan with many years of experience in rural tourism industry, shared that he believed that it is important to get tourists' feedback for improvement in order to ensure the sustainable development and management of rural tourism industry. Therefore, knowing that tourist's sharing of

knowledge with the local tourism operators could enhance the level of service quality, one should consider giving a token of appreciation to tourists to encourage the knowledge sharing activities with the local community or local tourism operators.

5.3.7.2 Knowledge Sharing Moderates Service Quality and Destination Marketing Efforts (H20)

This section covers the study on hypothesis twenty (H20): Knowledge sharing moderates service quality and destination marketing efforts of tourism destination at rural destinations of Sarawak. The resulting analysis for hypothesis twenty indicates that knowledge sharing has no moderating impact on service quality and destination marketing efforts and thus H20 is not supported. During an interview, Mr Edwin Meru, who is an artist and homestay operator in Ba'kelalan village, shared with the researcher that in order to ensure the success of knowledge sharing, the community must first truly understand what are the messages that tourists want to share. This only happens if the community can communicate well with the tourist by using the same language that can be understood by both parties. Thus, one possible reason for the contradicting result of this study may be due to the receivers (i.e., local community) not being able to internalize the knowledge that shared with them (Rao et al., 2018).

Although tourists can share experiences with the local community on what they have gained or experienced during their last visit at a particular tourism destination, it must be noted that the knowledge and experiences shared might not be internalized by the current local community. This means that the external knowledge might not be absorbed into internal knowledge and incorporated into the receiving behaviour (Chappin, Cambre, Vermeulen & Lozano, 2015). The possible explanation for this is due to the differences in the cultural atmosphere of the compared rural tourism destinations (Rao et al., 2018). Thus,

tourists believe that the sharing of knowledge with the local community and local tourism players would not aid in enhancing the service quality and further strengthen the relationship on destination marketing efforts of rural tourism destinations. Therefore, it is suggested that a series of training should be given by relevant tourism authorities to the local community or local tourism players on ways to better communicate, internalize and transform the knowledge shared by tourists. From this, they can then begin to offer a better quality of services that could enhance the performance of tourism destination marketing.

5.3.7.3 Knowledge Sharing Moderates Service Quality and Comparative as well as Competitive Advantage (H21)

This section covers the study on hypothesis twenty-one (H21): Knowledge sharing moderates service quality and comparative as well as competitive advantage of tourism destination at rural destinations of Sarawak. Interestingly, the resulting analysis for hypothesis twenty-one indicates that knowledge sharing has a positive significant moderating impact on service quality and comparative as well as competitive advantage and thus H21 is supported. The statistical findings revealed that with a higher level of knowledge sharing among the tourists and local tourism stakeholders, the relationship between service quality and comparative as well as competitive advantage of rural tourism destinations in the context of Sarawak is further strengthened. It is important to note that the consolidation of tourists' knowledge and perceptions of tourism could increase the competitive advantage of a tourist destination (Leszcyński & Zieliński, 2015). The findings of the present study support the works from previous studies that service quality as an important indicator for tourism destination competitiveness (Ţiţu et al., 2016). Some authors found that knowledge sharing could enhance the level of service quality (Tan et al., 2010) in the area of tourism and hospitality. In short, knowledge sharing was found to moderate the relationship between

service quality to comparative and competitive advantage of rural tourism destinations in Sarawak. Therefore, the local community or local tourism players should maintain the culture of openness to experience when it comes to rural tourism development and that one should always be open to accepting new ideas to produce a better quality of services to visitors (Abbas et al., 2018).

5.3.8 Knowledge Sharing Moderates Destination Image and Rural Tourism Destination Competitiveness

This section also aims to answer the fifth research question: Does knowledge sharing have a positive moderating effect on destination appeal, tourism infrastructure, service quality and destination image towards the sustainable management, destination marketing efforts, as well as comparative and competitive advantage of the rural tourism development of destination competitiveness in rural areas of Sarawak? The discussion of the findings presented in the current section is focused on the role of knowledge sharing to enhance the relationship between destination image and tourism destination competitiveness (i.e., sustainable management, destination marketing efforts, as well as comparative and competitive advantage) and the discussions are presented in three hypotheses developed, namely, H22, H23 and H24.

5.3.8.1 Knowledge Sharing Moderates Destination Image and Sustainable Management (H22)

This section covers the study on hypothesis twenty-two (H22): Knowledge sharing moderates destination image and sustainable management of tourism destination at rural destinations of Sarawak. Interestingly, the resulting analysis for hypothesis twenty-two indicates that knowledge sharing has a positive significant moderating impact on destination image and sustainable management and thus H22 is supported. The statistical finding

revealed that higher knowledge sharing among the tourists and local tourism stakeholders could strengthen the relationship between destination image and sustainable management of rural tourism destinations. The present study has revealed and confirmed that knowledge sharing is important to promote and enhance touristic destinations as well as the image of the tourism destination. Past studies showed that tourists and locals sharing of knowledge could potentially produce tourist information to attract tourists (Sigala & Chalkiti, 2015; Edwards, Cheng, Wong, Zhang & Wu, 2017). Hence, this study propounded that tourists could share their knowledge or experiences with the local community or local tourism players on ways to present the image of the destination that imply a good practice in environmental conservation for sustainable management and development of rural tourism destinations. Thus, multiple platforms could be provided for tourists and local entrepreneurs to share their experiences and knowledge on ways to build and project a good image for a rural tourism destination, specifically when looking at sustainable management of rural tourism destinations.

5.3.8.2 Knowledge Sharing Moderates Destination Image and Destination Marketing Efforts (H23)

This section covers the study on hypothesis twenty-three (H23): Knowledge sharing moderates destination image and destination marketing efforts of tourism destination at rural destinations of Sarawak. The resulting analysis for hypothesis twenty-three indicates that knowledge sharing has no moderating impact on destination image and destination marketing efforts and thus H23 is rejected. Although it was propounded that tourists' knowledge sharing could enhance the relationship between destination image and destination marketing efforts of tourism destinations. The importance of studying tourists' perspective on factors attracting them to visit a tourism destination is significant (Foroudi et

al., 2018). However, contrary to expectations, the findings for hypothesis 23 indicated that tourist's knowledge sharing does not strengthen the relationship between destination image and destination marketing efforts of rural tourism destinations in Sarawak. The contradictory finding may seem possible because tourists do not build place identity with the rural tourism destination visited over the short period of time. Place identity is explained as to how strong an individual feel attached to a place from the aspect of emotions (Hernandez, Hidalgo, Salazar-Laplace & Hess, 2007). It is believed that tourists do not build a strong emotional attachment to the rural tourism destination visited due to their short stay. Thus, tourists are of the opinion that they are not the right referral point to share knowledge with the local community or local tourism players, particularly when dealing with the image and marketing of tourism destinations.

5.3.8.3 Knowledge Sharing Moderates Destination Image and Comparative as well as Competitive Advantage (H24)

This section covers the study on hypothesis twenty-four (H24): Knowledge sharing moderates destination image and comparative as well as competitive advantage of tourism destination at rural destinations of Sarawak. The resulting analysis for hypothesis twenty-four indicates that knowledge sharing has no moderating impact on destination image and comparative as well as competitive advantage and thus H24 is rejected. The contrary finding is justified due to different recipient context. Recipient context is associated with the recipient's motivation, learning aptitude, willingness and learning culture (Clarke, Raffay & Wiltshier, 2009). To ensure the success of knowledge sharing, the recipient must be able to absorb, retain and create new knowledge for a competitive advantage. According to one of the tourists at Ba'kelalan, Mr Terry Gevelt, he believes that knowledge sharing with the local community at rural tourism destinations of Sarawak would not add advantage to the

development of better destination image, especially in terms of comparative and competitive advantage of a rural tourism destination. This is because the locals themselves might not be ready to accept the new knowledge shared with them. Tourists are considered as outsiders from the tourism destination and the local community might be reluctant to accept new knowledge share by the tourist due to the fact that they have not developed any sort of relationship due to the short period of time. Hence, it is suggested that to foster innovation and creativity for competitiveness, knowledge sharing practices should be cultivated and practised within the locals' culture to ensure the better success of the knowledge sharing process between tourists and locals.

5.4 Implications

From the theoretical and practical point of view, this study has several implications for scholars and practitioners both theoretically and practically, especially in the domain of rural tourism destination competitiveness.

5.4.1 Theoretical Implications

This study explored the impacts of both hard and soft measures on the development of rural tourism destination competitiveness (i.e., sustainable management, destination marketing efforts, comparative as well as competitive advantage) from the demand point of view. There are several encouraging and noteworthy theoretical implications from the findings, which is to be discussed in this section.

