

*Impacts of Limited-Stakes Casino Gambling
on Resident Satisfaction with Community Life: A Preliminary Report*

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Introduction

Rural communities across the United States, faced with the decline in their traditional industries of fishing, forestry, mining and agriculture, are continuing their efforts to restructure their economies (Bonnett 1993; Long et al 1990). Despite the most creative efforts few economic development options appear to be available to these communities, thus many are pursuing tourism as the most acceptable in the short-term. Within tourism only one attraction seems to have the potential for substantial short-term economic gain and that is gambling. But, aside from the promise of windfall profits and potential for abundant tax revenues, it is evident to even the casual observer that such an economy creates tremendous change within a community.

Two states, Colorado and South Dakota, have implemented gambling in rural communities with varying success. In both states, gambling was initiated through a citizen referendum and is restricted to the games of Poker, Black Jack and slot machines. There is a \$5 bet limit and thus is referred to as "Limited Stakes" gambling. As would be expected, their decisions have resulted in economic and social trade-offs, many of which were difficult to anticipate. Although the literature contains substantial information about the economic and policy implications of large scale gambling in such places as Nevada and New Jersey (Eadington 1993; Cabot et al. 1991) and of the addictive nature of gambling (Volberg 1992), to date there has been no comprehensive study of the implications of limited stakes gambling on resident assessment of satisfaction with rural community life.

Using a large data set this article empirically examines resident welfare implications of the introduction of legal gambling in the rural communities of these two states. Two research questions are considered. The first question examines the levels of community satisfaction across different survey groups. For example, are residents of gambling towns more satisfied with their community than those who live in a comparable non-gambling town? A second research question identifies potential sources of any differences in expressed satisfaction. For example, does economic dependence on gambling business influence resident satisfaction with a gambling community?

Tourism and Gambling Impacts

Because tourism is a growth industry it offers the potential for job creation, business development, real estate investment and tax revenue generation for rural communities. It currently is reported to be a \$350 billion industry in the United States and is projected to be the world's leading industry by the year 2000 (Edgell 1994).

Substantial research has been conducted on the social, economic and environmental impacts of tourism (Lankford 1994; Nuckolls et al 1992). Much of this research has studied the impacts of tourism on the local community and on resident's assessment of their satisfaction with community life. Predictors of such attitudes generally include the concentration of tourists and/or the ratio of tourists to residents (Pizam 1978); personal benefits received from tourism (Milman & Pizam 1988); distance of the resident's home from the tourist zone (McCool & Martin 1992); length of residence (Sheldon and Var 1984); the stage or extent of tourism development (Long et al 1990); and the magnitude and intensity of change (Pizam and Milman 1986).

Gambling as a strategy to attract visitors and their expenditures (tourism industry development) is being considered at state and local levels across the country. Revenues from gambling appear to be so great that small towns are now looking at gambling as a solution to their economic troubles. But gambling also appears to bring about rapid and dramatic change that can have particularly detrimental effects on community life and resident's satisfaction. Such change has not been seen since the 1970's when the energy rich states in the West created towns and cities overnight in response to the discovery, extraction, and production of oil.

Because legal gambling is just now appearing in small communities (Deadwood, 1989; Colorado 1991), few studies have been conducted on its impact, and none have been of a comprehensive nature. Caneday & Zeiger (1991) conducted a study in 1990 in Deadwood to "assess residents' perceptions of the social, economic, and environmental impacts of tourism on a small community immediately after a major change in tourism policy and visitor pattern." Their research was conducted two months after limited stakes gambling began and they found that residents were particularly sensitive to "the effects of tourism on traffic conditions, noise levels, quantity of litter, and occurrences of gambling." Stokowski (1994) reported that "The Central City and Black Hawk (Colorado) developments suggest that undesirable lag effects associated with community tourism growth (in this case due to gambling) are likely to appear in social and human services, which trail economic benefits." She further states that "the experiences . . . should alert other developing tourist destinations to the need for more capable planning and management of temporal problems in growth impacts."

