International Journal of Advanced Studies in Economics and Public Sector Management | IJASEPSM ISSN Print: 2354-421X | ISSN Online: 2354-4228 Volume 6, Number 2 June, 2018

Resident's Attitude towards Tourism Development: an Empirical Study of Bonny Local Government Area, Nigeria

Obiora, Judipat N.

Department of Hospitality Management and Tourism, Faculty of Management Sciences, University of Port Harcourt

Abstract

his study set out to examine the relationship between residents' attitude and tourism development of communities in Bonny Local Government Area, Rivers State. A cross sectional survey method was used and stratified proportionate sampling technique was utilized. A sample size was obtained from a population of 120 and data analysis was conducted using 105 (87.5%) copies of returned and completely filled questionnaire. Descriptive and inferential statistics were used to analyze data. The results identified that there exists a significant relationship between the dimensions of residents attitudes and measures of tourism development. The proposed null hypotheses were rejected and the alternate hypotheses accepted. While adjustment was observed to contribute more significantly to socio-cultural impact, tolerance contributed more significantly to economic impacts. The study further recommended that residents be trained and/or sensitized on the importance and significance of being accommodative to tourists and tourism interventions programmes.

Keyword: Residents attitude, Tourism development, Embracement, Adjustment

Corresponding Author: Obiora, Judipat N.

Background to the Study

The attitude of a community can affect tourism development negatively or positively based on the benefits and losses they will derive from it. Allen et al. (1993) submitted that local community will have a more favourable attitude towards tourism development provided they perceive a positive outcome from their relationship with tourists and tourism activity. Getz (1994) argue that individuals who stand to gain personally from tourism also perceive greater economic benefits and fewer negative social and environmental impacts arising from tourism development than those who do not. It is essential that community residents have a positive attitude towards tourism development to attract infrastructure, create employment opportunities, build entrepreneurial mindset and conservation of cultural heritage (Sandra, Julia and Fernando, 2014). On the other hand, community residents that display negative attitude towards tourism development transmit their feelings to tourists, who, in turn, are likely to be reluctant to visit destinations where they feel unwelcome (Ramseook-Munhurrun and Naidoo, 2011; Ching-Fu and Pei-Chun, 2010).

However, studies on community attitude towards tourism development have been carried out around the globe with findings. For instance, Maumbe (2012) and Siti and Mohd (2014) indicated that the local community that embraced tourism programmes and tourists visitation obtained both personal and community wide benefits and this enhanced the socio-cultural and economic benefits of tourism in their localities. The above studies focused mainly on the attitudes of community towards tourism development without giving credence to the empirical substantiation of the relationship between community attitude and tourism development in the oil rich Bonny Local Government Area. The point of departure in this study is to examine if there is any relationship between residents attitudes and community development in Bonny Local Government of Rivers State. This research is given credence when Yoon et al 2001 stated that an understanding of this relationship is essential in achieving a host community's support fortourism development.

Review of Related Literature

Community attitude towards Tourism Development

Local communities play a vital role in tourism development as they are important to providing good situation especially for tourist in order to boost up the number of tourist's arrival as well as improve their quality of life (Andereck and Nyaupane, 2011). Generally, the term 'community' can be described as spatial boundaries and area also refers to group with a common interest (Godfery, 1996). As stated by Brehm, Eusaneheaur and Krannich (2004), community can be declared as a group of individuals living or working within the same geographic of residence. It is crucial to understand how community development is linked with the ability of a community to improve tourism development.

Local community plays their roles in influencing the tourism development activities through organizing themselves at all levels to act more effective in development and good in sense of contact with government (Siti and Mohd (2014), Brehm et al 2004).. The

importance of gaining local community support for the tourism development has been discussed by tourism scholars as vital components in achieving successful tourism industry (Chaskin, 2001, Kepe (2004), Aref, Gill, & Aref, 2010). Support for future tourism development is a key factor in developing and implementing successful initiatives Chen (2001.

