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Limitations of Resident Perception Surveys for Understanding Tourism Social Impacts: the Need for Triangulation

Jeremy Northcote & Jim Macbeth
(Tourism Program, Murdoch University)

Abstract: Resident perceptions survey (RPS) approaches to social impact assessment (SIA) in tourism are currently en vogue, but little discussion has taken place over the validity of this approach to SIA. This paper contends that there are serious limitations involved in RPS approaches when employed as a stand-alone SIA method, which throw doubt on whether the results obtained from these surveys in fact indicate actual impacts from tourism at all. While it is not disputed that the RPS approach can be an important SIA tool, it is argued that RPS results - if they are to be accepted as valid measures of social impacts - need to be supplemented by other research data, such as that obtained from visitor surveys, participant observation, in-depth interviews and, of particular focus in this paper, quantitative social indicator research. An integrated approach is recommended that aims to determine whether the impacts indicated in RPS results derive from tourism development or are caused by external factors, including factors that may well be 'imaginary' in nature. Hence, a combined approach attempts to triangulate the causal variables underlying the perceived impacts. The importance of undertaking such triangulation is not only to further understanding of the effects of tourism development on host communities, but to ensure that the incorporation of resident attitudes into tourism planning is undertaken in an informed manner that will benefit all concerned. Key terms: resident perceptions, tourism impact, social indicator, triangulation, methodology, social impact.

Introduction

Tourism analysts have long embraced resident perception surveys as the pre-eminent means of measuring social impacts from tourism. This approach has received renewed impetus in recent years, largely due to the rising importance of participatory approaches that seek to include the voices of residents as an integral component of sustainable tourism planning. While there is considerable value in understanding tourism development from the point of view of residents, such an approach has serious limitations when employed as a stand-alone method as an objective measure of social impacts.

In this paper, it is argued that resident perception approaches are naïve in their often-stated assumption that resident perceptions refer to actual tourism effects. In particular, the confounding effect of ideological and psychological processes that shape residential attitudes towards tourism are generally not considered in such studies. The issue is whether the qualitative social indicators measured by resident perception surveys can be taken as evidence of external phenomena, and if so, what type of phenomena? More specifically, do the qualitative social indicators measured by resident perception surveys reflect impacts that are caused by tourism or, alternatively, factors or processes that are minimally related to tourism?
It is argued that resident perception survey approaches need to be supplemented by other forms of data gathering. These supplementary techniques, when combined with the results of resident perception surveys, can serve to ‘triangulate’ the actual causes underlying the impacts - indeed, whether in fact there are actual effects in an objective sense, and whether those effects are the result of tourism development or from other factors. A brief outline of the resident perception survey (RPS) approach will be presented, followed by a critique of the validity of these surveys as measurements of the social impacts from tourism. A range of alternative influences on resident responses will then be discussed, including social, cultural and psychological factors that can lead residents to exaggerate or misinterpret impacts and misidentify the cause(s). Finally, a means of triangulating the actual causes of impacts will be proposed, in which a combined methodology of resident perception surveys and quantitative social indicators is recommended, supplemented by follow-up methods such as participant-observation and in-depth interviews. It is argued that this combined approach will result in greater discrimination between: a) objective effects and subjective effects; and b) tourism impacts and non-tourism impacts. The results of this integrated approach will not only allow researchers to be more confident in their claim that resident surveys in fact measure perceptions of tourism impacts, but also help planners meaningfully incorporate the results of such surveys into their policies and practices.

The Resident Perceptions Survey (RPS) Approach to SIA

The study of the way host communities react to tourism has been a key research area in tourism studies since the 1970s. Faulkner and Tideswell (1997) make a distinction between studies that focus on the ‘extrinsic’ dimensions of resident attitudes (i.e. those that relate to the characteristics of the destination) and those that focus on the ‘intrinsic’ dimensions (i.e. those that relate to the characteristics of residents themselves). Various models proposed in the mid-1970s/early 1980s sought to understand the ‘extrinsic’ factors underlying resident attitudes to tourism development, the most influential being those models put forward by Doxey (1975: 111) and Butler (1980) concerning stages of tourism development. Doxey (1975) notes that residents’ perception of visitors change during the life-cycle of destinations from initial euphoria to apathy, irritation and finally antagonism. Doxey's ‘Irridex’ model viewed these changes as partly determined by objective changes in the scale of tourism development and its resultant impacts. Doxey's model has been subject to various criticism in recent years for postulating the uniformity of these stages (Pearce 1998: 142). Other studies have emphasised the way that ‘intrinsic’ factors such as age, proximity and involvement in the tourism industry influence residents' perceptions of tourism in different ways (Brougham and Butler 1981; Liu and Var 1986; Milman and Pizam 1988; Long, Perdue and Allen 1990). Nevertheless, most studies of resident attitudes have treated their findings as indicators of the social impacts of tourism (Pizam 1978; Ap 1990; Lankford and Howard 1994; Lindberg and Johnson 1997; Cegielski and Mules 2002; Fredline 2002), even if residents’ reactions to tourism may differ according to their particular interests, position or level of involvement.
The notion of social impacts is one that is borrowed from the wider field of development studies, although it is true to say that the wider SIA field has had little direct influence on the development of tourism impact research. According to Burdge and Vanclay, social impact assessment (SIA) can be defined as, "the process of assessing or estimating, in advance, the social consequences that are likely to follow from specific policy actions or project development" (1995: 32). While the predictive aspect of SIA is certainly a prominent aspect of such assessment, SIA can equally be used as an evaluation tool for development that has already taken place (i.e. its ex-post as opposed to ex-ante application). The resident perceptions approach to SIA in tourism studies is an ex-post examination of the effects of tourism on destinations, for it concerns resident reactions to tourism development or tourism-related events that have already occurred or are currently under way.