Research Questions/Hypotheses

This paper will report on the testing of select hypotheses predicting the response of residents of gambling communities in assessing satisfaction with community life. These hypotheses are:

- H₁ Resident satisfaction with community life in a gambling community will be significantly lower than in a non-gambling community.
- H₂ Residents receiving economic benefits from gambling will be significantly more satisfied with community life than those who are not receiving such benefits.
- H₃ Resident support for (attitude toward) gambling will have a positive effect on satisfaction with community life in a gambling town and a negative effect in a non-gambling town.

To test these hypotheses, a survey was conducted of all occupied households from four gambling communities and one non-gambling community. The sample frame consisted of residents of the three Colorado mountain communities of Black Hawk, Central City and Cripple Creek, and Deadwood, South Dakota, all of which recently were legally authorized to provide limited-stakes casino style gambling. Limited-stakes gambling was re-introduced to these communities as a result of state referenda and in the case of Deadwood, a local referenda. In addition to the gambling towns, residents of a non-gambling "control" town (Grand Lake,

Colorado) with characteristics similar to those of the four gambling towns were surveyed. Also, high school junior and seniors from the four gambling towns were included in this research.

Questionnaire Development and Administration

The questionnaire used in this study was modeled after questionnaires used in previous research conducted on the impacts of tourism on resident satisfaction with community life (Ap, 1991; Long, Allen and Perdue, 1990). An initial draft of the questionnaire was reviewed by a panel of tourism and survey research authorities as well as tourism technical assistance providers and community officials. After suggested revisions, the questionnaire was then administered to a panel of community residents to determine the utility of the instrument and the amount of time it took to complete it.

The questionnaire sought information generally on residents' attitudes about their community (22 questions), on resident's attitudes about gambling and gambling in the community (17 questions), on the perceived changes that had occurred since gambling was approved and whether these changes were attributable to gambling (36 questions), on changes in political empowerment of residents and gambling businesses (7 questions), on the type and extent of contact with gamblers (8 questions), on the type of professional and/or recreational relationship with gambling (4 questions), and on general demographic information (14 questions). In addition, respondents were also asked to make additional comments or suggestions regarding gambling in their community and whether they would recommend other communities legalize gambling. Likert scales were used whenever appropriate with the majority of the measurement items being taken from the tourism impact literature and adapted for use with gambling.

In the Fall of 1992, attempts were made to distribute a questionnaire to an adult member of each occupied household in the four gambling towns and the control town. In three of the four gambling communities and the control town, the questionnaires were personally delivered and picked up by trained data collectors. In one gambling community (Cripple Creek) questionnaires were mailed along with a return stamped envelope. In addition, questionnaires were distributed in home room classes to junior and senior high school students of the respective schools of the gambling communities. Permission could not be obtained to collect similar information from students of the control town.

A total of 776 questionnaires were collected from adult residents for an overall response rate of 65.4 percent. For the individual communities the response rate was 57 percent for Black Hawk, 60 percent for Central City, 70 percent for Cripple Creek, 66 percent for Grand Lake, and 74 percent for Deadwood. The overall response rate for students was 71 percent, resulting in a total of 225 questionnaires. For the individual schools the response rate was 60 percent for Gilpin County School District (Black Hawk and Central City), 63 percent for Cripple Creek/Victor School District, and 91 percent for Lead/Deadwood School District.

Attempts to secure a gender balanced response resulted in a 50 percent response of females in Deadwood, a 47 percent response in the Colorado gambling towns, and a 49 percent response in the control town. Also, to detect possible non-response biases, non-respondents were later contacted. They were asked to complete a post-card-sized six-item questionnaire which elicited the non-respondents' community satisfaction, attitude toward legal gambling, and

demographic data (age, sex, length of residence, and employment in gambling). A total of 60 such short-form questionnaires were collected. A comparison between respondents and non-respondents on those variables did not reveal any significant differences.

Measurements

Over one hundred and forty items were measured in the survey with the exact number dependent on the respective town or age group. This paper reports only the analysis of a subset of the total data base. The characteristics of the measurement items are shown in Appendix A, and, in general, all measures were highly reliable.