Firstly, this study presented the theoretical or empirical research about the hard measures (i.e., destination appeal and tourism infrastructure) and soft measures (i.e., service quality and destination image) on the development of rural tourism destination competitiveness (i.e., sustainable management, destination marketing efforts, comparative

as well as competitive advantage) at rural tourism destinations of Sarawak. Despite the plethora of studies on factors affecting rural tourism destination competitiveness, little has been done on integrating and investigating both the hard and soft measures on rural tourism destination competitiveness in the context of Sarawak, Malaysia. Hence, this study's framework provides a better understanding of factors that tourists consider to be their priority when deciding on visiting a rural tourism destination. The findings revealed that tourists are of the opinion that the important factors such as destination appeal, tourism infrastructure, service quality and destination image were the influencing factors contributing towards the competency levels of the destination. The results of this study showed the important link between destination appeal (e.g., natural resources and cultural heritage attractions), tourism infrastructure (e.g., transportation, accommodation and facilities), service quality, destination image and rural tourism destination competitiveness (i.e., sustainable management, destination marketing efforts and comparative as well as competitive advantage) in Sarawak rural tourism destinations. Therefore, this study provide basis for future researchers who are interested in the field of rural tourism studies to further investigate the relationship between both the hard and soft measures and destination competitiveness, especially in the rural tourism industry. For instance, future studies could investigate the potential of local capacity building in contributing to both the hard and soft measures on tourism destination competitiveness.

Secondly, the findings of this study highlighted the value of knowledge sharing in enhancing the relationship between soft measures (i.e., service quality and destination image) and tourism destination competitiveness (i.e., sustainable management and comparative as well as competitive advantage). One of the propositions that have been debated is the role of knowledge sharing in the competitiveness of the tourism industry (Liu

& Cho, 2011; Odunga et al., 2020). One of the pivotal factors that encouraged the innovativeness of tourism destinations for competitiveness is the transfer of knowledge between the destinations network and this has been put forward by Haugland, Håvard, Bjørn and Jarle (2011). In other words, the findings of this study support that knowledge sharing is one of the relevant boosters that could potentially elevate or enhance the destination resources (e.g., hard and soft measures) to better improve attractiveness for the development of rural tourism destination competitiveness. As such, this study discovered this unique value by exploring the potential of knowledge sharing in the rural tourism context among the tourism stakeholders from the perspective of tourists. The findings revealed that tourists believed that with the existence of knowledge sharing between tourism stakeholders and tourists, the service quality and destination image of the destination itself could be enhanced and lead to better sustainable management and comparative as well as competitive advantage. Given the findings of the three supported hypotheses, they help to expand the existing tourism literature and provide a deeper understanding of the structural relationships of the moderating impacts of knowledge sharing on service quality to sustainable management and comparative as well as competitive advantage. On top of that, the statistical findings also highlighted the moderating impacts of knowledge sharing on destination image to the sustainable management of destination competitiveness for rural tourism destinations.

Thirdly, limited research has previously studied both the hard measures (i.e., destination appeal and tourism infrastructure) and soft measures (i.e., service quality and destination image) in a single framework particularly in the context of Sarawak's rural tourism destinations. In rural tourism destinations, both push and pull factors play a vital role in catching tourists' attention. On the one hand, push factors are related to the intrinsic desires of the tourists, whereas on the other hand, pull factors are mainly linked to the

competitive and comparative advantages of the destination (Dann, 1977). In this regard, this study provided a broad investigation of tourists' perspective (which is the only stakeholder from the demand side of view) on the importance of hard and soft measures toward its contribution to rural tourism destination competitiveness (i.e., sustainable management, destination marketing efforts and comparative as well as competitive advantage) in the Sarawak tourism industry. It is believed that this study would have added value to the existing literature on rural tourism destination competitiveness in a Sarawak setting, since the current availability of relevant literature is conspicuously absent from the academic literature.

Lastly, another important theoretical implication of the findings of this study is the demonstration that Social Exchange Theory (Ap, 1992) and Competitiveness Theory could be the pertinent theories on studying of both hard and soft measures on rural tourism destination competitiveness with knowledge sharing as the moderator variable in the context of rural tourism industry. This study provides a conceptual foundation and proves that the existence of knowledge sharing among the tourism stakeholders would enhance the impact of soft measures (i.e., service quality and destination image) on rural tourism destination competitiveness. In other words, based on the theoretical foundation of Social Exchange Theory, tourists believed that tourism stakeholders should be jointly engaged in the sharing of knowledge or experiences and to come out with new and constructive ideas for rural tourism development to gain destinations' competitive advantage.

5.4.2 Practical Implications

The findings of this study provide several useful practical implications for various tourism stakeholders (e.g., tourism practitioners, local government, local communities and

local industry players). Firstly, both hard measures (i.e., destination appeal and tourism infrastructure) and soft measures (i.e., service quality and destination image) were found to have a significant positive relationship with one of the components of tourism destination competitiveness, namely, destination marketing efforts. The findings revealed that service quality has the highest impacts on the marketing efforts of the destination, followed by destination appeal, infrastructure and destination image. The current findings may assist in the development of destination marketing strategies for tourism destinations for competitiveness, especially in the rural tourism context. It is therefore suggested that tourism players should set the highest priority on the aspect of service quality when it comes to marketing tourism destinations. A series of capacity building workshops could be provided to the local tourism players in order to improve their service quality. Although tourists are believing that service quality is their main concern in deciding rural tourism destination to visit, however, one should also not forget about the importance of destination appeal and tourism infrastructure, as well as the image of the destination. Thus, it is suggested that the tourism players adopt a sustainable practice (e.g., minimise carbon footprint and pay attention on the carrying capacity of the rural tourism destination) of tourism development by conserving and protecting the natural and developed resources. It is believed that tourists are concerned about soft experiences as well as the tangible aspects of the rural tourism destination, as the combination of both could guarantee a better experience for tourists. This study provides some empirical results and reveals the importance of the hard and soft measures for the development of rural tourism destinations in Sarawak.

Secondly, the substantial findings generated in this study enables local tourism stakeholders to better understand and address the key factors to improve the competency of rural tourism destinations in Sarawak. The empirical findings suggested that destination

appeal (e.g., natural resources, cultural heritage and outdoor activities), tourism infrastructure (e.g., transportation, accommodation and facilities) and service quality as the three main encounter factors that enhance the comparative and competitive advantage of rural tourism destinations. Notably, comparative advantage is referred to natural resources, whereas competitive advantage is associated with built resources. In relation to the above mentioned, it is also time for local industry players or local communities to take the initiative to preserve the local natural resources (e.g., natural environments and traditional cultural heritage) because tourists are mainly attracted by these elements when deciding to visit a rural tourism destination. The empirical findings could contribute to some of the strategic thrusts for Malaysia's shared prosperity vision 2030 such as for local social well-being and key economic growth activities. That is the sustainability development of rural tourism destination for income generation and to increase the quality of living among the local communities. Also, the local tourism stakeholder should pay attention to the built resources such as transportation, accommodation and tourists' facilities as these are the main factors that pull and attracts tourists to stay at the rural tourism destination. Most importantly, these are the resources that generate a lucrative income for the local tourism industry players, especially the local community members. Therefore, local tourism providers should emphasize on maintaining the highest quality of services to each tourist, as this could lead to positive word of mouth and more visit or revisit intentions of tourists to the rural tourist destinations.

In addition to that, at the state level, Sarawak has built its very own Tourism Sector Aspiration 2030 framework. The Tourism Sector Aspiration statement is focused on building Sarawak as the leading destination for eco-tourism and business events in the ASEAN region and is driven by empowering communities to conserve heritage, culture and biodiversity and

to promote investment and development through responsible actions. The findings of this study have a very high value in contributing towards Sarawak's Tourism Sector Aspirations 2030. This study investigated both the hard and soft measures that affect the development of rural tourism destination competitiveness in Sarawak. Realising the fact that destination appeal resources such as cultural and heritage components are the major attractors that pull tourist attention to visit rural tourism destination (hanging sentence). Hence, an initiative should be taken by the relevant authorities to protect and conserve these valuable resources in order to ensure that the competitiveness of the rural tourism destination is achieved and sustainably use over time. Therefore, the findings of this research can be used as references or benchmark for relevant tourism stakeholders, as well as the Ministry of Tourism, Arts and Culture Sarawak during the implementation of Sarawak's Tourism Aspirations 2030.

Thirdly, another positive outcome of this study is that the local tourism industry players or local government have insights into the significant role of tourism infrastructure, service quality and destination image play in the formation of sustainable management among rural tourism destinations. The results revealed that to manage rural tourism destination in a sustainable way that leads to a better competency of a rural tourism destination, the development of rural tourism destination should focus on the aspect of tourism infrastructure (i.e., transportation, accommodation amenities and tourists' facilities) as these are the destination resources that attracts tourists to visit a tourism destination. Tourists would prefer to use a more safe and comfortable mode of transportation to reach to a rural tourism destination, followed by putting up a stay at a local traditional homestay with a certain level of comfortability and hygiene, as well as exploring around the destination with the support of some local facilities. Moreover, the results of this study also confirmed that both service quality and destination image as an important component in enhancing the

sustainable management and development of destination competitiveness. Therefore, tourism stakeholders who are concerned about the sustainable management of rural tourism destination to build competitiveness should place more emphasis on the importance of providing better tourism infrastructure, maintaining the highest quality of services and forming a better destination image. In terms of tourism infrastructure, one could consider providing a better quality of accommodation and tourist facilities by utlilising the local natural resources (e.g., bamboo) to enhance tourist experience.

