

Application of The Theory of Planned Behaviour to Predict Pro-tourism Attitude in Differing Rural Community Segments Inside Regional Victoria, Australia. A Hierarchical Regression Analysis.

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Abstract : The most recent Tourism Victoria (Australia) strategic plans have implemented a dedicated strategy for tourism development in regional Victoria. While Australian residents have an overall positive attitude toward tourism, they are aware of the possible negative impacts of poorly planned tourism development. This research used cluster analysis to confirm four community resident groups that differ on attitudes toward future tourism development. Then, using the Theory of Planned Behaviour (TPB), this research linked positive attitudes, subjective norms and perceived behavioural control with intent to behave and actual pro-tourism behaviour by community groups. The results support the use of TPB in identifying key community members who are most likely to become involved in tourism development. Finally, it is recommended that future applied research integrate the TPB into the planning stages of strategic tourism development in regional communities.

Keywords: Theory of Planned Behaviour, pro-tourism behaviour, Australia, rural communities

# Introduction

The Victorian Tourism Commission (Australia) was established under an Act of Parliament in 1982. Since then, successive State Governments of Victoria have promoted regional as well as metropolitan urban tourism. As per the latest

employment data, around 148,000 Victorian jobs were directly associated with tourism (Tourism Victoria, 2002). In regional Victoria, the tourism industry has employed approximately 60,000 people and contributed more than \$3.5 billion into the regional economy. The latest Strategic Tourist Plan (2002-2006) has the vision 'Over the life of the plan more Australians and international visitors will be aware of and visit destinations in regional Victoria. This will contribute to increased tourism yield, greater dispersal of visitors and economic social and environmental benefits to regional communities' (Strategic Business Plan, 2002-2006, Tourism Victoria, 2002). However, in-depth analysis of the attitudes of rural community residents toward growth in tourist volume has not been evaluated.

# Australian attitudes toward tourism development

Many tourism authors have alerted readers to the possible cultural, ecological, environmental, social and political impacts of increased tourism. The Australian Tourist Commission (ATC) in 2001 published the results of a representative sample of 1451 Australian residents and found 93% perceived some advantage that overseas tourists brought to Australia. The four major perceived advantages were: economic benefits (81%); opportunity to showcase Australia (24%); visitors stimulate the culture/life of the Australian community (17%); and, tourism boosts Australia's image overseas (14%). While 46% of respondents mentioned a disadvantage, 39% stated there were no disadvantages and a further 15% could not say if there were any disadvantages. The major disadvantages that were cited included: threats to safety or security (health risks; tourists attract crime) (12%); growth pressures and increased demands on facilities (6%); crowds and queues (6%); and, environmental damage impact (5%). While this survey indicated Australian residents as a whole are overwhelmingly positive toward tourism, it does not segment the population in terms of perceptions, attitudes and opinions regarding current tourism levels and future growth.

While researchers and residents have little difficulty identifying potential positive and negative impacts associated with tourism development on local host communities, the successful development of a tourism industry requires effective planning that both recognizes tourists' demands and emphasizes the values of the local host community (Lankford, 1994). Current researchers on host communities have identified factors that influence residents' attitudes toward tourism and its future development (Besculides, Lee & McCormick, 2002; Brunt & Courtney, 1999; Fredline & Faulkner, 2000; Gursoy, Jurowski & Uysal, 2002; Hernandez, Cohen & Garcia, 1996; Teye, Sirakaya & Somnez, 2002; Upchurch & Teivane, 2000; Weaver & Lawton, 2001; Williams & Lawson, 2001). These