Resident perception surveys have mostly been quantitative in their design, although some qualitative studies have been carried out using open-ended questionnaires (e.g., Brunt and Courtney 1999; Xiao and Smith 2004). Most RPS studies are quantitative because they employ statistical-based techniques that, theoretically at least, are not shaped by the interpretive perspective of the researcher. This claim is open to dispute of course, and it would be a bold researcher who would claim that their findings are not shaped to some degree by his/her interpretive outlook. Nevertheless, the intent of most RPS studies is to derive findings with minimal subjective interference from the researcher through objective, mathematical means (even if this objectivity may ultimately be illusional), and so their methodology is defined as quantitative. The social indicators these researchers study are, however, qualitative, because – from the point of view of researchers at least - they are based on residents' evaluations, which theoretically differ according to the point of view of respondents. By 'social indicators' we mean the key variables that serve as signs of social impacts of development.

Miller (2001) notes the employment of both quantitative and qualitative social indicators in his exploration of social indicators for sustainable tourism. Quantitative indicators refer to those variables that can be independently measured, such as the level of crime in an area, or the amount of income per capita. Qualitative indicators, on the other hand, are those that are evaluative in nature, such as levels of resident satisfaction. Because quantitative indicators can be measured independently from resident perceptions, they are generally seen to be 'objective' in nature. Conversely, because qualitative indicators are understood from the viewpoint of residents, they are generally seen to be 'subjective' in nature. This is not to say, however, that qualitative indicators are not related to objective determinants, and here lies the complexity of the matter. An ‘indicator’ refers only to the form that the sign takes, it does not refer to the nature of the factor that it is supposedly an indication of. Hence, an evaluative measure such as the level of community dissatisfaction might indicate an objective change in the demographics of that area, which leads residents to change their evaluation of their community. In this case, we can talk of demographic change as having an ‘impact’ on residents, which can be discerned through examining resident attitudes towards their community as a relevant ‘qualitative indicator’ of those effects. When we consider many of the RPS studies that have been carried out in the tourism
field, we find that most RPS studies carry the implicit or explicit claim that social actors’ representations of those events are in some important respects qualitative indicators of effects from objective events. Otherwise, we can only limit ourselves to talking about ‘attitudes’ rather than ‘impacts’. While the notion that perceptions can have an ‘objective’ basis should not be accepted uncritically (objectivity is a term, after all, that is essentially a philosophical construct or ontological notion that is open to contestation), the objectivist discourse that has given rise to the term ‘impact’ (with its implication of causality) demands that some notion of objectivity be entertained and, further, that the basis of those perceptions so designated be assessed accordingly. Our point is that if RPS proponents are intent on representing their findings as measurements of tourism ‘impacts’, then this carries with it certain implications, which have an important bearing on the way they design their methodologies.

Problems with the RPS Approach

While the methodological sophistication of the research designs employed within RPS studies is increasing, the methodological awareness of RPS as an SIA tool – in particular, its conceptual validity as a measure of objective effects - remains largely underdeveloped. For example, there has been trend in recent years to standardise resident survey techniques by developing generic scales (e.g., Getz 1994; Lankford and Howard 1994; Delamere 1997; Ap and Crompton 1998; Delamere 2001; Delamere, Wankel and Hinch 2001; Fredline, Jago and Deery 2003). But methods of item selection in these scales tend to be based on subjective processes, such as literature reviews of previous survey findings (Fredline et al. 2003), or the Delphi technique (Delamere et al. 2001) which relies on the opinions of so-called ‘experts’ who are familiar with previous findings. The objective basis of these items has never been investigated, and consequently, it has never been established whether these scales measure objective tourism effects or merely involve a self-referential cycle of subjective item reproduction based on researchers’ judgements and/or resident attitudes. Given that the value of resident perception surveys is often seen by their supporters to lie in the ability to assist in planning future development, one would think that the issue of their validity as an objective measurement of tourism social impacts would be of paramount concern.

