# 1995 Video Lottery Survey - Results by Player Type 

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## INTRODUCTION

This report's purpose is to examine results of the 1995 Video Lottery Survey conducted for the Oregon State Lottery by the University of Oregon Survey Research Laboratory. The specific goals of this report are to examine the characteristics, behaviors, attitudes, and Indian gaming of four particular groups of lottery players, specifically Non-players, Lapsed Players, Traditional Lottery Players, and Video Lottery Players. We begin the report with a brief overview of the survey methodology and the methods of data analysis.

## METHODOLOGY

## Data Collection

From February 20 to March 19, 1995, OSRL collected data from 3,017 randomly selected Oregonian adults regarding their attitudes towards games of chance and gaming behaviors, as well as demographic information. The data were weighted to match 1994 Oregon population parameters, and an SPSS data file was created for data analysis.

## Methods of Data Analysis

The methods of data analysis include stacked bar frequency distributions, bar graphs, medians, and multivariate regression analysis. The text summarizes the results of this analysis and refers readers to the appropriate supporting tables and graphs. At the end of this report is a "technical note" explaining variation in " $n$ 's" on tables and graphs.

## RESULTS

## Overall Sample

In the overall sample, the average survey respondent

- was 47 years old,
- had a high school diploma or a few years of college,
- a household income of $\$ 30,000-34,999$, and
- had a per capita household income of $\$ 16,250 .{ }^{1}$

[^0]More specifically,

- the highest educational level attained by $57 \%$ of the sample was a high school diploma or a few years of college (no degree);
- $27 \%$ completed a bachelor's degree or higher.
- nearly one-third of the sample had annual household incomes of $\$ 45,000$ or greater
- $22 \%$ had annual household incomes of $\$ 30,000$ to $\$ 44,999$.
- almost three-fifths of the sample had per capita household incomes of $\$ 20,000$ or less
- $59 \%$ of the sample was employed, with an additional $36 \%$ not in the labor force (keeping house or retired).
- $57 \%$ were female.


## Player Groups

For purposes of this report, the overall sample was divided into four player groups on the basis of their lottery playing behavior in the 5 years, 3 years, and 1 year preceding the survey.

Non-players did not play any form of traditional lottery game in the past 5 years, nor any video poker lottery in the past 3 years. Non-players comprise $32 \%$ of the sample.

Lapsed Players comprise respondents who reported playing traditional lottery games at least one time in the previous 5 years but not in the past year, or they played video poker lottery in the previous three years but not the past year. In order to obtain a sample size adequate for statistical comparison to the other groups, lapsed player status may override current game-playing status: for example, if a lapsed video poker lottery player currently plays traditional lottery games, he is still categorized as a lapsed player. Lapsed players represent $15 \%$ of the sample.

Traditional Lottery (TL) Players reported playing at least one traditional lottery game (Scratch-its, Keno, Sports Action, Daily Four, Break-opens, Powerball, and Mega-Bucks) in the previous 12 months. TL Players comprise $36 \%$ of the sample.

Video Poker Lottery (VL) Players were defined as those who played video poker lottery games in the previous 12 months. They may also have played traditional lottery games: in order to obtain a sample size of video lottery players adequate for statistical comparison to the other groups, video poker lottery status overrides traditional lottery playing; that is, any respondent who has played traditional lottery games but also has played video lottery is categorized as a video lottery player. VL Players comprise $17 \%$ of the sample.

Where appropriate, we further divided annual per capita income by 12 to come up with monthly per capita household income. Respondents' individual income was not asked in the survey.

For each group defined above, the data analysis is organized around their demographic characteristics, general attitudes toward the lottery, playing behaviors, and spending behaviors.