The empirical results also demonstrated interesting findings such as knowledge sharing was found to be the important moderator in enhancing the relationship between destination image to the sustainable management of rural tourism destinations and the relationship between service quality to sustainable management as well as comparative and competitive advantage of rural tourism destinations. Tourists believed that they should and are willing to share their experiences gained and learned from other tourism destinations with the tourism operators at the current destination, as this would indirectly help to improve the image and service quality of the rural tourism destination. From this, rural planners and stakeholders can infer that it is important to provide a knowledge-sharing platform that aids in cultivating the culture of knowledge sharing among tourism stakeholders, especially among tourists and local industry players or local community members.

Unexpectedly, the emergence of the novel Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2), has led to the Coronavirus Disease 2019 (COVID-19) pandemic. As a result, global business activities are now at a standstill and the tourism sector has not spared by the disease. In fact, tourism is one of the sectors most affected by COVID-19, whereby physical promotions and campaigns are no longer possible. Prior to the

pandemic, the tourism sector experienced a stellar performance and was considered as one of the world's fastest-growing industries, contributing significantly to the economies of many countries (Yang, Ishtiaq & Thanh, 2019). However, in preparation of the post COVID-19 phase, a number of tourism initiatives have been undertaken by different countries including Malaysia and also at the Sarawak state level, to help the tourism industry recover. Some of the recovery plans suggested by UNWTO (2020) are to refocus from quantity to quality, diversify cultural tourism, boost the community's participation and to be innovative through digital platforms. In Sarawak, initiatives taken in preparation for the post COVID-19 recovery phase include putting an emphasis on nature and rural tourism, sustaining Sarawak's visibility and the development and maintenance of tourism products. The focus on sustaining Sarawak's visibility could be done by promoting the 5 key pillars of Sarawak's unique experiences in terms of Culture, Adventure, Nature, Food and Festivals (CANFF). The findings of this study are in line with the state's post COVID-19 initiatives of looking into natural and cultural aspects, as well as focusing on the rural tourism industry. Therefore, the findings of this study can be used as references for tourism practitioners to have some insight on tourists' perspective for the development of rural tourism destination competitiveness, specifically with regards to how tourists would want the rural tourism destination to be developed. The sharing of knowledge practices among the tourism stakeholders would also be an added value to further develop the tourism destination in a competitive way. The findings contribute to the concept of regenerative tourism post the pandemic period, in which social and environmental improvement is the focal point of regenerative tourism. Regenerative tourism emphasises on the restoration and regeneration of tourism industry capabilities.

In sum, this study provides useful, practical implications for rural tourism practitioners and rural tourism destinations. The image of the rural tourism destination first plays a role in creating awareness and interest among tourists to visit a rural tourism destination. Next, the quality of tourism infrastructure as well as the uniqueness of destination resources (i.e., natural, cultural heritage and outdoor activities) at a destination could provide an amazing experience to the visitors during their stay at the destination itself. In the same vein, the quality of services provided by the local tourism players could be an added value to enhance user experience at a tourism destination. Finally, the encouragement of knowledge sharing among the visitors and local industry players could ultimately enhance the development of rural tourism destination for better competitiveness.

5.5 Strengths and Potential Limitations of the Research

As with any research, this study has several limitations. Firstly, this study relies primarily on samples drawn from tourists, both international and domestic, who have visited the selected study rural tourism destinations in Sarawak, Malaysia. The different cultural aspects for rural tourism destinations of Sarawak with other rural tourism destinations in different countries may restrict the generalizability of the outcomes. The reason is that various rural tourism destinations could provide different experiences to the tourists. From the findings of this study in the context of Sarawak, tourists believed that the proposed hard and soft measures and also knowledge sharing, are important components for the development of rural tourism destination competitiveness. However, results may vary if the survey is to be conducted in the western context. As such, comparative studies across cultures, locations and tourism industry are needed in order to truly understand the constructs comprised in this study that brings impact to the development of rural tourism destination competitiveness.

Secondly, the data collection was done at one point in time and not from different points in time. Thus, the causality effect of this study cannot be determined due to data collected at one point and not from the same group of participants over a longer period of time. Therefore, only conclusions and discussions of the general relationships between variables as well as the moderating effect could be shown in this study. In short, a longitudinal study should be carried out and replace the cross-sectional study to determine the causality effect of the study.

Thirdly, another limitation is the use of knowledge sharing as the moderator in this study; other potential moderating variables could be adopted and added into the model. Other potential moderator variables such as ICT adoption, social media marketing, community support and product innovativeness could be an added-value and are worth testing if added to the current research model. Also, this study only focused on the few aspects of hard and soft measures as the predictors for the development of rural tourism destination competitiveness, however, other observed indicators, variables and constructs may exist that could achieve further insights into destination competitiveness.

Despite these limitations, this research study posed several strengths and significantly contributed to both theoretical and practical implications. The current research findings significantly provide a holistic view and add value to the understanding of the importance of both hard measures (i.e., destination appeal and tourism infrastructure) and soft measures (i.e., service quality and destination image) and its potential impacts to the development of rural tourism destination competitiveness (i.e., sustainable management, destination marketing efforts and comparative as well as competitive advantage) from the perspective of the only demand side of tourism stakeholders (i.e., tourists) in the Sarawak

rural tourism industry. This studied framework which integrated both hard and soft measures is zero to minimal at rural tourism destinations in Sarawak.

Also, previous studies suggested that knowledge sharing could be the potential variable for the development of competitiveness for the tourism industry. The findings of this study provide insights as to how knowledge sharing could play a role in enhancing the relationship between proposed predictors to the development of rural tourism destination competitiveness. Ultimately, the current research findings make a significant contribution for the development of rural tourism destination competitiveness (i.e., sustainable management, destination marketing efforts and comparative as well as competitive advantage) in the context of the Sarawak rural tourism industry. This research was the very first study using tourist knowledge sharing as the moderating variable in the rural tourism context for the development of better rural tourism destination competitiveness in the tourism industry.

5.6 Directions for Future Research

Despite the importance for tourism destination to stay competitive, however, within the tourism literature, there has been a growing trend showing that there are a few challenges that have dragged the development of rural destination competitiveness behind. To overcome the limitations, the researcher recommends the following for future research.

Firstly, future endeavours should examine this model from a different set of respondents as the current study focuses on the demand view point. This study suggested that for tourism destination to become competitive, both the perspectives from the supply and demand sides should be integrated and a comparison should be made on these findings to get better insights for the development of rural tourism destination competitiveness. Also,

due to the cultural differences in the current study sites, future studies should explore the usefulness of this model at rural tourism destinations other than Sarawak, Malaysia. The results of the findings from other tourism destinations could provide a better understanding of the development of rural tourism destination competitiveness.

Secondly, future research should include other moderators in the current framework. The present study tests the moderating role of knowledge sharing in enhancing the relationship between predictors to tourism destination competitiveness. It is suggested that future research could consider examining other potential moderator variables such as ICT adoption, social media marketing, community support and product innovativeness into the research framework. The results and findings with other moderator variables could provide another significant impact on the development of rural tourism destination competitiveness.

Lastly, the current study took place at rural tourism destinations of Sarawak, Malaysia and these rural destinations are Annah Rais Bidayuh Longhouse (Kuching), Bawang Assan Homestay (Sibu), Kampung Po Ai Melugu (Sri Aman), Rumah Benjamin Angki Homestay (Kanowit, Sibu), Bario Kelabit Highlands (Miri) and Ba'kelalan Homestay (Lawas, Miri). Thus, scholars may further investigate this model in other tourism destinations, especially within rural settings. It is suggested that by examining the current model at different rural tourism destinations that have differences in culture and ethnicity, a different set of results could possibly be drawn, or the results could be congruent with this study. In sum, the findings could add value to the domain of rural tourism destination competitiveness.

5.7 Conclusion

To sum up, the results of this study have concluded that the hard measures (i.e., destination appeal and tourism infrastructure) are important factors for the development of rural tourism destination competitiveness (i.e., destination marketing efforts and comparative as well as competitive advantage). Also, tourism infrastructure was found to contribute to the sustainable development of rural tourism destination competitiveness. Furthermore, soft measures (i.e., service quality and destination image) were found to be important factors for the development of rural tourism destination competitiveness (i.e., sustainable management and destination marketing efforts). Interestingly, service quality is the only soft measure tested that showed a significant relationship with comparative and competitive advantage of rural tourism destination competitiveness. As for the moderating hypotheses tested, knowledge sharing was found to enhance the relationship between service quality to sustainable development and comparative as well as competitive advantage. On top of that, knowledge sharing was also found to strengthen the relationship between destination image to the sustainable management of rural tourism destination competitiveness.

The findings of this study have provided several significant insights to the local community, local tourism players, as well as the relevant government tourism departments. By taking into consideration the perspectives of tourists for rural tourism development in Sarawak, it was proven that tourists are attracted to both the hard and soft measures of a rural tourism destination. Specifically, the destination appeal resources (e.g., natural, cultural and outdoor activities) and infrastructure (e.g., transportation, accommodation and facilities) are the two main studied hard measures. Also, it was found that both service quality and destination image were important soft measures that attract tourists when deciding to visit a

rural tourism destination in Sarawak. Lastly, this study highlighted a number of recommendations, limitations and potential scopes of future research on the development of rural tourism destination competitiveness.