The dimensions of residents attitude used in this study are embracement, tolerance and adjustment. Embracement describes how a community accepts tourism in their domain including the cost and benefits. Attitude of community towards tourism activities goes a long way to determine how business will thrive in such environment. When a community doesn't welcome tourism activities with a positive attitude, there is the tendency that any tourism infrastructure will be deserted. The acceptance of tourism activities by communities makes the tourist feel comfortable whenever there is visitation (Husbands, 1989 and Mason and Cheyne, 2000). This implies that the residents must be tolerant to the positive outcome of tourist. Tolerance here refers to the forbearance of tourism activities. One thing community does when it comes to tourism development is how to tolerate visitors coming to the tourist sites. In the light of this, community's ability to forebear matters a lot in towards tourism activities. There must be awareness of the need to forebear tourism consequences from those that understand what tourism is all about. But it will be very difficult in a place where no one want to listen on what tourism can bring to the community.

Adjustment in this study is an attitude of community on how it can accommodate tourism activities. It is one thing to accept tourism activities, it is another thing to tolerate and it is another thing to accommodate it or live with it. This attitude ascertains the continued existence of tourism infrastructure in a community. Community adjustment in this scenario generally revolves around seminars and sensitization of the people to take tourism as their own and live with it. Some communities may find it very difficult to live with tourism activities especially when they are not sure of visitors. There will always be fear of the unknown among the community dwellers (Dogen, 1989)

The Concept of Tourism Development

Tourism development however, refers to all the activities linked with providing services for tourists in a destination. When the services needed by tourist are provided with the intention of satisfying visitors, tourism development is said to be in existence. Socio-cultural impacts are concerned with the ways in which tourism is contributing to changes in value systems, individual behaviour, family relationships, collective lifestyles, moral conduct, creative expressions, traditional ceremonies and community organization (Pizam and Milman, 1978). Socio-cultural aspects within a destination may be positively affected through increased tourism. Research (Ap and Crompton, 1998; Easterling, 2004) suggests that tourism brings an increased understanding of other cultures, and strengthens the cultural identity of the host destination and increases community pride. Furthermore, tourism development increases and promotes cultural exchange between

tourists and residents (Liu and Var, 1986). Tourism can also be a force to preserve and revitalize the cultural identity and traditional practices of host communities and act as a source of income to protect heritage sites (Easterling, 2004, Faulkner and Tideswell, 1997).

Positive economic aspects of tourism development revolve around increased employment opportunities, improved standard of living, support for infrastructure, and economic growth (Brunt and Courtney, 1999). In Faulkner and Tideswell's (1997) study of the Australian Gold Coast, tourism development contributed to economic growth and increased employment opportunities within the region. Liu and Var (1986) reported that Hawaiian residents strongly agreed that tourism development led to economic benefits, with regards to job opportunities and increased investments in the state's economy. (Sheldon and Var, 1984). Easterling (2004) (Ap and Crompton, 1998).(Wall and Mathierson, 2006).

BONNY ISLAND: Bonny is an island situated at the southern edge of Rivers State, Bonny Island is an oil rich Island. Due to its strategic position, the island hosts various oil companies including Royal Dutch Shell, Mobil, Chevron, Agip, and Elf. The Island has beautiful beaches mostly used by the oil company staff and the locals. The community is subdivided into two main segments – the mainland and the hinterland. The mainland is comprised of the Township, Sandfield, Iwoama, Orosikiri, Aganya, Ayambo, Akiama, Workers Camp, Finima and some outlying fishing settlements lying along the Bonny River's coastline. The hinterland includes the villages that serve as home to indigenes of Bonny kingdom. Some notable tourist sites in Finima include the Nature Park, and tourist beach. Finima Nature Pond was developed by Nigeria NNG as part of effort in preserving the mangrove swamp and wildlife of the area. The beautiful beaches attract tourists and fun seeking inhabitants alike on sunny days and festive periods like Christmas and Easter.

Residents Attitude and Community Development

Researchers have examined the attitude of community residents towards tourism development with findings. Ramseook-Munhurrun (2011) investigates residents' attitudes toward perceived tourism benefits and observed that socio-cultural and economic impacts had significant and positive influence on tourism development. Secondly, Bagri and Devkant (2016) studied residents' attitudes toward tourism development and Impacts in Koti -Kanasar, Indroli, Pattyur Tourism Circuit of Uttarakhand State, India. Findings of their study indicate that residents understand the extent of tourism impacts in their mountainous region with respect to economic, social and environmental dimensions. Thirdly, Kudzayi and Candice (2015) carried out an assessment of residents' attitudes towards tourism development in Marshall County, West Virginia. Results of their assessment and several other studies revealed that residents have positive attitudes towards tourism development as they perceive it to be necessary for economic growth (Hanafiah et al 2013, Sharpley, 2014).