Unfortunately, most RPS studies simply treat their results uncritically as measures of social impacts (e.g., Delamere et al. 2001), without defining what type of social impacts, or what aspects of social impacts, an RPS approach actually measures. For example, Fredline et al (2003: 27-28) remark that the RPS approach is "clearly subjective and, therefore, gives no verifiable indication of the quantification of costs and benefits accruing to the community under investigation". However, they point out that objective measurement is "not possible for some types of impacts” or for measuring “effects on the quality of life of local residents” (2003: 27-28). They then proceed to discuss a scale for measuring resident perceptions of social impacts that will “lay some of the foundations” for an understanding of the variable social impacts of events (2003: 36). However, they do not specify what type of impacts
their approach helps us to understand, and what precisely such an approach tells us about those impacts.

**Limitations of Resident Perceptions Surveys**

We have to be clear about what the results of resident surveys convey in terms of understanding tourism impacts. For example, there is no doubt that Fredline et al. (2003) are correct in stating that objective measurements are unsuitable for certain types of impacts. But what are these types of impact exactly? For example, contrary to their own position, there are some quality of life issues that are amenable to objective measurement. Safety is a quality of life issue, but it is one that can be subject to objective measurement through, for example, examination of crime statistics. Having said that, there is a subjective element to ‘safety’ that cannot be revealed through objective measurement - namely, the *feeling* by residents that they are safe or unsafe. Only a RPS approach will, admittedly, uncover such subjective qualities. However, an RPS approach will not tell us whether those subjective ‘feelings’ are based on objective effects (such as a real rise in crime and, further, one that is caused by tourism), or are merely imaginary notions caused by insecurities, myths or media sensationalism.

Indeed, any statement made by a resident about an objectively measurable impact, such as crime levels, job opportunities, pollution, and so on, can theoretically be confirmed or invalidated by an objective measure. Unfortunately, a RPS approach (when employed alone) is unable to distinguish between objective effects and ‘imaginary’ constructs. The only instances where a RPS approach alone has validity in measuring impacts is in the case of ‘pure’ subjective effects. An example is the way that residents can react negatively to tourists because of racist sentiments held by the host community. In this case, tourism has an impact on residents by causing them discomfort due to the racial categorisation of the arriving tourists. Strictly speaking, however, tourism may not be the principal cause of that discomfort (unless it can be shown that tourists of particular ethnicities are engaging in behaviour that is intrinsically offensive). Rather, the principal cause lies in cultural or psychological processes that precede the tourism impact. For example, some initial negativity to Japanese tourists visiting Australia during the 1980s was based on widespread distrust by Australians of Japanese people as a result of the Second World War, combined with general racism against Asian people that was widespread among Australians. These attitudes soon changed as a result of positive host-guest interactions (the Japanese generally came to be recognised as polite people, whose high-spending habits also won favour among locals), but these preconceived attitudes had to be first broken down.

Understanding the basis of such views is important, for it reveals whether tourism itself is the cause of an impact, or whether the cause lies elsewhere. The problem with RPS approaches is that they can indicate a misplaced or even spurious causality. Residents know that they are dissatisfied with something, but they are not always in the best position to know what the cause of that dissatisfaction is. Even if their assessment of the cause is correct, how can we be certain that other factors did not also contribute to that dissatisfaction - perhaps more so than the factors that they indicate (e.g., tourism)?
The limitations involved in the RPS approach to SIA are evident in the theoretical positions invoked to justify this approach. A theory currently popular among those employing the RPS approach is social exchange theory (Ap 1990; Perdue, Long and Allen 1990; Lee and Back 2003; Waitt 2003). Social exchange theory basically holds that people who benefit favourably from a situation tend to evaluate it positively. On this basis, it follows that a positive evaluation of tourism relates to tourism having positive effects on those concerned. However, there are a number of assumptions involved in social exchange theory that have not been adequately addressed by proponents. The most problematic of these is the assumption that people are in a position to know whether they are in fact benefiting from a particular exchange, which involves a certain clarity and insight on the part of the participant. Herein lies a flaw in the way the RPS approach has been employed, for its proponents often fail to acknowledge that various social and psychological factors may limit or even distort people's perception of the costs and benefits involved in an exchange. Another assumption is that people know who their exchange ‘partner’ is. It does not consider the possibility that participants might sometimes be mistaken in their identification of their exchange partner - for example, when crime levels are attributed to tourism, but in fact are caused by other factors such as changing demographics, income levels, police practices, and so on.