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APPENDICES

Appendix A: Summary of Representative Sample of Past Studies on Destination Competitiveness

Author (s)	Variables examined	Sample characteristics	Findings
Mihalic (2000)	• Environmental Perspective • (environmental impact and environmental quality management) • Environmental marketing activities • Destination Competitiveness	Not mentioned	• The findings of the study showed that destination competitiveness can be increased by proper managerial efforts. • The environmental quality of a destination plays significant role in influences tourists destination choice. • Environmental marketing activities can enhance destination competitiveness.
Yoon (2002)	• Tourism development impacts (economic, social, cultural, physical, & environmental impacts) • Environmental attitude (new environmental paradigm) • Place attachment (place identity & place attachment) • Development preferences about tourism attractions • Support for destination competitiveness strategies (destination marketing efforts,	646 tourism stakeholders	• There was a positive relationship between tourism stakeholders' perception of the benefits of tourism impacts and preferences about tourism attraction/resources development. • This finding suggested that tourism stakeholders' environmental attitudes did not affect their preferences about tourism attractions/resource development. • There was a positive relationship between tourism stakeholders' place attachment and preferences about tourism attractions/resources development.

Appendix A continued

	quality services & experiences, destination management, information & research, and sustainable management & practices)		• There was a positive relationship between tourism stakeholders' preferences about tourism attractions/resources development and support for the enhancement strategies of destination competitiveness.
Dwyer & Kim (2003)	• Endowed resources (natural, cultural and heritage) • Created resources (tourism infrastructure) • Supporting factors (general infrastructure, quality of service, accessibility, hospitality) • Destination competitiveness (Destination management, situational conditions, demand factors, market performance indicators)	Tourism stakeholders (total number of respondents not mentioned)	• The findings revealed that it is important to identify the 'hard' and 'soft' measures of tourism competitiveness to ensure the destination achieve its competitiveness. • Future research may focus on the dimension of environmental aspects and its contribution towards destination competitiveness.
Vengesayi (2003)	• Intrinsic destination resources & mix of activities • Experience environment: Physical and Social • Supporting Services (e.g., venues, accommodation, transport, energy) • Communication/ Promotion • Competitiveness • Attractiveness • Destination Image	Tourists and tourist facility operators	• Though there have been advances in modelling competitiveness in tourism there is little empirical evidence to support the models proposed by researchers. • More importantly the dual perspective of TDCA has not been explored. The symmetrical approach to tourism destination evaluation should be a starting point in harmonising the interests •

Appendix A continued

	• Tourist Satisfaction • Organisational performance		of the destination as well as those of the tourists. • The results of such an approach could be used to sell the destination interests to visitors as well as the interests of visitors to the destination operators.
Dwyer, Mellor, Livaic, Edwards, & Kim (2004)	• Destination management • Nature-based resources • Heritage resources • Quality service • Efficient public services • Tourism shopping • Government commitment • Location and access • E-business • Night life • Visa requirements • Amusement/ Theme parks	Data collected in a study of Australia and Korean tourism industry stakeholders	• The findings show that the respondents are confused between the responsibility for public and private sector on destination management activities • Respondents are failed to differentiate between natural and created resources. • The model developed are deemed to be useful to compare the performance of different destinations worldwide on competitiveness.
Enright & Newton (2005)	• Attractors • Business related factors • Tourism destination competitiveness	Tourism industry practitioners	• The results suggest that in both the attractors and the business factors, there were very few disagreements among the respondents in the three locations. • The results provide strong empirical support for the inclusion of both industry-level and destination attributes in studies of tourism competitiveness.

Appendix A continued

			• The results also question approaches to competitiveness that assume that the relative importance of attributes is common across locations, suggesting, • rather, that the importance of competitiveness attributes may vary across locations, depending on product mix and target market segments, especially in complex, multifaceted industries such as tourism.
Meng (2006)	• Quality of tourism experience (Pre-trip planning experience, en-route experience, on-site experience, and after-trip reflection) • Perceived destination competitiveness • (accessibility and information availability, environment, tourism attributes, price and value, destination management & marketing) • Tourist involvement (Moderator) • (personal involvement inventory and consumer involvement profile)	365 tourists	• The quality of pre-trip planning experience as part of the tourism experience had a positive influenced on tourists' perceived destination competitiveness. • Tourist en-route significantly influenced their perception on the destination competitiveness. • The tourist on-site instrumental experience significantly influenced the perception of the competitiveness of destination. • The relationship between tourist on-site expressive experiences had a positive significant impact on perceived destination competitiveness. • The tourist after-trip reflection had positive significant influenced on perceived destination competitiveness.

Appendix A continued

	•		• The level of tourists' involvement moderated both quality of pre-trip planning experience and quality of en-route experience on perceived destination competitiveness.
Byrd (2007)	• This study investigated who should include as stakeholder and how to involve tourism stakeholders in the development of sustainable tourism with the application of Stakeholder theory.	Tourism stakeholders (total of respondents not mentioned)	• The results successfully identified four distinct groups as the tourism stakeholders which included the present visitors, future visitors, present host community, and future host community. • Results also showed that there is a significant impact for the involvement of four stakeholders' group in the development of sustainable tourism.
Gomezelj & Mihalic (2008)	• Natural resources Created resources (accommodation, food service facilities) • Supporting factors (hospitality, communication, accessibility, telecommunication system) • Destination management (residents' support for tourism development, service quality, responsive to visitor needs) • Situational conditions (overall environment, security & safety)	118 tourism stakeholders	• The results indicated that Slovenia is more competitive in its natural, cultural and created resources, but less competitive in the management of tourism (e.g., demand conditions). • Natural endowment (natural resources) is clearly a very important factor of competitiveness in the tourism industry.

Appendix A continued

	• Demand conditions (destination awareness, image) • Destination Competitiveness		•
Wilde & Cox (2008)	• Destination Competitiveness in Tourism (Destination appeal, destination management, destination organization, destination information & destination efficiency)	Tourism industry stakeholders	• The results found that the ability of tourism infrastructure is crucial to sustain the destination's appeal. • The findings also indicated that it is important for local tourism industry and relevant governing bodies to cooperate as a driving force to sustain the destination and for future tourism.
Byrd, Bosley, & Dronberger (2009)	• This study examined stakeholders' attitudes towards tourism in term of environmental conservation and environmental education.	545 stakeholders (residents, government, entrepreneurs, tourists)	• The results of the study indicated that there were differences in the perceptions of tourism impacts between stakeholder groups. • It is important to identify the four stakeholders' perceptions to get a success in tourism development.
Mathew (2009)	• This study tries to find various components of sustainable tourism that lead to destination competitiveness.	Not mentioned	• The findings revealed that infrastructure is the most important components in sustain the destination's appeal and support the economic growth of tourism industry.
Kozak, Baloğlu, & Bahar (2009)	• Availability of facilities and activities • Cultural and natural attractiveness • Quality of services • Quality of infrastructure •	International tourists visiting the southwest part of Turkey	• The results revealed that attributes like hospitality, value for money, and quality of services are the key competitive factors for Turkey's • Attributes like cultural and natural also found significantly across origin

Appendix A continued

	• Destination competitiveness		countries from the perceptions of the respondents.
Seetanah et al. (2009)	• Tourism infrastructure • Tourism destination development & competitiveness	Tourists	• The findings revealed that tourists are sensitive to the infrastructure of the island.
Dugulan, Balaure, Popescu, & Veghes (2010)	• Cultural heritage • Natural resources • Destination competitiveness	22 countries from European Union	• The findings showed that cultural heritage does not appear as a supporting pillar for travel and tourism competitiveness. • Natural resources was also found to had very poor related to the competitiveness of CEE countries.
Mechinda et al. (2010)	• Competitiveness factors (natural resources, heritage and culture, tourism infrastructure, activities, entertainment, shopping, quality of services, general infrastructure, hospitality, destination management of environment, location, safety, & price competitiveness) • Destination equity (destination awareness & destination image) • Tourist's loyalty	560 tourists (both international & domestic)	• The results found that destination image can influences interest and likelihood of revisiting of tourists. • Also, competitiveness factors that influence tourist's loyalty may vary depending on target customers. • Domestic tourists believed that factors like location, quality of service and natural resources are important; whereas international tourists preferred the natural resources as the most important attributes.
Armenski, Gomezelj, Djurdjev, Đeri, & Aleksandra (2011)	• Destination competitiveness model (inherited resources, created resources,	Tourism stakeholders (Tourism experts and practitioners)	• The findings indicated that the weakest point in Serbian tourism's competitiveness on destination management.