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factors include: demographics; person factors; social factors; and, tourism-related factors. In summary, a more positive attitude toward tourism is related to the following profile: being female; being employed (in general); higher income; high education attainment; higher political / demographic position in society; and, living in an urban environment. Perceived control over host community decisions and increased knowledge of the industry lead to positive attitudes toward tourism (Ap, 1992; Gursov et al, 2002; Lankford, 1994). Working in the industry (and being economically dependent on tourism) leads to a strong positive and strong negative attitude toward tourism (Brunt & Courtney, 1999; Pizam, 1978; Williams & Lawson, 2001). The major research focus regarding social factors has been length of residence. Researchers have reported a negative relationship between length of residence and attitude toward tourism, that is, the longer people have lived in the community, the more likely they are to have negative attitudes toward tourism development (Mansfeld, 1992; Ryan & Montgomery, 1994; Brunt & Courtney, 1999). Research into other social factors indicates the state of the local economy (poverty), home ownership and different geographical regions in a country can all influence resident attitudes toward tourism. The final category of variables that seem to influence attitudes toward tourism development are factors related to the tourism industry. Increasing the level of contact by residents with tourists increases the degree of negative attitudes toward further tourism development. If residents in their daily lives have frequent contact with tourists, they are likely to report negative attitudes. Two measures of this interaction are resident proximity to major tourism zones (Belisle & Hoy, 1980; Besculides et al, 2002; Fredline & Faulkner, 2000; Weaver & Lawton, 2001; Williams & Lawson, 2001) and the concentration of tourists in a given region (Madrigal, 1995; Williams & Lawson, 2001). Finally, Fredline and Faulkner (2000) reported that the longer the tourism facility had been in the community, the more positive the residents' attitude was to that product.

## **Previous segmentation research**

Previous attempts of segmenting resident populations utilizing attitudes as a cluster base include Davis, Allen & Cosenza (1988); Evans (1993; in Williams & Lawson, 2001); Ryan and Montgomery (1994); Madrigal (1995); Fredline and Faulkner (2000); Weaver and Lawton (2001); and, Williams and Lawson (2001). The major criticism of this line of research is that these attitude-based clusters were not related to demographics and therefore these resident segments cannot be readily identified and described to tourist developers and planners. In contrast, Inbakaran and Jackson (2003) surveyed 376 residents in five tourist regions of Victoria and found a more positive attitude toward tourism development was associated with the following demographic factors: gender; age; education level;

lifecycle stage; length of residence; ethnicity; occupational connection to tourism industry; and, overall involvement with the tourism industry. A subsequent K means Cluster Analysis (Inbakaran & Jackson, 2004), using demographics as the clustering base, determined four community resident groups. These cluster groups based on demographic profiles allowed easy identification of group membership. That is, the use of recognizable traits (demographics, resident behaviours, tourism related variables) allows tourism developers and local government planners to identify residents that hold strong positive and negative attitudes toward tourism development.

# Relationship between attitudes toward tourism development and proactive community behaviour

The final question that needs to be asked is "Why do tourism developers and local government planners wish to know about residents' attitudes toward future tourism development?" Holding strong positive or negative attitudes does not necessarily affect tourists, tourism development or local government planners. These attitudes will only affect the tourism industry if residents act consistently towards tourism in line with their attitudes. That is, if residents are rude and hostile to tourists visiting their community, then tourism developers may locate their new facilities/product elsewhere. A major limitation of past research (and most resident attitude research) is the focus on attitudes without addressing the real issue "do residents act on their attitudes toward tourism and its future development?" These behaviours could be positive. For example, residents may volunteer to assist at community fairs aimed at attracting tourists, they could chat with tourists who are interested in local heritage or cultural sites, and, they could provide goods and services that will enhance the tourist experience. Or the behaviour could be negative in relation to government planners and tourism developers. Examples would include disrupt local government planning meetings, voting against local government representatives who favour rapid tourism development, and boycott local retail facilities in the high tourist season. Importantly, can tourism resident research predict actual behaviours of community group members? Fishbein and Ajzen (1975) concluded that attitudes by themselves do not predict actual behaviours. In subsequent research, Fishbein and Ajzen developed a Theory of Reasoned Action (Fishbein & Ajzen, 1975) and a Theory of Planned Behaviour (Ajzen, 1988) (see figure 1.).