Prior to applying a reliability test, all 23 items designed to measure the various opinions about community life were first subject to exploratory factor analysis. Consequently, items that loaded high on a construct other than the *a-priori* projected one were eliminated from further analysis. As a result of this analysis and consistent with prior expectation, five conceptually distinguishable factors emerged. These factors were named satisfaction, safety, involvement, affiliation, and historic preservation, respectively. This paper will report only the results of the first factor--satisfaction.

The satisfaction measure was the simple mean of five scores on Likert-type scales (1 denoting "strongly disagree" and 7 denoting "strongly agree"). The overall mean satisfaction score of 977 respondents was 4.06 (slightly above the neutral point) and its standard deviation was 1.64. The internal consistency of the scale was satisfactorily high as indicated by coefficient alpha of .91.

Satisfaction

Resident satisfaction with community life, the dependent variable in this paper, was measured in two ways: as a summated scale of five individual items, and as a single-item global satisfaction judgment measure (referred to as LIFESAT). The five individual items were subjected to a reliability test which resulted in an acceptable internal consistency coefficient (alpha = .91). Further, the correlation between the multiple item measurement and the single/global measure was significantly high at .81. This result adds to the convergent validity of the measurement.

Additionally, the summated measure's correlation with other related variables was examined. The satisfaction measure's correlation with the intent to move out of the town (MOVEAWAY) was negative and significant ($r = -.66$); the same correlation with an expression of dissatisfaction with life in the community (NOTMUCH) was also negative and significant ($r = -.64$). These findings also indicate the validity of the satisfaction measure. Because summated scales are more desirable than single-item measures in reliability, precision, scope, and psychometric properties (Spector 1992), the summated scale was used throughout the analysis.

Perceptions of Change in the Town. It was expected that various changes which had occurred in the community since the approval and introduction of legal gambling would influence the current level of community satisfaction. Altogether 36 items were included to measure resident perception of change which had occurred in the community during the previous three

years. All measures were taken on a 1 (large decrease) to 5 (large increase) scale where 3 denotes "no change."

An exploratory factor analysis and reliability test yielded seven summated measures (constructs) or dimensions of community change. Of the seven measures, three, cultural opportunities, economic activities, and social opportunities, have particular relevance. Other constructs which are not examined in this paper include changes in the level of congestion, job opportunities, local government services, and preservation of local history.

Economic Dependence on Gambling Business. Previous tourism impacts research has documented that residents' economic dependence on tourism (actualized in this study as gambling) is likely to influence support for additional tourism (Perdue et al 1990; Milman and Pizam 1988; Haukeland 1984) and their level of satisfaction with community life (Allen et al 1990). Hence, the questionnaire sought (1) whether the respondent is employed in a gambling related business, (2) whether another family member is employed in a gambling-related business and/or (3) whether the household has any investment in a gambling business. Of the 628 adult respondents from the four gambling towns, 217 (35%) answered positively to at least one of these three questions.

Attitude toward Gambling. Again, previous tourism research has documented that resident attitude toward tourism (again, gambling in this case) would play a major role in determining the level of community satisfaction. Of the 17 items related to attitude toward gambling, five items form the primary factor which explained the most variance. This factor has been named "support" for gambling, because a typical item reads "This town made the right choice to develop gambling."

Other Variables. The questionnaire elicited socio-demographic information about the respondent and the respondent's household. A partial list of this information includes: age, sex, ethnicity, education level, household income level, employment status, marital status, length of residence in the community, home-ownership, marital status, number of children in the household, employment status (including spouse), and the distance from the gambling area (number of block or miles).

Analysis

Two types of statistical analysis were conducted. First, ANOVA was used to compare the levels of satisfaction across various select dimensions including gambling towns versus a non-gambling town, between the two states and the two gambling regions in Colorado, as well as between age groups (adult versus youth). Secondly, standard multiple regression procedure was used to identify variables that influence resident assessment of community satisfaction. The results of this analysis will be reported along with the implications of the research findings.