Appendix A continued

	supporting resources, situational conditions, destination management, & demand condition)		• However, the results also revealed that Serbia is practically more competitive of its created, inherited, and supporting resources. • The results also indicated that Serbia is less competitive in Management than in Situational and Demand Conditions.
Tanja et al. (2011)	• Destination competitiveness model (inherited resources, created resources, supporting resources, situational conditions, destination management, & demand condition)	140 tourism stakeholders (employed within the tourism industry)	• The results showed that Serbia is more competitive in its natural, cultural and created resources than in destination management. • Based on the integrated model, Serbia is less competitive in demand conditions that refer to the image and awareness of the destination itself.
Angelkova, Koteski, Jakovlev, & Mitrevska (2012)	• Quality of environment • Preserve the attractive natural and cultural heritage • Goods and resources • Sustainable tourism development • Competitiveness	Not mentioned	• The results revealed that to achieve sustainable tourism development, the influenced of quality of environment, attractiveness of cultural and heritage and other resources were significantly on its competitiveness.
Ancuta, Olaru, & Ianas (2012)	• Supporting factors and resources (infrastructure, accessibility, facilitating resources, hospitality, enterprise) • Destination management (resource stewardship, marketing, finance	Not mentioned	• The findings revealed that the best features of a rural tourism destination must have high quality of environment followed by supporting factors (e.g., infrastructure, & facility). • This paper also realizes a quantitative and qualitative analysis of the rural tourism in the area emphasizes the spatial, temporal and typological

Appendix A continued

	& venture capital, human resource development, information, quality of services, visitor management, destination policy, & planning and development)		aspects of these activities as well as the main aspects involved in the future development of tourism industry.
Armenski, Gomezelj, Djurdjev, Ćurčić, & Dragin (2012)	• Integrated model of destination competitiveness (inherited resources, created resources, supporting factors & resources, destination management, demand conditions) • Destination competitiveness • Socio-economic prosperity • Destination/ National/ Regional competitiveness indicators	Tourism stakeholders – supply side	• The results showed that both destinations are more competitive in its natural, cultural, and created resources, but less competitive in the destination management and, according to the Integrated model, demand conditions.
Kim (2012)	• Core resources & attractions (natural resources, cultural resources, & created resources) • Complementary conditions (tourism infrastructure, air infrastructure, ground infrastructure, ICT infrastructure, Hospitality, & accessibility) • Destination management (destination marketing, planning & development,	139 countries/ Economics divided into two groups: a high-income country group (86) & low-income country group (53)	• Findings suggest that the main determinants of TDC include globalization as a main factor of TDC. • The results also suggest that the main determinants of TDC are core resources/attractions, destination management, and globalization in both high-income and low-income country groups. • High-income country groups, the core resources/attractions had the strongest impact on TDC, while for low-income country group globalization measured by

Appendix A continued

	human resources, & environmental management) • Demand conditions (price competitiveness & demand condition) • Globalization • Economic development (Moderator) • Tourism Destination Competitiveness (TDC)		the net inflow of FDI had the strongest impact on TDC. • This study suggests that there is a difference in the impact of determinants on TDC across two income-level country groups, confirming the moderating effect of economic development. • Tourism infrastructure and general infrastructure were not supported as a main determinant of TDC in both income country groups. • There is a positive relationship between TDC and socioeconomic prosperity in both groups.
Reimer & Walter (2013)	• Ecotourism framework (involves travel to natural destinations, minimizes impact, builds environmental awareness, provides direct financial benefits for conservation, provides financial benefits and empowerment for local people, respects local culture, & supports human rights and democratic movements) • Sustainable development	Interview 26 tourism stakeholders	• The findings of this study revealed that the complexity of community-based ecotourism in addressing often contradictory concerns of environmental conservation, local livelihood, and cultural preservation, and the importance of local context to management of ecotourism. • The social dimension of gender also seen to be a key analytical category for community-based ecotourism and sustainable development.
Sharma (2013)	• Destination marketing • Tourist attention and visit	150 tourists	• The results showed that destination marketing as the important strategy in branding a tourism

Appendix A continued

			destination to further attract tourists' attention and visit.
Lo, Songan, Mohamad, & Yeo (2013)	• Economic impact • Social impact • Cultural impact • Environment impact • Communities value • Destination image	297 local communities	• The results revealed that social impact and communities' value had a significant positive impact on destination image. • Surprisingly, economics impact, cultural impact, and environment impact had no significant relationship on destination image.
Pavlović & Čavlin (2014)	• Rural tourism competitive factors (factors and attractors, accessibility and infrastructure, accommodation facilities, unemployment, experience in rural tourism, proximity of the marketplace, and seasonality)	Villagers	• The results of this study revealed that Zlatibor is relative weak in all criteria except unemployment.
Quach (2015)	• Destination attractiveness • Tourism supply - inherited assets & created assets • Tourism demand - tourist preference, & tourist perception • Competitive destination • Destination image • Tourist satisfaction • Destination loyalty	Perceptions of stakeholders and international visitors	• The proposed research model – destination attractiveness and destination competitiveness (DADC) is an indicator to measure destination competitiveness. • It is the basis to better understanding tourism destination's ability to compete in an effective and sustainable way within the tourism context.
Molose & Ezeuduji (2015)	• Tourism and hospitality organizational competitiveness	170 employees from three	• The findings indicated that respondents responded positively to knowledge •

Appendix A continued

	• Knowledge sharing • Team culture • Service innovation performance (SIP)	international hotels	sharing, team culture and SIP. • Also, it found that organisational culture affects employees' knowledge sharing attitudes and behaviours, impacting on SIP.
Chin et al. (2016)	• Environmental conservation • Tourism infrastructure • Carrying capacity • Quality of environment • Community Support • Rural Tourism Destination competitiveness	299 Local community	• The results revealed that four of the proposed predictors (i.e., environmental conservation, tourism infrastructure, carrying capacity, and quality of environment are positive and significantly related to rural tourism destination competitiveness. • Community support does not moderate the relationship between he predictors and destination competitiveness.
Law & Lo (2016)	• Natural resources • Range of activities • Accessibility • Local communities • Destination competitiveness	103 tourists	• Based on the research findings, natural resources, range of activities and accessibility have a significant influence on destination competitiveness. • However, local communities were found not significantly influence on destination competitiveness.
Corte & Aria (2016)	• Coopetition • Sustainable competitive advantage	Small and medium tourism enterprises (SMEs) – 169 accommodation providers	• The results indicated that coopetition through acquired trust between partners would improves performance for sustainable competitive advantage.
Demirović et al. (2016)	• Key resources and attractions •	136 tourism experts	• The findings show that it is important to focus on resources and attractions

Appendix A continued

	• Strategies of tourism destination • The environment of tourism destination • Competitiveness of rural destinations		of the destination, safety and security, continuous improvement of services, diversity of culinary products, and application of the principles of sustainability of the principles of sustainability in environment management should be the focused when come to rural tourism development.
Kubickova (2016)	• Tourism competitiveness • Government involvement	Secondary data	• The results reveal that government plays an important role in tourism. • The data also provide evidence that a new theory may emerge as it pertains to tourism and developing countries.
Novais (2017)	• Tourism destination competitiveness model	Demand and supply side perspective	• The findings reveal that destination stakeholders conceptualise and assess destination competitiveness differently. • The findings also found that there are differences in the measurement of destination competitiveness between supply-and demand-side stakeholders.
Nunes, Estevão, & Filipe (2018)	• Government policies • Related and supporting industries • Factor conditions • Demand conditions • R&D networks • Cooperation and innovation • Competitiveness	285 respondents working with hospitality firms	• The results indicated that factors like government policies, factor conditions, related and supporting industries, and cooperation and innovation were key factors of the sector competitiveness.
Blanco-Cerradelo, Gueimonde	• Tourist competitiveness of a protected area	Secondary data – a sample of 102	• The findings revealed that an adequate interaction of economic, social, and

Appendix A continued

-Canto, Fraiz-Brea, & Diéguez-Castrillón (2018)	• Capability to attract tourists • Local population • Economic tourist sustainability • Social tourist sustainability • Environmental tourist sustainability	protected areas in Spain	environmental factors is crucial in achieving competitive tourist destinations.
Lo, Chin, & Law (2019)	• Tourism infrastructure • Accommodation Quality • Range of Activities • Special Events • Community Support (Moderator) • Rural Tourism Destination Competitiveness	314 tourists from 3 rural villages	• The findings revealed that tourists are more concerned about the quality of accommodation, infrastructure, range of activities, and special events for the development of tourism destination competitiveness in rural tourism destination.
Ching, Lo, Suaidi, Mohamad, & Chin (2019)	• Accessibility Quality • Accommodation • Cultural Heritage • Entertainment • Natural Resources • Range of Activities • Special Events • Infrastructure • Destination Competitiveness	232 tourists visited Gunung Gading National Park	• Interestingly, the findings suggested that accessibility, natural resources, infrastructure and range of activities had a significant positive impact on ecotourism destination competitiveness, whereas no significant impact found among accommodation, cultural heritage, entertainment, and special events.
Joe, Lo, Suaidi, Mohamad, & Chin (2019)	• Natural resources • Accessibility • Cultural uniqueness • Carrying capacity • Perceived values • Destination Competitiveness	157 tourists visited ecotourism destination in Sarawak	• The results revealed that accessibility and cultural uniqueness are positively and significantly correlated to tourism destination competitiveness based on tourists' perspectives.
Owiya, Mulwa, &	• Destination attractors • Support resources	102 tourists to national park	• It is evident that destination attractors influence competitiveness

Appendix A continued

Kemboi (2019)	• Destination Competitiveness		of the Western Tourist Circuit in Kenya and not support resources.
Reisinger, Michael, & Hayes (2019)	• Destination infrastructure • Support services • Destination resources • Tourism Competitiveness	218 international tourists	• The results show that destination infrastructure and support services, followed by destination resources, had the highest significant effect on the UAE's tourism competitiveness as perceived by tourists.
Hossain & Islam (2019)	• Destination attributes • Tourism Competitiveness	Primary data from 303 practitioners (supply side) Importance-performance analysis	• The current status of tourism infrastructure and accessibility is relatively very poor compared to that of competing countries, and immediate upgrading is required to improve the situation.