Table 1: Demographics by Type of Player

|  | AllRespondents | Type of Player |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Non-Player | Lapsed | Traditional | Video Lottery |
| Age |  |  |  |  |  |
| 18-29 | 12.1\% | 10.5\% | 14.7\% | 9.1\% | 19.2\% |
| 30-49 | 44.3\% | 39.2\% | 51.2\% | 41.8\% | 53.3\% |
| 50-64 | 20.9\% | 16.8\% | 19.6\% | 26.5\% | 17.7\% |
| 65+ | 22.7\% | 33.5\% | 14.5\% | 22.5\% | 9.8\% |
| Median | 47.0 | 50.0 | 43.0 | 49.0 | 40.0 |
| n | 2,438 | 775 | 374 | 887 | 400 |
| Sex |  |  |  |  |  |
| Female | 56.7\% | 58.1\% | 57.2\% | 60.0\% | 46.3\% |
| Male | 43.3\% | 41.9\% | 42.8\% | 40.0\% | 53.7\% |
| n | 2,458 | 786 | 374 | 894 | 402 |
| Highest Level of Education Completed |  |  |  |  |  |
| No High School Diploma | 9.2\% | 9.9\% | 7.9\% | 10.1\% | 7.3\% |
| High School Diploma/GED | 28.4\% | 23.6\% | 26.8\% | 30.0\% | 35.5\% |
| Some College, No Degree | 28.5\% | 25.7\% | 33.5\% | 27.7\% | 31.3\% |
| Associates Degree | 6.8\% | 6.7\% | 9.4\% | 6.1\% | 6.3\% |
| Bachelors Degree | 17.7\% | 20.3\% | 17.0\% | 16.2\% | 16.6\% |
| Masters Degree or Higher | 9.4\% | 13.8\% | 5.5\% | 9.8\% | 3.0\% |
|  | 2,453 | 783 | 374 | 893 | 401 |
| Labor Force Status |  |  |  |  |  |
| Employed | 58.9\% | 46.2\% | 65.0\% | 59.8\% | 75.4\% |
| Keeping House | 12.6\% | 15.0\% | 14.0\% | 13.2\% | 5.8\% |
| Not Employed | 5.5\% | 7.2\% | 3.6\% | 4.5\% | 6.2\% |
| Retired | 23.0\% | 31.6\% | 17.5\% | 22.4\% | 12.7\% |
| n | 2,325 | 736 | 360 | 846 | 380 |
| Annual Household Income |  |  |  |  |  |
| Less than \$10,000 | 10.6\% | 16.1\% | 11.2\% | 7.7\% | 6.2\% |
| \$10,000-19,999 | 17.4\% | 20.4\% | 19.0\% | 17.2\% | 11.4\% |
| \$20,000-29,999 | 18.1\% | 16.0\% | 19.5\% | 19.6\% | 17.6\% |
| \$30,000-44,999 | 21.7\% | 19.3\% | 22.6\% | 20.7\% | 27.2\% |
| \$45,000 or More | 32.2\% | 28.2\% | 27.7\% | 34.8\% | 37.6\% |
| Median | \$30-34,999 | \$30-34,999 | \$30-34,999 | \$30-34,999 | \$35-44,999 |
| n | 2,852 | 885 | 420 | 1,039 | 504 |
| Annual Per Capita Income |  |  |  |  |  |
| Less than 10,000 | 26.9\% | 29.3\% | 28.9\% | 26.6\% | 21.6\% |
| \$10,000-19,999 | 32.6\% | 31.6\% | 33.2\% | 33.5\% | 32.5\% |
| \$20,000-29,999 | 18.8\% | 15.1\% | 20.4\% | 19.2\% | 23.2\% |
| \$30,000 or More | 21.6\% | 24.1\% | 17.5\% | 20.7\% | 22.8\% |
| Median | \$16,249.75 | \$14,999.88 | \$14,999.88 | \$16,249.75 | \$17,499.50 |
|  | 2,749 | 821 | 409 | 1,020 | 496 |

## DEMOGRAPHIC CHARACTERISTICS AND ATTITUDES BY PLAYER GROUP

## Non-players

Non-players are close to one-third of the total sample. Their demographic profile is substantially older, more likely to be out of the labor force, lower income, and better educated than the other player groups. One-third of Non-players are age 65 or greater, and $47 \%$ are retired or keeping house. Non-player's annual household income distribution is also low, with over one-third less than $\$ 20,000$, suggesting the fixed incomes typical of retired persons. However, Non-players' per capita household income is close to average, indicative of small household size. Non-players are slightly more likely to be female. Over one-third have completed a college bachelor's degree or higher.


Given that Non-players have never played traditional lottery games or video poker lottery, it is not surprising that their attitudes toward the lottery in general are largely unfavorable. Fully $62 \%$ have unfavorable feelings about the lottery in general, and $66 \%$ have unfavorable feelings about video poker lottery.