Community Satisfaction. The ANOVA results indicate that the resident satisfaction level is significantly higher in Deadwood, South Dakota, than in the three Colorado gambling towns (4.23 versus 3.47). In addition, resident satisfaction is higher among adults than among the

students (4.07 versus 3.54), although this adult-youth difference was statistically significant only in South Dakota (4.43 versus 3.70) and not in Colorado (3.54 versus 3.19). Resident satisfaction levels in the two gambling regions in Colorado (Cripple Creek versus the Black Hawk/Central City area) were not statistically different from each other.

Most importantly, the level of community satisfaction of adult residents of the four gambling towns (mean = 5.12, s.d. = 1.38, N = 102) was significantly lower than that of a comparable non-gambling town (mean = 4.07, s.d. = 1.38 N = 875). Due to the strength of the measurement, this difference could hardly be attributed to chance ($F = 49.35$, $p = .0000$). It should be noted that the respondents from both non-gambling and gambling towns were comparable in many regards. For example, the average age of the non-gambling town respondents was 48.6, whereas that of the gambling towns was 48.3. They were also very similar in home ownership, family size, and ethnicity. However, on average, the non-gambling town residents were higher in education and income level than those in the four gambling towns. These demographic differences could explain the difference in satisfaction levels, and such possibility will be subsequently explored.

Further, among the adult residents of the gambling towns, those who have economic ties with gambling business (employment or investment) expressed greater satisfaction with their community than those who do not have any direct relation with a gambling business (4.34 versus 3.91, $F = 9.0$, $p = .003$). This outcome is consistent with the findings of previous tourism impact studies where it was found that those who benefit from tourism show more favorable attitudes toward additional tourism development (Perdue et al 1990). Therefore, legal gambling, being a special form of community tourism development, supports the finding that economic ties with gambling business leads to a more favorable attitude toward legal gambling in the community. This favorable attitude, in turn, is likely to enhance the satisfaction with the community.

The application of the one-way ANOVA analysis did not reveal any relationships existing in the data regarding the prediction of community satisfaction. In particular, the results do not suggest where differences in satisfaction come from. Using Multivariate Analysis will be necessary to determine such relationships. The results of the multiple regression analysis will be reported, and the implications of this research discussed, during the formal presentation.

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Appendix A
Measurement Items

SATISFAX (Community satisfaction)

- OPIN18: This community is an ideal place to live
OPIN23: I am satisfied with the quality of life in this community
OPIN17: I am satisfied with this community as a place to live
OPIN19: The future of this community looks bright
OPIN22: People work together to get things done for this community

SAFETY (Perceived safety)

- OPIN7: My family is safe here
OPIN6: I feel safe here
OPIN8: My home and possessions are secure here

LIFESAT (Global judgment of satisfaction): Taking everything into account (family, work, leisure, self, etc.) how satisfied are you with the **QUALITY OF LIFE** in this community? (1 = not at all satisfied to 10 = extremely satisfied scale)

MOVEAWAY

- (OPIN9): I would like to move away from this community (R)

NOTMUCH

- (OPIN12): Not much can be said in favor of this community (R)

SUPPORT (Support for gambling)

- GAMFEL14: Without gambling, this community would have no future
GAMFEL9: This town made the right choice to develop gambling
GAMFEL15: Gambling has made this town a better place to live
GAMFEL8: Having gambling in this community is a pleasure
GAMFEL3: I boast about living in a gambling community

CULTUR_C (Perceived change in cultural opportunity)

- CHANGE24: opportunities to learn about other people and cultures
CHANGE8: opportunities to meet interesting people
CHANGE35: resident understanding of different people and cultures
CHANGE12: resident awareness of local culture and heritage

ECONOM_C (Perceived change in economic activity)

- CHANGE5: revenue generated in the local economy
CHANGE3: number of jobs for local residents
CHANGE1: personal income of local residents
CHANGE13: amount of income going to local businesses

SOCIAL_C (Perceived change in social opportunity)

- CHANGE31: quality of recreation opportunities for residents
CHANGE34: variety of social opportunities for residents
CHANGE36: life and vitality of Black Hawk
CHANGE28: variety of cultural facilities and activities