Source: Author self-compilation

Appendix B: Summary of Semi-structured Interview with Tourist and Community

Tourists
Do you think it is important to preserve the natural and cultural resources at rural tourism destination? In your opinion, do you think the rural tourism destination you visited is practicing preservation/conservation of these resources? 1. I am attracted with the natural wonder, peaceful, fresh air and local foods at Bario, especially the fresh pineapple. So, to me, it is important to protect these resources. But, I am not so sure whether the locals are currently practising and preserving the natural and cultural resources or not. (Tourist @ Bario) 2. I enjoy the greenery of this mountain. I like the cultural show. They should preserve such valuable resources. I think they are preserving those resources. (Tourist @ Bario) 3. Of course, yes. These are the important resources so my future generation can also have a chance to enjoy and experience it. The local should have a proper planning to protect and preserve these valuable resources. (Tourist @ Ba'kelalan) 4. I am an adventurer. I enjoy travelling especially trekking in different jungles. Definitely a yes to preserve those natural resources. Sustainability is important. Otherwise, I am going to lost one more exciting place to visit. Through my observation, it is still lack of such initiatives. I don't see any conservation practices happening at this village. (Tourist @ Annah Rais) 5. The waterfall is beautiful. But a lot of leeches. However, I enjoy the journey to the waterfall. I noticed some plastic bag at the waterfall area, should have clean it up to maintain the cleanliness of the area. Some initiatives should be taken by the community especially the tourism players. (Tourist @ Annah Rais)
If there is limited access to the rural tourism destination that you have visited but the journey is an adventure, would you still visit and why? 1. I would think twice before visiting these rural tourism destinations, especially if there is no proper tourism infrastructure as my family's safety is my main concerned. (Claudia @ Bario) 2. To sustain the rural tourism, of course the destination needs to have a proper infrastructure, connectivity, otherwise we as tourist will not visit as we are not adventurer/risk taker. Accommodation is also another important factor. (Terry @ Ba'kelalan) 3. Well, this is rural destination, we cannot expect to have train, luxury boat etc. But as long as the transportation and place to stay is safe then I will still visit. (Henry @ Bario) 4. I am too old to take these challenges. 5. No. At least there must be minimal level of accessibility provided.
How do you normally decide on rural tourism destination to visit? What are your main filtering criteria for tourism destination selection? **1.** The popularity/image of the destination. Whether it is listed as top 10 places to visit/information available online. 2. I normally search online, decision made reliant on existing advertisements or promotional activities available. Some are from recommendation from friends.

Appendix B continued

3. Visually appealing. Means the destination must be beautiful (at least), safe, and friendly local because at least I am sure that I will be welcomed by the local during my visit.
4. Whether they have good natural scenery and natural wonder, unique rural experience, local produce/foods. I enjoy taking variety of cuisine.
5. Hospitality and friendliness of the people. Whether the destination is famous or popular in something (e.g., beautiful waterfall?).

Do you think you can share some valuable experience/knowledge with the local people to improve the services/products offered?

1. Yes, I think I can share some experiences with the local during my previous visit to other tourism destinations. Maybe on cooking/recipe, handicrafts making, traditional dances.
2. I can share how other community used bamboo to build the walkway.
3. I learned something useful in one of the rural tourism destinations in Thailand. They are using those jungle resources to produce handicrafts, and facilities.
4. Maybe I can also share with the homestay owner on my travel experience at some of the rural destinations in West-Malaysia.

Community

What are the unique selling points of your village? / What are so special about your village that attracted a lot of tourists visit?

1. Over the years most of the tourists, either domestic or international, visited Bawang Assan because of our natural wonders, Iban cultural dances and cuisine and also jungle trekking. These are the important resources that bring us competitive advantage compare to other rural tourism destinations in Sibu area. (Mr Marcathy @ Bawang Assan)
2. Traditional local foods such as pineapple and Bario rice. Our village location located at highlands area. Our Kelabit culture and traditions. We also have waterfall, paddy field, and peaceful scenery. (Uncle Panai @ Bario)
3. Homestay experience, Kelabit's foods, jungle trekking, mountain trek, Bario rice and maybe our culture/heritage. These are our uniqueness compare to others. (Scott Apoi @ Bario)
4. Bidayuh longhouse, *tengkorak* house, our Bidayuh's traditional dances and culture, traditional foods, waterfall and hotspring. (Jenny @ Annah Rais)
5. Tourist like our longhouse, our traditional dances - *ngajat*, flora and fauna, crystal clear river and jungle trekking. (Wilson Bana @ Kg Po Ai Melugu)
6. Highlands, our culture, Lun Bawang ethnic tribe, we also have beautiful scenery, flora and fauna, waterfall, local foods and local produced salt. (Edwin @ Ba'kelalan)
7. Iban's traditions and culture, welcoming musical performance, homestays, flora, fauna, river, fishing, and natural environment for jungle trekking. (Benjamin Angki @ Rh Benjamin Angki Homestay)

Appendix B continued

Do you think it is good to have a sharing session in between community and tourist? They could have shared some life experience, tourism experience and traditions. So some of it can be used to improve the tourist destination.

1. Not all tourists would like to share experience or knowledge with us. Maybe they are shy? Or maybe they are not in the position to share with us. However, it would be good if tourists can share some experience and comments to improve our tourism products/services. (Marcathy @ Bawang Assan)
2. Sharing of experience/knowledge is good but before that we must ensure our community is able to communicate with the tourist using the same language. Language barrier could sometime stop tourist from sharing their experiences with us. (Edwin @ Ba'kelalan)
3. Not every villager would like to take part in tourism activities. Maybe they are shy. They are not good in communication. (Panai @ Bario)

Appendix C: Constructs and Measurement Items

Item(s)	Construct(s) and Question(s)
	Destination Appeals
DestAppeal_01	This place has beautiful flora and fauna.
DestAppeal _02	This place has attractive natural scenery.
DestAppeal _03	This place is rich with natural resources.
DestAppeal _04	This place has variety of unique cultural attractions.
DestAppeal _05	This place has unique heritage attractions.
DestAppeal _06	This place has high quality craft products.
DestAppeal _07	This place has many outdoor adventurous activities.
	(Sources: Dwyer & Kim, 2003; Gutierrez, Lamoureux, Matus, & Sebunya, 2005; Cracolici & Nijkamp, 2009; Chi & Qu, 2008; Getz, 2008; Zainuddin et al., 2015; Mustafa et al., 2020)
	Tourism Infrastructure
TouInfras_01	This place has adequacy of infrastructure to meet visitor needs.
TouInfras _02	This place has availability of local transport systems to support tourism facilities.
TouInfras _03	The accommodation in this place has good quality.
TouInfras _04	There are electricity supplies in this place.
TouInfras _05	This place has the availability of telecommunication system for tourists.
TouInfras _06	The tourist attract spot are easily accessible.
	(Sources: Mo et al, 1993; Smith, 1994; Murphy et al, 2000; Dwyer & Kim, 2003; Hankinson, 2004; Collins, 2005; Chi & Qu, 2008; Canny & Hidayat, 2012; Mustafa et al., 2020)
	Service Quality
ServQual_01	The service providers were friendly and courteous.
ServQual_02	The service providers provided prompt service.
ServQual_03	The service providers were knowledgeable about the products and services offered.
ServQual_04	The service providers were professional and gave me confidence.
ServQual_05	The service providers were always willing to help me.
	(Sources: Parasuraman et al., 1988; Su, Hsu, & Swanson, 2017; Šebrek, 2020)
	Note: Each of the five service quality dimensions measured using a single response item.
	Destination Image
DestImage_01	This place is safe and clean.
DestImage _02	This place is a restful and relaxing place to visit.
DestImage _03	There are many places of interest to visit in this place.
DestImage _04	This place offers a pleasant environment.
DestImage _05	This place provides an exciting experience.
DestImage _06	This place provides a relaxing environment.