Fourthly, Maumbe (2012) carried out an assessment of residents' attitudes towards tourism development in Marshall County, West Virginia. The findings of the study show

that residents who feel the county's infrastructure is poor see tourism development as the only way to improve the infrastructure, hence the county's quality of life.

Fifthly, Sandra, Julia and Fernando (2014) examined local residents' attitudes towards the impact of tourism development in Cape Verde. The results of their study revealed that, in general terms, the local community perceives that tourism brings economic opportunities - especially for a population whose traditional fate was to emigrate - and has other positive impacts such as increased investments in infrastructures and higher quality hospitality and retail establishments.

Lastly, Siti and Mohd (2014) carried a study on local community attitudes towards tourism development in Tioman Island. The findings of their study indicated that the local community who obtained the personal benefit from tourism development will support for future tourism development as well as who perceived the positive impact on the tourism development. From the foregoing empirical discourse, this study formulated the following hypotheses:

HO₁: Embracement does not significantly associate with socio-cultural impacts

HO₂: Tolerance does not significantly associate with socio-cultural impacts

HO₃: Adjustment does not significantly associate with socio-cultural impacts

HO₄: Embracement does not significantly associate with economic impacts

HO₅: Tolerance does not significantly associate with economic impacts

HO₆: Adjustment does not significantly associate with economic impacts

Research Methodology

The study set out to identify the relationship between residents attitude and tourism development in Bonny. This cross-sectional study carried out with field research approach at selected destinations in Bonny using stratified proportionate random sampling technique. Copies of questionnaire were distributed to 120 residents of the selected mainland communities. To test the reliability of questionnaire a pilot test was conducted and Cronbach Alpha coefficient of embracement was 0.78; tolerance 0.84; socio-cultural impact 0.80 and economic impact 0.76 showed that research tool is reliable. Analysis was done via the SPSS version 25.0. Univariate analyses of the demographic details was done using descriptive statistics while the bivariate analyses was by the Spearman Rank Correlations Coefficient. Both were obtained through the use of SPSS version 24.0

Results/Findings

Out of one hundred and twenty copies of questionnaire distributed, 105 representing 87.5% were returned and used for data analysis. 57 respondents representing 54.3% were males while 48 respondents representing 45.7% were females. 16 respondents representing 15.2% were between the ages of 20-25. 12 respondents representing 11.4% were between the ages of 26-35. 52 respondents representing 49.5% were between the ages

of 36-45 and, 14 respondents representing 13.4% were between the ages of 46-55 and 11 representing 10.5% were above 55 years. 23 representing 22% were had certificates from the elementary school; 23 respondents representing 22% were holders of WAEC/NECO certificates. 38 respondents representing 36.2% were holders of B.Sc/B.Eng degrees. 18 respondents representing 17% were M.Sc/MBA degree holders, and 3 respondents representing 2.9% are holders of other certificates/degrees. 23 respondents representing 27% were singles. 61 respondents representing 73% were married.

 $\textbf{Ho}_{\text{\tiny{1}}}\text{:} \textbf{Embracement does not significantly associate with socio-cultural impacts}$

Correlations					
			embracement	Sociocultural	
	embracemen	Correlation Coefficient	1.000	.785**	
Spearm	t	Sig. (2-tailed)		.000	
an		N	105	105	
correlati on	Socio-	Correlation Coefficient	.785**	1.000	
	cultural	Sig. (2-tailed)	.000		
		N	105	105	

Correlation is significant at the 0.05 level (2-tailed)

The SPSS output above shows that the p-value (0.000) is less than the alpha value (0.05). Based on the decision rule, the null hypothesis will be rejected. The alternate hypothesis is therefore accepted. The study therefore states that there is a significant relationship between embracement and socio-cultural impacts in Bonny Island, Rivers State.