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## **Theory of Planned Behaviour**

Fishbein and Ajzen (1975) and Ajzen (1988) have developed a theoretical explanation indicating that the best predictor of pro-tourism behaviour by local residents was their intention to act and become involved in community activities that promote tourism. This intention to act is influenced by three determinants: Attitudes, Subjective Norms, and Perceived Behavioural Control. That is, a local residents' pro-tourism behaviour will be determined primarily by intention to become involved. This involvement will vary and may include: attendance of relevant meetings proposed by tourism developers and local Government planners; spending time on committees that evaluate costs and benefits of the new development; and, ensuring that the benefits for the local community are maximized and the social and environmental costs are minimized. This intention to act (according to Ajzen's (1988) revision can be predicted from the three proximal factors. The first factor to coincide with this intention to act is a positive attitude toward future tourism development. These positive attitudes (made up of beliefs and positive outcome evaluations) motivate residents to behave (if they already intent to act). The second proximal factor is subjective norms. Subjective norms are constituted with two types: behavioural subjective norms (or the social influence of other key community members will also become involved in the consultative approach) and subjective information norms (the knowledge that family, friends, important others believe that the person should become involved). If these subjective norms are present, the person will be much more likely to act in line with their intentions. Finally, the TPB posits an element of perceived control. In Fishbein and Ajzen's (1975) original research, it was assumed the person had volitional control over the situation (i.e., their decision to act was under their total control). However,

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Ajzen (1988) reviewed the research and concluded that most people perceived they only have partial control over many situations. Perceived behavioural control, therefore, becomes an important addition to the theoretical model. If residents believe that their behaviour will have no influence over future tourism development in the local district, then logically they would be reluctant to act. However, if from past experiences, they perceive they have control over the final outcome (tourism development will only go ahead if modifications lead to benefits for the local community), then the person's intention to act will be translated into actual pro-tourism behaviours. This research attempts to measure Attitudes, Subjective Norms, Perceived Behavioural Control, Intentions to act and protourism behaviour of host community members. The research aims to understand the influence of these proximal factors on resident behaviours and also evaluate the explanatory power of the TPB.

A review of the applicability of TPB to diverse areas shows five substantial meta-analyses that concluded that the model successfully explained between 0.43 and 0.53 of variance (Albarracin, Johnson, Fishbein & Muellerleile, 2001; Ajzen, 1991; Hagger, Chatzisarantis & Biddle, 2002; Randall & Wolf, 1994; Sheerana & Taylor, 1999). Within the reviewed literature, the ability to predict actual behaviour was as high as 0.75 (see Conner, Kirk, Cade & Barrett, 2001; 2003). The range and breadth of successful applications of the TPB include: addictive behaviours, consumer behaviour, dieting behaviour, driving behaviour (including drink-driving), exercise, health behaviours, help seeking behaviour, recycling household waste. and sex behaviour. The TPB has not previously been applied to tourism settings.

The aim of the present study is to confirm previous segmentation research on rural communities and then determine the relationship between attitudes toward tourism development, intention to act and residents' actual behaviour. This will be completed for the overall sample and then repeated for each resident cluster group. A regression analysis on the cluster group with the highest inter-correlations will be completed to determine the predictive ability of these independent variables (Attitudes, Subjective norms, Perceived behaviour control) on the dependent variable (Host behaviour).

# Method

## **Participants**

The 508 participants (47.4% were male) were drawn from one local government shire in rural Victoria. The average age of the sample was 47.5 years (range 18 - 80+) and 58.9% had attained a tertiary education. Average duration of residence in the community was 13.4 years, 44.1% were married with children and 54.7% lived within five km of a major tourist facility. Eighty five percent were Australian-born, 25% had a tourism related occupation and

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26.1% indicated that they voluntarily participated in a community activity that was tourist focused.