An alternative theoretical position invoked by those promoting a RPS approach is the Social Representation Theory (Pearce, Moscardo and Ross 1996; Fredline 2002), which emphasises the way in which images, values and preconceived ideas frame people's perceptions. Ross points to the possibility that "tourists and tourist impacts are comprehended by host community members by way of certain social representations" that "typify and channel their social judgements" (Ross 1998: 110). For example, Fredline and Faulkner (2002) note how sociopolitical values can shape people's perceptions of impacts. Snepenger and Johnson (1991) found in the United States that those identifying themselves as 'conservatives' tend to be more negative about the effects of tourism than those identifying themselves as 'liberals'. According to Fredline and Faulkner: "The consideration of values as possible predictors of residents' perceptions lends itself to a more in-depth study of how individual values and beliefs are formed, and how they are shared and transmitted within a community" (2002: 117). However, one of the implications of Social Representation Theory when applied to social impacts is that resident perceptions may not be based on objective effects at all. This is a possibility that is not considered by RPS proponents, who seem to assume that social representations only apply to the different ways residents respond to actual effects based on varying values and beliefs.

We need to thoroughly explore the implications of employing a RPS approach to social impacts. What does such an approach tell us about social impacts? In particular, what are the possible factors that may misrepresent actual tourism impacts in the eyes of residents, such that we can be confident that we are talking about social impacts caused by tourism events at all? Indeed, keeping in mind the
distinction between perceptions and attitudes (Ap 1992; Getz 1994), are we in fact dealing with perceptions (with its implication of the sensual and cognitive processing of independently existing, 'objective' phenomena), or simply with attitudes that may not be based on 'clear' perceptions but on norms and beliefs? The central issue is whether RPS data serves as an indicator of objective social impacts, or whether it serves as an indicator of distorting processes that may have little or no relation to the actual impacts from tourism.

The Basis of Distortions

There is a risk in a resident perceptions approach that all that is being measured is host satisfaction/dissatisfaction with tourism, and not tourism impacts per se. As Burdge and Vanclay remark:

The general community does not necessarily know what the likely effects of development will be. The public may be manipulated by advertising, and may be deceived by promises of economic prosperity. Public support for, or opposition to, a project may simply be a matter of timing, the role of the media and public relations exercises by the developer (1995: 49).

Burdge and Vanclay's remarks apply equally to ex-post SIAs, such as those carried out by RPS proponents, as they do to the ex-ante SIAs that they are interested in.

Central to the issue is the distinction between objectivity and subjectivity. Pearce (1998) makes the distinction between tourism impacts that are objectively verifiable and those that are subjectively felt (see also Hall and Page 1999: 132). In actuality, we are dealing with three kinds of impacts: those that are objectively verifiable and subjectively felt; those that are objectively verifiable but not subjectively felt; and those that are not objectively verifiable but subjectively felt. Further, subjectively felt impacts can be classified into three types: those with empirical causes intrinsic to the claimed impact factor (e.g., tourism), those with empirical causes not intrinsic to the claimed impact factor, and those with no empirical causes at all and hence are imaginary effects spawned by myths, beliefs and misconceptions.

There are a range of limiting and distorting factors that can lead to exaggerations and misplaced causality in resident perceptions. Limiting factors include: a person's lack of omnipresence to see all the processes that impact on their lives (including on the lives of others that affect them in an indirect manner); the delays caused by accumulative effects that fail to impact on people's lives until a later date; and the subtle nature of the factors that underlie change that tend to go unnoticed. Distortive factors include: prevailing myths, ideologies or discourses that lead reality to be interpreted in preconfigured ways; social interaction (with other people and the media) that leads to consensual misunderstandings - in some cases 'myths' - about the causes and severity of impacts; individual life histories that shape the way events are understood; cognitive and perceptual processes that can lead to misjudgments; and various culturally and psychologically defined needs and desires that can 'cloud'
people's awareness. In the case of event tourism and seasonal tourism, the passage of time can also be an important variable, as distortions tend to increase with temporal distance. For example, interviewing respondents about the impacts of a local festival immediately after the event, or surveying residents during the peak tourism season, may produce quite different results from a study carried out six months later (Haralambopoulos & Pizam 1996: 510). Residents responding to a survey at a later date may not be so annoyed by this time by the noise, congestion and litter associated with the tourism season. Alternatively, the employment benefits and euphoria surrounding the holiday season may have lost their lustre by this time. Unfortunately, it has not been standard practice in RPS studies to document the date or period in which the survey was administered in relation to the date of the event(s) being assessed – a methodological matter that should be as compulsory in reporting procedures as the specification of sample sizes and techniques.