Ho₂: Tolerance does not significantly associate with socio-cultural impacts

Correlations					
			Tolerance	Sociocultural	
	Tolerance	Correlation Coefficient	1.000	.705**	
		Sig. (2-tailed)		.000	
Spearman correlatio		N	105	105	
n	Sociocultural	Correlation Coefficient	.705**	1.000	
		Sig. (2-tailed)	.000		
		N	105	105	

^{**} Correlation is significant at the 0.05 level (2-tailed)

The SPSS output above shows that the p-value (0.000) is less than the alpha value (0.05). Based on the decision rule, the null hypothesis will be rejected. The alternate hypothesis is therefore accepted. The study therefore states that there is a significant relationship between tolerance and sociocultural impacts of tourism in Bonny Island, Rivers State.

Ho₃: Adjustment does not significantly associate with socio-cultural impacts

Correlations

			adjustment	Sociocultural impact
		Correlation Coefficient	1.000	.902**
Spearm	adjustment	Sig. (2-tailed)		.000
an		N	105	105
correlati on	sociocultural	Correlation Coefficient	.902**	1.000
		Sig. (2-tailed)	.000	
		N	105	105

^{**} Correlation is significant at the 0.05 level (2-tailed)

The SPSS output above shows that the p-value (0.000) is less than the alpha value (0.05). Based on the decision rule, the null hypothesis will be rejected. The alternate hypothesis is therefore accepted. There is a significant relationship between adjustment and sociocultural impacts of tourism in Bonny Island, Rivers State.

HO₄: Embracement does not significantly associate with economic impacts

Correlations

			Embracement	Economic impact
	England	Correlation Coefficient	1.000	.803**
Spearma	Embracement	Sig. (2-tailed)		.000
n		N	105	105
correlatio n	Economic	Correlation Coefficient	.803**	1.000
	impact	Sig. (2-tailed)	.000	
		N	105	105

^{**} Correlation is significant at the 0.05 level (2-tailed)

The SPSS output above shows that the p-value (0.000) is less than the alpha value (0.05). Based on the decision rule, the null hypothesis will be rejected. The alternate hypothesis is therefore accepted. The study states that there is a significant relationship between embracement and economic impacts of tourism in Bonny Island, Rivers State.

Ho₅: Tolerance does not significantly associate with economic impacts

Correlations

			Tolerance	Economic impact
		Correlation Coefficient	1.000	.815**
Spearma	Tolerance	Sig. (2-tailed)		.000
n		N	105	105
correlatio n	Economic	Correlation Coefficient	.815**	1.000
	impact	Sig. (2-tailed)	.000	
		N	105	105

^{**} Correlation is significant at the 0.05 level (2-tailed)

The SPSS output above shows that the p-value (0.000) is less than the alpha value (0.05). Based on the decision rule, the null hypothesis will be rejected. The alternate hypothesis is therefore accepted. The study states that there is a significant relationship between tolerance and economic impacts of tourism in Bonny Island, Rivers State.

Ho₆: Adjustment does not significantly associate with economic impacts

Correlations

			Adjustment	Economic impact
	A J:	Correlation Coefficient	1.000	.803**
Spearm	Adjustment	Sig. (2-tailed)		.000
an		N	105	105
correlati on	Economic	Correlation Coefficient	.803**	1.000
	impact	Sig. (2-tailed)	.000	
		N	105	105

^{**} Correlation is significant at the 0.05 level (2-tailed)

The SPSS output above shows that the p-value (0.000) is less than the alpha value (0.05). Based on the decision rule, the null hypothesis will be rejected. The alternate hypothesis is therefore accepted. The study states that there is a significant relationship between adjustment and economic impacts of tourism in Bonny Island, Rivers State.

Discussion of Findings

From the test result, it was shown that embracement has a significant relationship with socio-cultural impacts of tourism. It therefore means that as community embrace tourism it will have positive effect on socio-cultural pattern of the community. This implies that residents that display inappropriate attitudes towards tourist tend to reduce revisit intention and hence this would reduction in tourist attraction. This is in line with the finding of Maumbe, 2012; Pizam & Milman, 1978 and Ramseook-Munhurrun and Naidoo (2011 that residents who feel display restive attitude towards tourists would elicit a reduction in tourism development of their community.

The test result revealed that tolerance has a significant relationship with socio-cultural impacts of tourism. This implies that as community tolerate tourism activities, so will it affect their socio-cultural behaviour. This is in line with the result of Sandra, Julia & Fernando (2014). They examined local residents' attitudes towards the impact of tourism development in Cape Verde. The results of their study revealed that, in general terms, the local community perceives that tourism brings economic opportunities - especially for a population whose traditional fate was to emigrate - and has other positive impacts such as increased investments in infrastructures and higher quality hospitality and retail establishments.