### Materials

The survey questionnaire consisted of two sections. In first section there were both positive and negative attitudinal statements that required responses on a five point Likert scale (from strongly agree to strongly disagree). Two examples of positive items are: "Overseas investment through tourism is good for my region" and "Through tourism our local culture gets international respect". Two examples of negative attitudinal statements are: "Tourism has increased the cost of living in my region" and "The general quality of life has deteriorated thanks to tourism in my region". Subjective Norms were evaluated by items such as: "My friends/families whose opinion I value would encourage me to interact/talk with tourists" and "My friends/families whose opinion I value have interacted/talked with tourists". The evaluation of Perceived Behavioural Control included such items as" "It is up to me whether or not to interact/talk with tourists visiting my community" and "Interacting/talking with tourists is within my principles" The concept of Intention to behave was evaluated using items such as: "I intend to interact/talk with tourists visiting my region in the coming year" and "I would try to interact/talk with tourists as much as I can in the coming year". Finally, Host community behaviour toward tourists was measured using items such as: "I often offer my assistance to tourism promotional events/activities in my community" and "I often attend local community meetings that focus on tourism development".

Section 2 comprised demographic and behavioural questions and included the following: gender; age; highest level of education; life-style categories; occupation; distance (in km) of residence from major tourist attraction; duration (in years) of resident in the region; occupation/business related to tourism; voluntary association with tourism; and, overall involvement with the tourism industry.

### **Procedure / Data Analysis**

### **Cluster Analysis**

The first data analyses required segmentation of the total sample. The first stage of cluster analysis is to segment the target group. A number of researchers have concluded that a range of measures (including demographics and actual behaviours) were the most informative indicators. Seven demographic characteristics and four behaviours related to interactions with tourists were subjected to a K-means Cluster Analysis. A four-cluster solution appeared to be the most appropriate (see Table 1). This solution gave good separation among the

groups on the clustering base (dependent) variables, acceptable cluster sizes, and allowed an understandable and consistent interpretation (Coates & Steed, 1999). In general, the solution replicated previous cluster research (Inbakaran & Jackson, 2004) and therefore their previous cluster names were utilized.

## **Correlation Analysis**

The next analysis involved a Pearson correlation of all variables associated with the TPB. These included measures of positive Attitudes toward tourism development, Subjective Norms, Perceived Behavioural Control, Intentions to act and Host behaviours in relation to tourism within the community. Correlations were completed on the total sample and on each of the four community clusters. The three major assumptions that were met for this statistical tool are: data was collected in related pairs; the data is at least interval in term of quality; and, the relationship between the two variables is linear (Coakes & Steed, 1999). The results of relevant correlations are summarized in table 2.

## Hierarchical Regression Analysis (HRA)

Multiple regression is an extension of bivariate correlation (Coakes & Steed, 1999). Regression analysis attempts to estimate the ability to predict an outcome from knowledge about determining factors. The three major assumptions associated with HRA have been fulfilled. These are: all independent variables correlate with the dependent variable; the ratio of cases to independent variables should be more than 20 to 1; and, the dependent variable is measured on a continuous scale (Coakes & Steed, 1999). Two HRAs are completed in line with the TPB.

#### (a) HRA on Host behaviours

The results represent the best prediction of the dependent variable (Host behaviour in relation to tourism in the community) from the two (theoretical) independent variables (Hosts' intention to act and Perceived behavioural control)

#### (b) HRA on Intention to act

The results represent the best prediction of the dependent variable (Hosts' intention to act) from several (theoretical) independent variables (Attitudes, Subjective norms, Perceived behavioural control)

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# RESULTS

## Cluster analysis: A profile of local community types

The cluster analysis produced four clusters that varied in terms of attitudes toward future tourism development. The first cluster indicated attitudes reflecting a pro-tourism development, the second cluster scored the highest in terms of negative attitudes regarding tourism development and the last two clusters were positive in terms of future tourism development. While the first three clusters matched those described in Inbakaran & Jackson (2004), the final cluster (#4) did not have the strong business and voluntary connections to tourism compared to Inbakaran and Jackson. This may be a regional phenomenon due to the degree of tourism development in this particular study area. A summary description of the community clusters appears in table 1.