The Subtlety of Tourism Impacts

It needs to be understood by tourism researchers that residents are not always in the best position to identify cause and effect. Delayed and indirect effects are major confounding variables. Of relevance here are the distinctions made between social change and human impacts (van Schooten, Vanclay and Slootweg 2003) and between ‘effects’ and ‘impacts’ (Baines, McClintock, Taylor and Buckenham 2003: 30-31). It needs to be kept in mind that the change brought about by tourism (i.e. its effect) is a constant process, which does not always produce impacts on residents straight away. The distinction between social changes/effects and impacts has some interesting implications in terms of a RPS approach. What happens when the human impact of social change is not felt for some time? After all, some changes have delayed impacts, such as rising crime rates that are not perceived until someone breaks into your home, or positive impacts on the economy caused by the multiplier effect that occur over time. In these cases, resident assessments are rather meaningless. What happens when the human impact brought about by social change has resulted from a number of factors, with tourism being only one of them? For example, the rise of crime might be partly due to tourism, but also due to changing demographics, changing police practices and any number of other factors. Tourism, however, may become the scapegoat for the problem.

We may also ask what happens when human impacts occur that are not consciously perceived by residents? We need not journey into the labyrinth of Freudian psychology to appreciate that people are not always aware of the transformations that take place in their lives, which can often be quite subtle in nature. It may be sometime before people ‘wake up’ to what is going on around them and how they are being affected. For example, a Marxist or political economy perspective would question whether residents are conscious enough of their own ideological subordination to be aware of the manner in which development initiatives impact on their structural position. A widening gap between rich and poor, for example, may go unnoticed by residents, but nevertheless have an impact on them. In fact, the key element missing from Faulkner and Tideswell’s (1997) often-cited extrinsic/intrinsic model of resident attitudes is that of ideology. A RPS approach does not take into account the way that resident
perceptions can be manipulated (unbeknown to themselves) by savvy tourism marketeers keen on discouraging opposition to their development plans, or by a pro-development government that talks up economic benefits for communities over potential social costs. From a Marxist perspective, incorporating resident attitudes into a SIA framework may only serve to reinforce dominant ideologies that may not be: a) referring to actual, 'objective' impacts; and b) in residents' best interests.

In pointing out the limitations of a residents perception approach, it is not being suggested here that tourism analysts should return to a sole focus on quantitative social indicators such as rates of employment, crime and education, to which the residents perception approach grew as an alternative (Ross 1998: 111). In fact, we agree with Fredline et al (2003) that residents may provide key information about social impacts that are not detectable through other means. However, the view of Allen and Beattie (1984) that subjective measures are better than objective indicators should not be assumed. The key to employing a RPS approach effectively in SIA is to, firstly, combine this approach with analysis of objective indicators, and secondly, to employ in-depth follow-up investigation of possible factors (other than tourism impacts) that shape the perceptions of residents. The rest of this paper will explore how a RPS approach can be employed alongside other approaches to identify the nature of the impacts involved, with particular emphasis on the use of quantitative social statistics in combination with RPS data.

Improving the Validity of RPS studies as a Social Impact Measure

To some extent, the validity of RPS as a SIA measurement tool can be improved through more effective design of the surveys and careful analysis of the data. Ross notes that resident attitudes on tourism tend to be polarised, with tourists often viewed either as "destructive 'terrorists' or economically beneficial 'goldmines'" (Ross 1998: 110). The biases caused from such stereotypes can be identified through a more careful survey design. The use of dummy questions, for example, could be included to identify respondents who might be 'fudging' their responses because they are overly positive or negative towards tourism or tourism-related events. For example, a few questions about impacts that are known by the researchers to not be associated with tourism in the area could be included as a way of determining whether respondents are genuine in their responses. Also, individual responses that are overall strongly positive or negative might be suspected of having strong feelings that are not related to the particular items on the questionnaire. In such cases, respondents might have reacted strongly to one impact, and this reaction has shaped their response to the other impacts, or their views may not be based on actual impacts at all, but various preconceptions. Such outliers should be flagged in studies as indicators of possible distorting factors.

However, even such internal design adjustments can only go so far. The validity of resident perception surveys for SIA purposes can be improved even further by incorporating other forms of data as a way of triangulating the causal factors. Denzin defines triangulation as "the combination of methodologies in the study of the same phenomenon" (1970: 291). Other social scientists also talk about the
triangulation of data, theories and investigators (Easterby-Smith, Thorpe and Low 1991). It is our proposal that the use of a RPS approach in combination with other approaches results in: a) greater validity in the detection of the social impacts of tourism; and b) greater insight into the nature of those impacts. In particular, we are interested in the way that the RPS approach can be supplemented by other approaches in order to triangulate the impact factors involved. The principal supplementary approach that we will examine here is one that seeks to analyse quantitative social indicators (QSI). The use of QSI data for measuring the social impacts of tourism is not new (see, for example, Casado-Diaz 1999), but their use in combination with a RPS approach has not been previously examined.