The SPSS test result of hypothesis three shows that adjustment has a significant relationship with socio-cultural impacts of tourism. This means that as community adjust in order to accommodate tourism activities, so will it affect the socio-cultural pattern of the community. This corresponds with the findings of Siti and Mohd (2014), where they indicated that the local community who obtained the personal benefit from tourism development will support for future tourism development as well as who perceived the positive impact on the tourism development.

Hypothesis four indicates that embracement has a significant relationship with economic impacts of tourism. This implies that when the community embraces tourism activities, they will secure employment in the tourism activities thereby improving their living standards. This is similar to the finding of Kudzayi and Candice (2015) the results of their assessment revealed that residents have positive attitudes towards tourism development as they perceive it to be necessary for economic growth.

Hypothesis five test result shows that tolerance has a significant relationship with economic impacts of tourism. This means that when a community tolerates tourism activities within their domain, they will be engaged in form of tourism activities or the other thereby increasing their income. This is in line with the result of Bagri and Devkant (2016) when they indicated that residents understand the extent of tourism impacts in their mountainous region with respect to economic, social and environmental dimensions

SPSS test result of hypothesis six shows that adjustment has a significant relationship with economic impacts of tourism. This indicates that as community accommodate tourism activities including tourists, the community will benefit immensely from government or public private partnership in terms of good road network, bridges, educational facilities, health facilities such as health centres as well as other social amenities. This is similar to the finding of Ramseook-Munhurrun (2011), Srikayaet al Teye, 2002 and Okazaki, 2008 when they observed that the attitudes of the residents towards tourist had significant socio-cultural and economic impacts on tourism development.

Conclusion and Recommendation

From the foregoing conclusion, it is recommended here that government/ community leaders should set up committees to train and encourage residents to embrace tourism activities so that other infrastructural development that will sustain tourism projects can be built by government, communities should learn to tolerate tourism activities as this has proven to promote tourism in other parts of the world and stakeholders should that has tourism potentials should make adjustment to accept tourism activities since the economic impacts of tourism are enormous.

References

- Allen, L. R., Hafer, H. R., Long, P. T. & Perdue, R. R. (1993). Rural residents attitudes toward recreation and tourism development. *Journal of Travel Research*, 31 (4), 27-33.
- Andereck, K. L., & Nyaupane, G. P. (2011). Exploring the nature of tourism and quality of life perceptions among residents. *Journal of Travel Research*, 50, 248-260.
- Ap, J., & Crompton, J. L. (1998). Developing and testing a tourism impact scale. *Journal of Travel Research*, 37 (2), 120-30.
- Aref, F., Redzuan, M. R., & Gill, S. S. (2010). Dimensions of community capacity building: A review of its implications in tourism development. *Journal of American Science*, 5 (8),74-82.
- Bagri, S.C. & Devkant, K. (2016). Residents' attitudes toward tourism development and impacts in Koti -Kanasar, Indroli, Pattyur tourism Circuit of Uttarakhand State, India. *Pasos Journal of Tourism and Cultural Heritage*. 14 (1), 23-39,
- Brehm, J. M., Eisenhauer, B. W. & R. S. Krannich. (2004). Dimensions of community attachment and their relationship to well-being in the amenity-rich rural West. *Rural Sociology*, 69 (3), 405-29.
- Brunt, P., & Courtney, P. (1999). Host perceptions of sociocultural impacts. *Annals of Tourism Research*, 26 (3), 493-515.