Cluster number and name	Cluster description
Cluster #1 (Tourism industry connection)	Cluster 1 has the highest percentage of females. Members of the cluster are significantly younger and better educated than members of the other clusters. They are typically single or a young couple with no children and live relatively near a major tourist attraction. Their length of residence in this community is less than ten years. The cluster has the highest business connection to tourism, but has the lowest rates of volunteerism.
Cluster #2 (Low tourism connection)	This cluster is the second largest group, has the second highest percentage of females; have an average age in the mid-30s, are well- educated, and are married with young to pre-adolescent dependent children. This cluster has the highest percentage people living closest to a major tourist attraction, have lived in this community from 11 to 20 years, have a low voluntary connection to tourism and a low business/occupation link with tourism. Members of this cluster live near a major tourist attraction.
Cluster #3 (Neutral tourism development)	Cluster 3 is demographically dissimilar compared to the other three clusters. The cluster is principally made up of males (59%), the average age is around retirement (64 years), the cluster members are not well-educated and have lived in the area for more than 20 years. This cluster has the highest ratio of people born overseas. They belong to a mature family with adult children either still living at home or visiting regularly. They reside a far distance from any major tourist attraction, they have few occupational connections to the tourist industry but have the highest voluntary involvement with the industry.
Cluster #4 (High tourism connection????)	This cluster is gender-balanced, have an average age in middle to late fifties, not well-educated and have a bimodal distribution in terms of life cycle: either mature family or mature single status. They appear average in terms of ethnic representation, have lived in community between two to 10 years and live close to a major tourist attraction. They have the lowest business connection with the tourist industry, the median rate of volunteerism to the industry and the lowest overall involvement with the tourist industry.

Table 1.: Name and description of rural community clusters

# Correlation analysis: Relationships between TPB constructs

Pearson correlations among the TPB constructs and host behaviours are presented in Table 2. Intention had the strongest correlation with host behaviour (as predicted by TPB) while Perceived behavioural control had (in general) a stronger correlation with host behaviour than Intention. Subjective Norms had the strongest positive correlation with Intention, followed by Attitude and Perceived behavioural control.

	Critical TPB correlations					
Sample	lnt → Beh	Att → Int	SN → Int	PBC →Int	PBC → Beh	
Total sample ( $N = 508$ )	.608	.451	.741	.204	.392	
Cluster #1 (Tourist connection) (N = $123$ )	.687	.495	.729	.132	.206	
Cluster #2 (Low tourist connection) (N = 126)	.746	.474	680	.224	.187	
Cluster #3 (Neutral tourist development) (N = 139)	.664	.594	.822	.263	.392	
Cluster #4 (High tourist connection) ( $N = 120$ )	.623	.213	724	.211	.225	

 Table 2. Correlations among the Theory of Planned Behaviour

 Constructs for total sample and sample clusters

Note: All correlations are significant at p < .0001

# Hierarchical regression analysis: Prediction pro-tourism behaviour

Forced entered hierarchical regression analyses (HRA) were used to determine the predictive ability of each of the TPB constructs (as recommended by Ajzen, 1991). Based on regression models with two or three predictor variables, (power of .80 and alpha of .05) adequate power was obtained to conduct these analyses. The order and content of blocks of variables for the HRA were based on the theoretical tenets of the TPB and previous research (Azjen, 1991). These analyses are summarized in Table 3. In the first HRA, host behaviour (dependent variable) was regressed on Intention (Block 1), followed by Perceived behavioural control (Block 1). Intention and Perceived behavioural control explained 49% of the variance in host behaviour. Both Intention (=.60, p < .001) and Perceived behavioural control (=.23, p < .001) were significant predictors of host behaviour. In the second HRA, Intention (dependent variable) was regressed on Attitudes and Subjective Norms (Block 1), and additionally Perceived Behavioural Control (Block 2). Attitude and Subjective norms explained 71% of the variance in Intention with Attitude (=.22, p < .001) and Subjective norm (=.71, p < .001) providing Application of The Theory of Planned Behaviour to Predict Pro-tourism Attitude in Differing Rural Community Segments Inside Regional Victoria, Australia. A Hierarchical Regression Analysis.

significant contributions. The addition of Perceived behavioural control in Block 2 failed to explain addition variance in Intention.