Appendix C continued

DestImage _07	I would recommend this destination to my family and friends.
DestImage_08	I would say positive things about this destination to other people.
	(Sources: Beerli & Martin, 2004; Chi & Qu, 2008; Agapito et al., 2013; Song et al., 2013; Assaker, 2014; Basaran, 2016; Akguna et al., 2020)
	Knowledge Sharing
KnowSha_01	It is my pleasure to share my knowledge (or experience) with the tourism stakeholders (e.g., local host communities, government agency, and other tourism industry players).
KnowSha _02	I will share my knowledge with the tourism stakeholders unconditionally.
KnowSha _03	When I have learned something new, I see that the tourism stakeholders are able to learn it as well.
KnowSha _04	I share my experience with the tourism stakeholders in this place.
KnowSha _05	I share my skills with the tourism stakeholders in this place.
	(Sources: Van Den Hoof et al., 2003; Liao et al., 2004; Hussain, Konar, & Ali, 2016; Mohamed, 2017)
	Sustainable Management
SustManage_01	I feel that the tourism development in the destination promoting ethical responsibility towards the natural environment.
SustManage _02	This place has plenty of tourist's facilities that built from natural resources (e.g., bamboos, woods, rocks & etc.).
SustManage _03	This place promotes green concept as one of the marketing initiatives.
SustManage _04	The destination expanding educational opportunities for the visiting public in terms of natural/environmental quality and protection.
SustManage _05	The destination protecting and improving more wildlife habitat.
SustManage _06	I feel that the tourism development in this place indicate the local host communities are well-trained in term of environmental consciousness.
	(Sources: Yoon, 2002; Dwyer & Kim, 2003; Azzopardi & Nash, 2016; Nunes et al., 2018)
	Destination Marketing Efforts
DME_01	Tourism helps to increase the development of a strong destination image.
DME_02	This place has an overall favourable image in the world community.
DME_03	This place has commitment to providing a satisfactory vacation experience for tourists.
DME_04	This place has continuous commitment to the ongoing improvement and development of a high-quality destination.
DME_05	This place has commitment to providing a safe and secure environment.
	(Sources: Yoon, 2002; Dwyer & Kim, 2003; Azzopardi & Nash, 2016; Nunes et al., 2018)

Appendix C continued

	Comparative and Competitive Advantage
C&CAdv_01	This place provides overall satisfaction.
C&CAdv_02	This place provides quality relative to visitor's country/state.
C&CAdv_03	This place offers value for the money.
C&CAdv_04	This place has an easy access to the destination.
C&CAdv_05	This place has a high commitment to preserving the destination environment.
C&CAdv_06	This place has a high commitment improving and developing a high-quality destination.
C&CAdv_07	This place has a high commitment to providing the safe and secure environment.
C&CAdv_08	This place has a favourable image.
C&CAdv_09	The local peoples are friendly, and I enjoyed the hospitability in this place.
C&CAdv_10	The policies and regulations in this place are favourable to the visitor.
C&CAdv_11	There is a good variety of tourism activities offered to the visitor.
C&CAdv_12	There are high-quality tourism infrastructures in this place.
C&CAdv_13	There are unique tourism resources which attracted visitor to this place.
C&CAdv_14	It is easy for the visitor to access the information about this place before travel.
	(Sources: Crouch & Ritchie, 1999; Hassan, 2000; Dwyer & Kim, 2003; Azzopardi & Nash, 2016; Nunes et al., 2018)

Appendix D: Survey Questionnaire

Universiti Malaysia Sarawak
94300 Kota Samarahan
Sarawak Malaysia

Dear respondent,

The present study is intended to examine the tourist's attitude and perception towards rural tourism development in Malaysia. Please complete the questionnaire based on your honest opinion. Although some of the questions may look similar to each other, each question addresses a unique issue. There is no right or wrong answer. We are mainly interested in your opinion.

Should you have any queries or if you are interested to know the outcome of this study, please do not hesitate to contact the person below. The collective data will be beneficial to the tourism board and local government for future development consideration.

Thank you for taking time off from your busy schedule to participate in this study. All information provided by you will be kept confidential. Your kind participation and assistance are highly appreciated in making this study a success.

Yours sincerely,
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Supervisor(s):
Professor Dr. Lo May Chiun
(Main Supervisor)
Dr. Abang Azlan Mohamad
(Co-Supervisor)

Tuan/Puan,

Kajian ini bertujuan untuk mengkaji sikap dan persepsi masyarakat tempatan terhadap pembangunan ekopelancongan di Malaysia. Sila lengkapkan kertas kajian soal selidik berdasarkan pendapat jujur anda. Walaupun beberapa soalan mungkin kelihatan serupa antara satu sama lain, setiap soalan menangani isu yang unik. Tidak ada jawapan yang betul atau salah. Kami terutamanya berminat untuk pendapat anda.

Sekiranya anda mempunyai sebarang pertanyaan atau jika anda berminat untuk mengetahui hasil kajian ini, sila tidak teragak-agak untuk menghubungi orang yang di bawah. Data kolektif akan memberi manfaat kepada lembaga pelancongan dan kerajaan tempatan untuk pertimbangan pembangunan masa hadapan.

Terima kasih kerana meluangkan masa dari jadual sibuk anda untuk mengambil bahagian dalam kajian ini. Semua maklumat yang anda berikan akan dirahsiakan. Penyertaan anda dan bantuan amat dihargai dalam membuat kajian ini berjaya.

Yang ikhlas,

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Section / *Bahagian* I

This section is designed to find out the local communities' perception towards ecotourism development. Please read each statement and choose the answer that most accurately tells how true the statement is for you.
Bahagian ini direka untuk mengetahui persepsi komuniti tempatan terhadap pembangunan ekopelancongan. Sila baca setiap kenyataan dan pilih jawapan yang paling tepat menceritakan bagaimana benar kenyataan itu adalah untuk anda.

Please circle one number which represents your answer for each item /
Sila bulatkan satu nombor yang mewakili jawapan anda untuk setiap item:

Responses are based on a seven-point scale and scores ranged from 1 (strongly disagree) to 7 (strongly agree)
Responses adalah berdasarkan pada skala tujuh mata dan markah adalah antara 1 (sangat tidak setuju) hingga 7 (sangat setuju)

←----------→

Strongly disagree 1 2 3 4 5 6 7 Strongly agree
Sangat tidak setuju ***Sangat setuju***

1.	**This place has beautiful flora and fauna.** ***Tempat ini mempunyai flora dan fauna yang indah.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
2.	**This place has attractive natural scenery.** ***Tempat ini mempunyai pemandangan semula jadi yang menarik.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
3.	**This place is rich with natural resources.** ***Tempat ini kaya dengan sumber semula jadi.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
4.	**This place has variety of unique cultural attractions.** ***Tempat ini mempunyai pelbagai tarikan budaya yang unik.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
5.	**This place has unique heritage attractions.** ***Tempat ini mempunyai tarikan warisan yang unik.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
6.	**This place has high quality craft products.** ***Tempat ini mempunyai kualiti produk kraf yang berkualiti tinggi.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
7.	**This place has many outdoor adventurous activities.** ***Tempat ini mempunyai banyak aktiviti yang memcabar.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
8.	**This place has adequacy of infrastructure to meet visitor needs.** ***Tempat ini mempunyai kecukupan infrastruktur untuk memenuhi keperluan pelawat.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
9.	**This place has availability of local transport systems to support tourism facilities.** ***Tempat ini mempunyai system pengangkutan tempatan untuk menyokong kemudahan pelancongan.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
10.	**The accommodation in this place has good quality.**	**1**	**2**	**3**	**4**	**5**	**6**	**7**

	Penginapan di tempat ini mempunyai kualiti yang baik.							
11.	**There are electricity supplies in this place.** ***Terdapat bekalan elektrik di tempat ini.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
12.	**This place has the availability of telecommunication system for tourists.** ***Tempat ini mempunyai sistem telekomunikasi kepada pelancong.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
13.	**The tourist attract spot are easily accessible.** ***Tempat menarik pelancong mudah diakses.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
14.	**The service providers were friendly and courteous.** ***Penyedia perkhidmatan yang mesra dan sopan.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
15.	**The service providers provided prompt service.** ***Penyedia perkhidmatan menyediakan perkhidmatan segera.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
16.	**The service providers were knowledgeable about the products and services offered.** ***Pembekal perkhidmatan berpengetahuan tentang produk dan perkhidmatan yang ditawarkan.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
17.	**The service providers were professional and gave me confidence.** ***Pembekal perkhidmatan adalah profesional dan memberi saya keyakinan.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
18.	**The service providers were always willing to help me.** ***Pembekal perkhidmatan sentiasa bersedia membantu saya.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
19.	**This place is safe and clean.** ***Tempat ini selamat dan bersih.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
20.	**This place is a restful and relaxing place to visit.** ***Tempat ini adalah tempat yang tenang dan santai untuk dikunjungi.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
21.	**There are many places of interest to visit in this place.** ***Terdapat banyak tempat menarik untuk dikunjungi di tempat ini.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
22.	**This place offers a pleasant environment.** ***Tempat ini menawarkan persekitaran yang menyenangkan.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
23.	**This place provides an exciting experience.** ***Tempat ini menyediakan pengalaman yang menarik.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
24.	**This place provides a relaxing environment.** ***Tempat ini menyediakan persekitaran yang santai.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
25.	**I would recommend this destination to my family and friends.** ***Saya akan mengesyorkan destinasi ini kepada keluarga dan rakan-rakan saya.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
26.	**I would say positive things about this destination to other people.**	**1**	**2**	**3**	**4**	**5**	**6**	**7**