Beginning with item selection, QSI data might reveal certain issues that may not show up in qualitative methods for item selection. Qualitative approaches to item selection only bring forth expected or already-acknowledged impacts, not ones that are yet to make a subjective impact. For example, perhaps while sifting through the results of, say, attendance figures for the annual fair, it is found that there has been a lower-than-average turn-out of residents in the last three years, which has coincided with increasing commercialisation of the fair through its promotion as a tourism event. This could be an impact that threatens the collective unity of the region, for in the past the fair may have served a valuable link between the urban centres and the surrounding rural districts. Because this particular impact may not have been attributed by residents to the effect of tourism, or would not have been deemed that important, the question would unlikely to have shown up in pre-testing. It is also not the type of impact that would be included in a standardised RPS scale. Such scales tend to only include generic factors that are not specific to tourism development patterns in particular regions. For this reason, examination of quantitative social indicators through 'data mining' can be a useful method for item selection in particular locales, thereby improving the content validity of resident surveys for measuring social impacts.

What we are most interested in, however, is the manner in which QSI data can, in general terms, improve the construct validity of resident perception surveys as a SIA method, by ensuring that resident perception surveys really do measure what they claim they do - namely, the social impacts of tourism. One aspect of improving the construct validity of surveys in this more general sense is by increasing their convergent validity (that is, their ability to measure impacts that can be verified through alternative means). We are not concerned here with the type of convergent validity that is often addressed by RPS proponents (e.g., Ap and Crompton 1998), which involves determining the strength of a particular survey design by comparing the results obtained by similar types of surveys. This form of convergent validity simply confirms that resident views on particular impacts are being accurately assessed. It does not confirm whether those views are themselves indications of actual tourism impacts. In contrast, a QSI approach can help confirm whether a RPS approach actually is measuring resident reactions to actual tourism effects. If, for example, residents complain of rising costs of goods and services, then a simple survey of local pricing will confirm, firstly, whether there has been a rise, and secondly, if this rise is due to tourism or normal rates of inflation. If residents
complain of increasing crime because of tourism, then an examination of the crime statistics will verify whether this is the case, and may offer some indication that such an effect is due to tourism.

In this respect, the use of geographic information systems (GIS) to identify impact zones in terms of pricing, crime levels, noise pollution, traffic flows, heritage sites and other relevant features offers a sophisticated tool for integrating RPS findings with quantitative social indicator results. GIS enables analysts to study various quantitative and qualitative indicators through thematic mapping and spatial analysis (Minerbi, McGregor and Matsuoka 2003), which enable analysts to determine correlations between variables. We can, for example, plot the location of residents who claim to experience increasing rates of disturbances against areas of rising crime and areas of increasing tourism, and determine whether there is a correlation through examining the overlaps.

The interesting thing is when the RPS data and QSI data do not agree. Let us say, for example, that the location of residents complaining of local disturbances does not correspond to the growing crime areas indicated by the QSI data. One of two things has occurred. The first possibility is that there has been a problem of under-reporting in the QSI data, in which case the crime statistics need to be reexamined (an important finding in itself, which will be particularly useful for policy-makers and police and, ultimately it is hoped, for residents and tourists). In such a case, a second survey might ask residents specifically if they have been victims of crime recently in the area. If the results indicate that levels of crime are no greater than normal, then we might suspect that some myth-making process is occurring. Perhaps there has been increasing crime rates in other areas, and that reports of these in the media, or through discussions with friends in other areas, has led to a general perception that crime is getting out of hand in their own area. Again, a carefully designed follow-up survey might be able to confirm such suspicions (together with an examination of neighbouring crime statistics and of local media reports).

Perhaps there has been no increase of crime anywhere in the region, in which case it could be concluded that tourism is serving as a scapegoat for normal levels of crime. Perhaps crime is increasing, but the quantitative social indicators suggest that it is linked to factors other than tourism (such as an economic downturn that tourism development might in fact be trying to redress!). By combining a QSI approach with a RPS approach in this way, the discriminant validity of resident perception surveys is increased, ensuring that actual impacts from tourism are being measured rather than extraneous variables.