## Lapsed Players

Lapsed players, who are about one-sixth of the sample, have a demographic profile that is relatively young, average educated, employed, and financially less well-off than Traditional and Video Lottery groups. Just over half of Lapsed Players are aged 30-49 and an additional $15 \%$ are younger. Two-thirds are employed, and household income is average, but per capita income is relatively low (almost two-thirds below \$20,000 each), suggesting the presence of children in households.

Lapsed Players' general feelings about the lottery are the most divided of all groups, with one-third favorable, $38 \%$ neutral, and $29 \%$ unfavorable. Lapsed players' feelings toward video poker lottery are less positive, with $23 \%$ favorable, $39 \%$ neutral, and $38 \%$ unfavorable.

## Traditional Lottery (TL) Players

TL Players are over one-third of the sample (36\%). They are somewhat older and more female, but their education, labor force status, and household income looks quite similar to the general population. Nearly half of TL Players are age 50 or older and three-fifths are female. $58 \%$ have completed a high school diploma or some college, and $60 \%$ are employed, plus $22 \%$ retired. Over one-third have annual household incomes of $\$ 45,000$ or more, and one-fifth have per capita household incomes of $\$ 30,000$ or more. About one quarter have college bachelor's degrees or better. Again, this profile is the most similar of all the player groups to the demographic profile of the entire sample.

TL Players' overall feelings about the lottery are more favorable than Lapsed Players', with $36 \%$ favorable, $41 \%$ neutral, and just $23 \%$ unfavorable. On video poker lottery, however, just $24 \%$ are favorable, $37 \%$ neutral, and $39 \%$ negative

## Video Poker Lottery (VL) Players

VL Players comprise $17 \%$ of the sample, and they are the youngest of the four player groups, the most male, the least well educated, the most likely to be employed, and they have the highest household incomes. Over half of VL Players are ages 30 to 49, plus nearly one-fifth are younger. $54 \%$ of VL Players are male, compared to $43 \%$ or less of the other player groups. One-fifth have completed a college bachelor's degree or more, and $43 \%$ have a high school diploma or less. Fully three-quarters of VL Players are employed. Annual household income for VL Players is $38 \%$ earning $\$ 45,000$ or more, plus $27 \%$ earning $\$ 30,000$ to $\$ 44,999$. Per capita household is also high, with $56 \%$ earning $\$ 20,000$ or more for each person in the household, compared to $40 \%$ or less for the other player groups.

VL Players' overall feelings about the lottery are very positive: fully $60 \%$ favorable, $29 \%$ neutral, and just $11 \%$ unfavorable. Their feelings about video poker lottery are more positive than any other group's, but less positive than about the lottery in general: $45 \%$ favorable, $33 \%$ neutral, and $22 \%$ negative.

## LOTTERY SPENDING BEHAVIORS

## Total Lottery Spending

How much do players spend on lottery games each month, and how does that vary by demographic characteristics? Examining, first, all lottery spending (traditional games plus video poker games), we have categorized spending into thirds, with sample sizes of roughly 300 in each group: $\$ 1-7$ in the previous month is called "Low," \$8-12 "Medium," and \$22 or more labeled "High.".