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Variable	R <sup>2</sup>	F	ΔF	p	Beta
Predicting behaviour					
Block I	.49	65.86		.00	
1. Intention				.00	.60
2. Perceived behavioural control				.00	.23
Predicting intention					1
Block 1	.71	165.40		.00	
<ol> <li>Subjective norm</li> </ol>				.00	.71
2. Attitudes				.00	.22
Block 2	.71	109.53		.00	1
<ol> <li>Subjective norms</li> </ol>				.00	.71
2. Attitudes				.00	.22
. 3. Perceived behavioural control				.81	01

 Table 3. Hierarchical regression analyses for the Theory of Planned

 Behaviour constructs

The results of this study demonstrated three points. First, there is a strong correlation between attitudes, subjective norms and hosts' intentions to act. It can be concluded that to understand resident host behaviour in regard to

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future tourism development, the following factors need to be taken into account: positive attitudes toward tourism, the role of significant/important others in the rural community and the perception by residents that they have (at least some) control over the planned tourism development. Further, this intention to become involved is the strongest determinant of actual host behaviour. The strength of these relationships vary depending upon the different community cluster groups.

The second point illustrated by the results arises from the hierarchical regression analysis (HRA). Here, the analysis indicated that Intention to act and Perceived Behavioural Control explains 49% of the variance associated with actual resident behaviour in response to proposed tourism development in the local community. Thus, their community behaviour (which includes joining committees and be part of working/planning groups to ensure equity and benefits flowing to the community) is determined by their intentions to become involved and their perceived ability to influence the outcome. Further research completed profiles on these community members. The most predictive profile indicated that long-term residents who are male, middle-aged, welleducated and head a family with adult children have the strongest intentions to act and are politically in the best place to affect positive change (see also Inbakaran & Jackson, 2004). The major proximal factors that predict intention to become involved are Subjective Norms and (positive) Attitudes toward tourism development (these account for 71% of the variance). While Perceived Behavioural Control over the situation had a direct effect on actual resident behaviours, it did not significantly add to the explained variance associated with intentions. In contrast to previous research, Subjective Norms explained significantly more of the variance than attitudes. Previous research indicated that in highly individualistic, Westernized nations such as Australia, specific attitudes toward targeted behaviours has more influence than Perceived Behavioural Control which in turn has more influence than subjective norms. The question then arises, for this particular community concern (the impact of future tourism development) why would the role of others (family, friends, and other important community members) have such a large impact? Previous research has indicated the Subjective norms are constituted by Behavioural social influence (others willing to become co-actors and act) as well as Normative social influence (significant others approve the actions of the resident). Further research on types of Subjective norms that influence intentions needs to be completed. However, it would be predicted that in small rural and remote districts that when presented with significant tourism development, both co-action and personal endorsements for action would be supported (and thus, highly correlated with each other and both predictive of Application of The Theory of Planned Behaviour to Predict Pro-tourism Attitude in Differing Rural Community Segments Inside Regional Victoria, Australia, A Hierarchical Regression Analysis.

residents' intention to act). Further, this Subjective norms (sense of community) seems to be more important than individualistic attitudes or personal perceptions of political control. Again, other explanatory factors (such as gender, age, ethnicity, length of residence) need to be researched (especially to determine if they should be added to the model as proximal factors or used to explain Attitudes, Subjective norms and Perceived behavioural control (distal factors to Intention to act)). An interesting implication related to the strong influence of Subjective norms, is the notion that unless a determined set of community members intent to become involved, no community member is likely to be involved. This all or nothing phenomena may help explain why some development proceeds without community input, while others tend to create wide community reaction.

The third point of the results is the confirmation of the TPB. While overall, only 49% of the total variance is explained, this research confirms that currently this is the best model to predict actual community involvement in future tourism development. While other known factors (including age, gender, ethnicity/ culture, etc) may add minimally to the explained variance, no research has yet been able to identify other significant variables that would predict host community involvement in the planning and development of new tourism enterprises. Further exploratory research is needed in an attempt to identify other significant sources of variance.