QSI results can also be useful for determining the seriousness of residents’ responses, which is another indication of the validity of the RPS data. The conviction with which residents hold certain views about tourism impacts can be measured by examining the manner in which attitudes translate into action - a means of increasing the survey’s criterion validity through testing its predictive ability. Getz (1994) points to the difference between attitudes and behaviour - a distinction also noted by Barrow who states: "the linkages between attitude and behaviour are complex; put crudely, there is often a big difference between what people say or feel and what they actually do" (2000: 68). It is reasonable to sometimes assume (although not always) that a failure of opinion to translate into action is a sign of a
lack of seriousness in people's stated views. While differences between the two do not necessarily indicate that their views lack conviction, it is certainly a strong possibility, and might indicate more the influence of 'myths' on resident responses than actual impacts undermining their quality of life. For example, if residents are genuinely dissatisfied with the level of tourism in their area, then it might be expected that more residents would be selling their homes and moving elsewhere than normal, which can be checked through home sales in the area (allowing, of course, for possible rises in real-estate prices – itself perhaps brought about by tourism - that might lead residents to sell-up for alternative or additional reasons!).

The Triangulation Inventory

The techniques discussed above represent just some of the ways that a combined RPS/QSI approach can help identify the factors underlying resident responses and whether actual effects of tourism development are impacting upon them. A partial inventory of the quantitative social indicators that can supplement RPS data for measuring impacts is shown in Table 1. The first column in Table 1 lists those impacts identified in the RPS scale developed by Fredline et al. (2003) for tourism-related events. The second column designates whether the impact is subjective or objective in nature (S = subjective, O = objective) or both – that is, as most researchers might define them. The third column is the 'quantability' of the perceived social impact, that is, the degree to which the impact can be measured through quantitative means (again, as most researchers might rate them). The final column lists examples of the quantitative indicators that might be employed to verify perceived impacts.

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<th>QUANTABILITY</th>
<th>QUANTITATIVE INDICATOR</th>
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<td>No. of new businesses opening</td>
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<td>Subjective/Objective</td>
<td>Proportion</td>
<td>Data Source</td>
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Table 1. An inventory of quantitative social indicators for perceived social impacts from tourism

The manner in which some items in Table 1 are classified as both subjective and objective in nature indicates the multidimensionality of social impacts. Although we have talked so far about how a combined approach can work to either support or discount the findings from resident surveys, we need not be simplistic, theoretically speaking, about the division between objective and subjectively felt impacts. In many cases, resident views may be based on a combination of objective and subjective elements, including some elements that are ‘imaginary’, and we might agree with Fredline and Faulkner (2002: 117) that residents’ existing schemas can be activated as a result of actual impacts, and then come to typify and even exaggerate impacts in accordance with these pre-conceived schemas. In such instances, the QSI data should reveal some level of impact occurring, although one that may not be of the same proportion and/or the same nature as that indicated by the RPS results.

The fact that some subjectively felt impacts do not lend themselves well to quantification presents something of a limitation when employing a combined RPS/QSI approach. In these cases, alternative methods may prove useful. For example, judgements about an area’s appearance made by residents
might be compared to the ratings made by an independent panel. Meeting new people and interaction with friends might be verified through participant observation. These alternative methods will not be discussed in any detail here, suffice to say that they may contribute greatly to the triangulation of actual causes of perceived impacts in ways that have been greatly underestimated by tourism scholars. In particular, methods such as participant-observation and in-depth interviews can, when employed properly, be highly effective in verifying or ruling out the effect of myth-making and other possible distortions in resident responses.

It should be noted that not all theorists are supportive of combining approaches in the way that we have suggested. Campbell (2001), for example, is critical of analysts who seek to integrate methodological approaches on the basis of ‘triangulation’. Referring to the emerging call to integrate quantitative and qualitative methodologies, Campbell rejects the notion that the findings from one method can be crosschecked or supplemented by the findings produced by another method. The implication is that triangulation does not lead to a superior perspective, but a plurality of perspectives that are incommensurate with one another. Campbell’s position is based on a firm distinction drawn between the respective paradigms that are seen to underlie the different methodologies. However, such a ‘purist’ approach to paradigms is rather limiting. While methodological triangulation is necessary because perception never completely accords with objective reality, methodological triangulation is possible because perception is never completely devoid of objective content. The notion that social reality is either objective or subjective in nature belies the view (a philosophical one to be sure) that social reality is both objective and subjective in nature (Berger and Luckmann 1967), and, further, that the subjective dimension captures something of the objective dimension that, through careful inspection, can be identified and measured from different vantage points. This is not to say, of course, that there will not be important differences in ‘what is seen’ from each vantage point. The challenge for the analyst is to understand where (if any) the area of convergence lies, and to determine whether such commonality is related to a shared objective reality or, conversely, to a shared set of socio-cultural norms that convey a sense of pseudo-objectivity. Only continual interrogation from a variety of perspectives will clarify the situation. Further, the analyst should not forget to explore the areas of divergence as well, for these areas can provide important clues regarding the source of those incompatibilities (for example, whether the differences are due to a limited data set, a research design that is poorly applied, or the effects of subjective bias, either on the part of the analyst him/herself or on those who are the source of the data).