Table 2: Demographics by Amount Spent on All Lottery Games Last Month

|  | All <br> Respondents | $\begin{gathered} \text { L } 4 \\ (\$ 1-7) \end{gathered}$ | Medium (\$8-21) | $\begin{gathered} \hline \text { High } \\ (\$ 22+) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| Age |  |  |  |  |
| 18-29 | 12.1\% | 13.5\% | 12.0\% | 7.2\% |
| 30-49 | 44.3\% | 44.3\% | 41.1\% | 45.1\% |
| 50-64 | 20.9\% | 21.7\% | 28.4\% | 31.6\% |
| 65+ | 22.7\% | 20.5\% | 18.5\% | 16.2\% |
| Median | 47.0 | 46.0 | 48.0 | 49.0 |
| n | 2,438 | 279 | 303 | 289 |
| Sex |  |  |  |  |
| Female | 56.7\% | 56.6\% | 56.4\% | 45.8\% |
| Male | 43.3\% | 43.4\% | 43.6\% | 54.2\% |
| n | 2,458 | 280 | 303 | 289 |
| Highest Level of Education Completed |  |  |  |  |
| No High School Diploma | 9.2\% | 9.5\% | 8.6\% | 12.6\% |
| High School Diploma/GED | 28.4\% | 25.1\% | 36.6\% | 34.5\% |
| Some College, No Degree | 28.5\% | 30.7\% | 30.4\% | 30.7\% |
| Associates Degree | 6.8\% | 8.0\% | 4.9\% | 7.2\% |
| Bachelors Degree | 17.7\% | 18.8\% | 13.0\% | 11.8\% |
| Masters Degree or Higher | 9.4\% | 8.0\% | 6.5\% | 3.3\% |
| n | 2,453 | 280 | 303 | 289 |
| Labor Force Status |  |  |  |  |
| Employed | 58.9\% | 65.1\% | 64.4\% | 65.6\% |
| Keeping House | 12.6\% | 13.2\% | 7.8\% | 8.5\% |
| Not Employed | 5.5\% | 2.7\% | 9.0\% | 3.1\% |
| Retired | 23.0\% | 19.0\% | 18.8\% | 22.8\% |
| n | 2,325 | 272 | 294 | 278 |
| Annual Household Income |  |  |  |  |
| Less than \$10,000 | 10.6\% | 7.3\% | 7.3\% | 8.4\% |
| \$10,000-19,999 | 17.4\% | 15.5\% | 18.7\% | 14.2\% |
| \$20,000-29,999 | 18.1\% | 17.8\% | 20.1\% | 16.6\% |
| \$30,000-44,999 | 21.7\% | 25.8\% | 21.3\% | 25.0\% |
| \$45,000 or More | 32.2\% | 33.7\% | 32.6\% | 35.8\% |
| Median | \$30-34,999 | \$35-44,999 | \$30-34,999 | \$35-44,999 |
| n | 2,852 | 331 | 348 | 343 |
| Annual Per Capita Income |  |  |  |  |
| Less than 10,000 | 26.9\% | 22.1\% | 26.5\% | 27.5\% |
| \$10,000-19,999 | 32.6\% | 37.9\% | 28.6\% | 28.4\% |
| \$20,000-29,999 | 18.8\% | 21.6\% | 25.1\% | 18.9\% |
| \$30,000 or More | 21.6\% | 18.3\% | 19.8\% | 25.2\% |
| Median | \$16,249.75 | \$16,249.75 | \$17,499.50 | \$16,328.27 |
| n | 2,749 | 325 | 341 | 338 |

Low Spenders are younger in median age, more female, better educated, and fairly average in employment and annual household income. Specifically, the average age of low spenders is 46 , and $58 \%$ are less than age 50 . However, Low Spenders also have the largest proportion age 65 and older, at $20.5 \%$. $57 \%$ of Low Spenders are female. $56 \%$ have completed high school or some college; $27 \%$ have a bachelor's degree or more. Very similar to the other spending groups, about two-thirds are employed, median income is in the $\$ 35,000-44,999$ category, and per capita household income is $\$ 16,250$.

Medium Spenders' demographic profile is slightly older, similar in sex composition, less educated, more unemployed, and with lower household income but higher per capita income than Low Spenders. Medium spender's average age is 48, with $53 \%$ less than age 50 and $18 \%$ age 65 or older. $56 \%$ are female. Two-thirds ended their education with a high school diploma or some college; $20 \%$ of Medium Spenders have completed a bachelor's degree or higher. Very similar to the other two groups, $64 \%$ are employed, but fully $9 \%$ of Medium Spenders are unemployed and looking for work, compared to $3 \%$ of the other two spending groups. Median annual household income is slightly lower than the other two groups, in the $\$ 30,000-34,999$ range, but per capita income is higher, at $\$ 17,500$, suggesting smaller household size.

High Spenders have the highest median age, are predominantly male, and are the least educated of the three groups, but they are quite similar in employment and household income to Low Spenders. The median age of High Spenders is 49, but their age distribution is more concentrated in the middle ages than the other two groups, with $53 \%$ less than age 50 and just $16 \%$ age 65 and older. As with Medium Spenders, about twothirds ended their education with a high school diploma or some college; only $15 \%$ have a bachelor's degree or higher, and fully $13 \%$ did not complete a high school diploma. $66 \%$ of High Spenders are employed, annual household income is in the \$35,000-44,999 range, and annual per capita income is about $\$ 16,300$.