## Implications

There are three major implications arising from this research. First, it strengthens the role of research in rural and remote areas. In the past, most community research into the various aspects of tourism has been conducted in large urban areas. Research within small rural remote areas is important because all levels of Government have targeted these areas for future (rapid) tourism development. The reasons for this vary from positive (using tourism to increase rural employment and economically stimulate economically shrinking communities) to neutral (infra-structure follows tourism development) to realistic (mass tourism has saturated many urban areas). However, what tourism developers and Government planners have not done is to adequately consult with local residents, preferring instead a "top-down" process of imposing development onto communities and organizing only the obligatory consulting process. These developers/planners fail to determine the attitudes of local residents and fail to anticipate the logical, well-reasoned, highly motivated, behavioural responses that are directed against this tourism related initiative. That is, tourism developers are encouraged by Government planners because of the new tourism development will bring positive benefits to the

local community, but fail to anticipate and address the concerns local residents have in terms of social and community impact of these initiatives.

The second implication of this study is the consolidation of understanding of the antecedents of community responses to tourism development. Though community attitudes have been extensively researched in the past (Besculides et al, 2002; Brunt & Courtney, 1999; Fredline & Faulkner, 2000; Gursoy et al, 2002; Hernandez et al, 1996; Teye et al, 2002; Upchurch & Teivane, 2000; Weaver & Lawton, 2001; Williams & Lawson, 2001), none of this research, however, has linked residents' attitudes with the influence of other community (collective) members and the (individual's) perceived control over decisions regarding future tourism development within the local community. This linkage allows a more comprehensive understanding of the complex relationship between attitudes and actual community behaviour. Further, this knowledge will broaden the understanding of tourism developers and Government planners of the impact/ effect of the proposed development on the community.

The third implication is the proposal to implement the proactive use of the TPB (Wyer, Earll, Joseph, Harrison, Giles & Johnson, 2001). Historically, community response to the development of new tourism enterprises has typically taken a reactive approach. That is, tourism developers conceptualize an enterprise that is advantageous to them, develop a proposal that highlights advantages to the community (employment, improved infrastructure, improved world view), presents the proposal to Government planning authorities who ensures that it follows all stated planning regulations, and then, it is imposed on the local community for comment/modification. In general, the local residents perceive that the developers and Governments see the proposal as a fait accompli, that they have little control, that only minor changes are allowed and that any (even small) change is a victory. Hence, development will proceed with frustrated developers who are progressing in a hostile environment with alienated locals who are not committed to the venture. It is recommended that a different model of intervention be created for future tourism development. Such interventions would involve press releases and Local Government planning sessions that would highlight the positives associated with tourism development, the role of other community members (especially leaders) in ensuring community sensitive development, and the role of the individual resident in controlling and achieving desirable outcomes for the community in regards to the tourism development. Such interventions could be continuously evaluated and modified to suit local conditions.

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# Limitations and Future Research

The major limitation of this study is that all the data was collected at one time. The TPB was conceived as a model that would predict future behaviour. Hence, ideally, researchers would visit a community at time 1 and measure Attitudes, Subjective norms, Perceived behaviour control and Intention to act. From this data, the model would attempt to predict which residents would become involved in response to new tourism developments. Finally, when a new tourism development project was proposed, researchers would return to confirm their predictions. However, over half the published research on TPB never collect data on actual behaviour (and report only on intention to act). Most of the remaining studies measures behaviour concurrently and therefore fails to adequately evaluate the TPB model. As the TPB paradigm is modified and incorporated into an integral part of the development/planning process (see Wyer et al., 2001), this limitation will be removed. Further, an evaluation of the process of tourism development in the local community will also be an adequate test of the TPB model. Finally, such interventions will also allow researchers to determine the process of behaviour change. That is, how do attitudes combine with Subjective norms and how do they interact to form an intention to become involved in the community response to tourism development. Also, once this process is understood, it should be possible to determine other proximal factors that will account for the other 50% of the variance on intention to act and actual resident behaviour.

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