	Saya akan mengatakan perkara-perkara positif mengenai destinasi ini kepada orang lain.							
27.	**It is my pleasure to share my knowledge (or experience) with the tourism stakeholders (e.g., local host communities, government agency, and other tourism stakeholders).** ***Saya senang berkongsi pengetahuan (atau pengalaman) saya dengan pihak berkepentingan pelancongan (conthonya, komuniti tuan rumah tempatan, agensi kerajaan, dan pihak berkepentingan pelancongan yang lain).***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
28.	**I will share my knowledge with the tourism stakeholders unconditionally.** ***Saya akan berkongsi pengetahuan saya dengan pihak berkepentingan pelancongan tanpa syarat.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
29.	**When I have learned something new, I see that the tourism stakeholders are able to learn it as well.** ***Apabila saya belajar sesuatu yang baru, saya dapat melihat bahawa pihak berkepentingan pelancongan dapat belajar juga.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
30.	**I share my experience with the tourism stakeholders in this place.** ***Saya berkongsi pengalaman saya dengan pihak berkepentingan pelancongan di tempat ini.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
31.	**I share my skills with the tourism stakeholders in this place.** ***Saya berkongsi kemahiran saya dengan pihak berkepentingan pelancongan di tempat ini.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
32.	**I feel that the tourism development in the destination promoting ethical responsibility towards the natural environment.** ***Saya merasakan bahawa pembangunan pelancongan di destinasi ini mempromosikan tanggungjawab etika ke arah persekitaran semula jadi.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
33.	**This place has plenty of tourist's facilities that built from natural resources (e.g., bamboos, woods, rocks & etc.).** ***Tempat ini mempunyai banyak kemudahan pelancong yang dibina dari sumber semula jadi (misalnya, buluh, hutan, batu dan sebagainya).***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
34.	**This place promotes green concept as one of the marketing initiatives.** ***Tempat ini mempromosikan konsep hijau sebagai salah satu inisiatif pemasaran.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
35.	**The destination expanding educational opportunities for the visiting public in terms of natural/environmental quality and protection.** ***Destinasi memperluaskan peluang pendidikan untuk pengunjung yang datang dari segi kualiti dan perlindungan semula jadi / alam sekitar.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**

36.	**The destination protecting and improving more wildlife habitat.** ***Destinasi yang melindungi dan meningkatkan habitat hidupan liar.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
37.	**I feel that the tourism development in this place indicate the local host communities are well-trained in term of environmental consciousness.** ***Saya rasa pembangunan pelancongan di tempat ini menunjukkan komuniti tuan rumah tempatan terlatih dari segi kesedaran alam sekitar.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
38.	**Tourism helps to increase the development of a strong destination image.** ***Pelancongan membantu meningkatkan pembangunan imej destinasi yang kuat.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
39.	**This area has an overall favourable image in the world community.** ***Kawasan ini mempunyai imej yang menggalakkan dalam masyarakat dunia.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
40.	**The destination's commitment to providing a satisfactory vacation experience for tourists.** ***Komitmen destinasi untuk menyediakan pengalaman bercuti yang memuaskan untuk pelancong.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
41.	**The destination's continuous commitment to the ongoing improvement and development of a high-quality destination.** ***Komitmen berterusan destinasi untuk penambahbaikan dan pembangunan destinasi yang berkualiti tinggi.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
42.	**The destination's commitment to providing a safe and secure environment.** ***Komitmen destinasi untuk menyediakan persekitaran yang selamat dan selamat.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
43.	**This place provides overall satisfaction.** ***Tempat ini memberikan kepuasan secara keseluruhan.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
44.	**This place provides quality relative to visitor's country/state.** ***Tempat ini memberikan kualiti relatif kepada negara / negara pelawat.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
45.	**This place offers value for the money.** ***Tempat ini menawarkan perkhidmatan yang setaraf dengan nilai wang dibelanjakan.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
46.	**This place has an easy access to the destination.** ***Tempat ini mempunyai akses mudah ke destinasi.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
47.	**This place has a high commitment to preserving the destination environment.** ***Tempat ini mempunyai komitmen yang tinggi untuk memelihara persekitaran destinasi.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
48.	**This place has a high commitment improving and developing a high-quality destination.**	**1**	**2**	**3**	**4**	**5**	**6**	**7**

	Tempat ini mempunyai komitmen yang tinggi dalam meningkatkan dan membangunkan destinasi berkualiti tinggi.							
49.	**This place has a high commitment to providing the safe and secure environment.** ***Tempat ini mempunyai komitmen yang tinggi untuk menyediakan persekitaran yang selamat dan selamat.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
50.	**This place has a favourable image.** ***Tempat ini mempunyai imej yang baik.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
51.	**The local peoples are friendly, and I enjoyed the hospitability in this place.** ***Orang-orang tempatan mesra, dan saya menikmati layanan di tempat ini.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
52.	**The policies and regulations in this place are favourable to visitor.** ***Dasar dan peraturan di tempat ini adalah baik kepada pengunjung.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
53.	**There is a good variety of tourism activities offered to the visitor.** ***Terdapat pelbagai aktiviti pelancongan yang ditawarkan kepada pengunjung.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
54.	**There are high-quality tourism infrastructures in this place.** ***Terdapat infrastruktur pelancongan berkualiti tinggi di tempat ini.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
55.	**There are unique tourism resources which attracted visitor to this place.** ***Terdapat sumber pelancongan unik yang menarik pengunjung ke tempat ini.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**
56.	**It is easy for the visitor to access the information about this place before travel.** ***Sangat mudah bagi pengunjung untuk mengakses maklumat mengenai tempat ini sebelum perjalanan.***	**1**	**2**	**3**	**4**	**5**	**6**	**7**

Section / *Bahagian* II Background Information / *Maklumat Latar Belakang*

(1) Your age / *Umur*: _____ years / *tahun*

(2) **Gender / *Jantina***

☐ **Male / *Lelaki*** ☐ **Female / *Perempuan***

(3) Education level / *Tahap pendidikan* (please tick one / *sila pilih satu*)

☐	**High school or below / *Sekolah tinggi atau di bawah***	☐	**Postgraduate / *Siswazah***
☐	**Diploma / *Diploma***	☐	**Others (please specify) / *Lain (sila nyatakan)*_____**
☐	**Degree or Professional qualification / *Ijazah atau kelayakan profesional***		

(4) Monthly income / *Pendapatan bulanan*

☐	**Less than / *Kurang daripada* RM1,500**	☐	**Between / *Antara* RM6,001 and / *dan* RM7,500**
☐	**Between / *Antara* RM1,501 and / *dan* RM3,000**	☐	**Between / *Antara* RM7,501 and / *dan* RM8,000**
☐	**Between / *Antara* RM3,001 and / *dan* RM4,500**	☐	**RM8,001 and above / *dan ke atas***
☐	**Between / *Antara* RM4,501 and / *dan* RM6,000**		

(5) Please indicate your number of visit to this destination / *Sila nyatakan jumlah kunjungan anda ke destinasi ini*:

_____

(6) Please indicate the destination you visited / *Sila nyatakan destinasi yang anda lawati*:

_____

(7) Country of origin / *Negara asal*: _____

THANK YOU VERY MUCH FOR TAKING YOUR VALUABLE TIME

TO COMPLETE THIS QUESTIONNAIRE. /

TERIMA KASIH KERANA MENGAMBIL MASA BERNILAI ANDA

UNTUK MENGISI KERTAS KAJIAN SOAL SELIDIK INI.

Appendix E: Journal Publications

1. **Chin, C. H.,** Lo, M. C., Razak, Z. B., Pasbakhsh, P., & Mohamad, A. A. (2020). Resources confirmation for tourism destinations marketing efforts using PLS-MGA: The moderating Impact of semirural and rural tourism destination. *Sustainability*, *12*(17), 6787-6810. *(Indexed in SCOPUS and SSCI, Impact Factor = 2.576)*
2. Lo, M. C., **Chin, C. H.,** & Law, F. Y. (2019). Tourists' perspectives on hard and soft services toward rural tourism destination competitiveness: Community support as a moderator. *Tourism and Hospitality Research*, *19*(2), 139–157. (*Indexed in SCOPUS)*
3. **Chin, C. H.,** Law, F. Y., Lo, M. C., & T. Ramayah. (2018). The impact of accessibility quality and accommodation quality on tourists' satisfaction and revisit intention to rural tourism destination in Sarawak: The moderating role of local communities' attitude. *Global Business & Management Research*, *10*(2), 115–127. *(Indexed in ERA)*
4. **Chin, C. H.,** & Lo, M. C. (2017). Rural tourism quality of services: Fundamental contributive factors from tourists' perceptions. *Asia Pacific Journal of Tourism Research*, *22*(4), 465–479. *(Indexed in SCOPUS and SSCI, Impact Factor = 1.444)*
5. **Chin, C. H.,** & Lo, M. C. (2017). Tourist's perceptions on man-made elements, natural elements and community support on rural tourism destination competitiveness. *International Journal of Leisure and Tourism Marketing*, *5*(3), 227–247. (*Indexed in ERA)*