- Burkart, A. J. & Medlic, S. (1981), *Tourism-past, present and future*, London: Heinemann Professional Publishing,
- Chaskin, R. (2001). Building community capacity: A definitional framework and case studies from a comprehensive community initiative. *Urban Affairs Review*, 36 (3), 291-323
- Chen, J. S. (2001). Assessing and visualizing tourism impacts from urban residents perspectives, *Journal of Hospitality and Tourism Research*, 25, 235-250
- Ching-Fu, C. & Pei-Chun, C. (2010). Resident attitudes toward heritage tourism development, tourism geographies, *An International Journal of Tourism Space, Place and Environment*, 12 (4), 525-545
- Clarke, J. (1997). A Framework of approaches to sustainable tourism. *Journal of Sustainable Tourism*, 5, 224–233.
- Dogan, H. (1989). Forms of adjustment: socio-cultural impacts of tourism. *Annals of Tourism Research*, 16, 216-236.
- Easterling, D. (2004). The residents' perspective in tourism research: A review and synthesis. *Journal of Travel and Tourism Research Marketing*, 17 (4), 45-62
- Faulkner, B., & Tideswell, C. (1997). A framework for monitoring community impacts of tourism. *Journal of Sustainable Tourism*, 5 (1), 3-28.
- Getz, D. (1994). Residents' attitudes towards tourism: A longitudinal study in Spey Valley, Scotland. *Tourism Management* 15 (4) 247-258
- Godfrey, K. B. (1998). Attitudes toward sustainable tourism in the UK: A view from Local Government. *Tourism Management*, 19 (3), 213-224
- Hanafiah, M. H., Jamaluddin, M. R. & Zulkifly, M. I. (2013). Local community attitude and support towards tourism development in Tioman Island, Malaysia in Procedia. *Social and Behavioral Sciences*, 105, 792 800
- Husbands, W. (1989). Social status and perception of tourism in Zambia, *Annals of Tourism Research*, 16 237-253.
- Kepe, T. (2004). Poverty alleviation and biodiversity conservation: a South African Perspective. *The International Journal of Conservation*, 38 (2), 143-5

- Kim, S. S., Wong, K. K., & Cho, M. (2007). Assessing the economic value of a world heritage site and willingness-to-pay determinants: A case of Changdeok Palace . *Tourism management*, 28 (1), 317-322.
- Kudzayi, M. & Candice, R. (2015). An assessment of residents' attitudes towards tourism development in Marshall County, West Virginia. *Proceedings of the Northeastern Recreation Research Symposium*, pp.1-6.
- Liu, J., & Var, T. (1986). Resident Attitudes toward Tourism Impacts in Hawaii, *Annals of Tourism Research*, 13, 193-214
- Mason, P., & Cheyne, J. (2000), Residents' attitudes to proposed tourism development, *Annals of Tourism*, 27 (2), 391-411.
- Maumbe, K. (2012). An assessment of residents' attitudes towards tourism development in Marshall County, West Virginia. retrieved from http://scholarworks.umass.edu/cgi/viewcontent.cgi?article=1057&context=nerr
- Mmopelwa, G., Kgathi, D. L., & Molefhe, L. (2007). Tourists' perceptions and their willingness to pay for park fees: A case study of self-drive tourists and clients for mobile tour operators in Moremi Game Reserve, Botswana. *Tourism Management*, 28 (4), 1044-1056.
- Okazaki, E. (2008). A community-based tourism model: its conception and use, *Journal of Sustainable Tourism*, 16 (5), 511–529.
- Oroian, M., Ratiu, R-F., Ghere S, M. (2013). Using the residents' profile as potential tourists in tourist market segmentation: The case of Mures county, Romania, *Academic Science Journal. Economic Series*, 1 (2), 21-34
- Pizam, A. & Milman, (1978). Tourism's impacts: The social costs to the destination community as perceived by its residents, *Journal of Travel Research*, 16 (4), 8-12
- Ramseook-Munhurrun, P. (2011). Residents' attitudes toward perceived residents' Perspectives. *Journal of Hospitality and Tourism Research*, 25, 235-250.
- Sandra, M. S. C., Julia, M.N.T. & Fernando, J.F.G. (2014). Local residents' attitudes towards the impact of tourism development in Cape Verde. *Tourism & Management Studies* 10 (1), 87-96
- Sharpley, R. (2014), Host perceptions of tourism: A review of the research , Tourism Management, 42,37-49

- Sheldon, P., & Var, T. (1984). Resident attitudes to tourism in North Wales *Tourism Management*, 5 (1), 40-47
- Sirakaya, E., Teye V., & Sonmez, S. (2002). Understanding residents support for tourism development in the central region of Ghana, *Journal of Travel Research*, 41 (1), 57-67
- Wall, G., & Mathieson, A. (2006). *Tourism change, impacts and opportunities*. England: Pearson Education Limited
- Yoon, Y., Gursoy, D. & Chen, J. S. (2001). Validating a tourism development theory with structural equation modeling, *Tourism Management*, 22 (4), 363–372.