It goes without saying that the validity of a triangulation approach (indeed, of any research method) as an ‘objective’ research technique is dependent on certain philosophical assumptions about the nature of reality and the manner in which human beings are able to come to ‘know’ that reality. But if researchers such as those promoting a RPS approach are stating that there are both objective and subjective determinants associated with tourism that can be measured through survey techniques, then it is consonant with this view that other techniques should be employed that, when combined together, have the ability to isolate the effects of each determinant. As Angrist et al. put it: "If we have physical
and psychological inputs into our lives, then it is axiomatic to measure both in order to determine a quality of life” (1976, quoted in Carley 1981). While Angrist et al were making a case here for incorporating qualitative data in studies, we still should not forget the importance of including quantitative data. For if in our haste to escape the quantitative hegemony of social research in the 20th century, we should find ourselves relying on qualitative indicators alone, then we will probably be no closer to understanding the multidimensional nature of the world that surrounds us than we were before.

Conclusion

Proponents of resident perception survey approaches to the study of tourism social impacts have been rather brazen in their claim to measure resident responses to the social impacts from tourism. There is a crucial distinction between perceptions and actual impacts, and the aims of research must be carefully matched with the methodological approaches employed to achieve them, which we hold has not been the case with many of the RPS studies to date. One means for improving the objectivity of such studies is by combining RPS with QSI analysis, enabling social impacts from tourism to be detected through a process of triangulation. Central to the effectiveness of this combined approach is the manner in which perceived impacts can be verified as actual effects, in the sense that the impact variable is shown to be intrinsic to tourism itself and not spurious or related to some other phenomena. Without such verification, the usefulness of resident perception surveys as a measure of objective social impacts is rather groundless, except as a general indication of the way tourism is constituted within the beliefs and values of residents (a by no means insignificant area of inquiry in itself).

The distinction between resident perceptions of impacts and actual effects has important consequences on planning. If indeed resident perceptions are valid, then policy makers and planners have a responsibility for mitigating these impacts. If they are unfounded, then policy makers might be better off engaging in education campaigns designed to raise awareness and change attitudes rather than alter the developmental path of tourism itself. The danger is, of course, when resident perceptions are valid, and are ethically unacceptable, but policy makers engage in promotional campaigns to distort the impacts or divert attention away from them. But it can be equally argued that it is just as ethically unsound for tourism ventures to be shut down or destinations to be de-marketed in order to allay resident concerns that are unfounded. Tourism may actually be doing much to help the community, unbeknown to residents. A RPS-only approach to SIA does not safeguard against such errors, and may lead authorities to seek to please the masses when other alternatives might actually be more productive or more ethical. Besides, who knows, perhaps residents will later come to change their minds about the benefits of tourism in their region? The stakes in ensuring that resident perception surveys are 'getting it right' are therefore high.

While sustainable tourism must seek to include residents as active agents in the process of development, it cannot - in the interests of intra-generational equity - do so in a simplistic, non-critical
manner. While earlier approaches to development were thoroughly guilty of ignoring the point of view of residents who are potentially development's main victims, we now need to be extra careful in ensuring that we fully understand the basis of the residents’ views that are increasingly being taken into consideration. In this respect, SIA needs to be undertaken in a systematic manner that is attentive to all the factors that may account for the findings that are produced. It has been suggested in this paper that methodological triangulation is an important means for carrying out such systematic analyses, although we should stress that the degree to which such an approach is carried out in a systematic manner is greatly dependent on the skills of the analyst, not to mention the time and resources available. The requirement of researchers to be trained in a variety of research data collection methods, and/or for organisations to employ multi-skilled researchers who work together in a complementary manner (methodologically speaking), might seem rather demanding and contrary to the methodological specialisation that has characterised much recent tourism and leisure research (indeed, of academic research in general) to date. However, the rewards of taking a more wide-ranging approach are considerable. In the process, we may learn not only about the impacts that occur from tourism development in destinations, but also about the factors that predispose residents to respond to such impacts in different ways, sometimes in ways that are not directly related to tourism at all. This in turn may help us understand the way that tourism is constructed in destinations, and how resident perceptions themselves contribute - in an objective sense - to the very nature of the social impacts that occur (thus serving to document the impact of resident attitudes on tourism, not just the impact of tourism on residents). Only in this way will resident perception approaches advance understanding of social impacts and aid in planning tourism initiatives and events in a manner that will be beneficial to all concerned.

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References