## Lottery Spending and Traditional Lottery Game Playing Behaviors

Lottery spending patterns are strongly associated with TL Players' game-playing behaviors. That is, high spending TL Players are more likely to play every type of traditional lottery game than low or medium spenders. MegaBucks, Powerball and Scratch-Its are the most popular games among TL Players, with over one-half of medium and high spenders and one-third or more of low spenders playing these games in the month preceding the survey.



Over half (56\%) of high spending TL Players played Scratch-its in the month preceding the survey, compared to $47 \%$ of medium spenders and $36 \%$ of low spenders. The parallel figures for Keno were $35 \%, 12 \%$ and $3 \%$, respectively.


About one-tenth of high spenders played the Daily Four and Break-opens in the month preceding the survey, compared to $3 \%$ of medium spenders and $0-1 \%$ of low spenders.

Just $12 \%$ of low VL spenders would play more if video lottery was in alcohol-free places, $26 \%$ would play more if it was offered in smoke-free places, and $20 \%$ would play more if different games were offered; three-fifths to three-quarters of the group's playing behavior would not be altered by these innovations.



Among high spending TL Players, $85 \%$ played Powerball and $88 \%$ played MegaBucks in the month preceding the survey. Among medium spenders, $68 \%$ played Powerball and $74 \%$ played MegaBucks. Among low spenders, $44 \%$ played Powerball and $50 \%$ played MegaBucks.

## Video Poker Lottery Spending

Patterns of VL Players' spending are quite different from total lottery spending, especially for those who spent more than $\$ 20$ in the previous month. To assess demographic patterns of Video Lottery players' spending, we again classified spending into thirds. The naturally occurring categories were nearly identical to total lottery spending: \$1-8 "Low," \$9-20 "Medium," and \$21 or more "High," with 51-58 players in each category.

Table 3: Demographics by Amount Spent on Video Lottery Games Last Month

|  | All <br> Respondents | $\begin{gathered} \hline \hline \text { Low } \\ (\$ 1-\$ 8) \end{gathered}$ | Medium (\$9-20) | $\begin{aligned} & \hline \text { High } \\ & (\$ 21+) \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| Age |  |  |  |  |
| $\text { \|l\|l} \begin{array}{\|l} 18-29 \\ 30-49 \\ 50-64 \\ 65+ \\ \text { Median } \\ \mathrm{n} \end{array}$ | $\begin{array}{r} 12.1 \% \\ 44.3 \% \\ 20.9 \% \\ 22.7 \% \\ 47.0 \\ 2,438 \end{array}$ | $22.0 \%$ $41.9 \%$ $20.9 \%$ $15.3 \%$ 45.0 51 | $15.3 \%$ $55.6 \%$ $25.2 \%$ $3.9 \%$ 40.0 57 | $15.9 \%$ $67.3 \%$ $7.1 \%$ $9.7 \%$ 40.0 58 |
| Sex |  |  |  |  |
| Female <br> Male <br> n | 56.7\% $43.3 \%$ 2,458 | $48.8 \%$ $51.2 \%$ 51 | $53.1 \%$ $46.9 \%$ 57 | $37.2 \%$ $62.8 \%$ 58 |
| Highest Level of Education Completed |  |  |  |  |
| No High School Diploma High School Diploma/GED Some College, No Degree Associates Degree Bachelors Degree Masters Degree or Higher n | $\begin{array}{r} \hline 9.2 \% \\ 28.4 \% \\ 28.5 \% \\ 6.8 \% \\ 17.7 \% \\ 9.4 \% \\ 2,453 \end{array}$ | $3.6 \%$ $30.2 \%$ $34.0 \%$ $18.3 \%$ $13.5 \%$ $0.4 \%$ 51 | $9.5 \%$ $39.6 \%$ $39.6 \%$ $0.9 \%$ $8.5 \%$ $1.9 \%$ 57 | 15.3\% |
| Labor Force Status |  |  |  |  |
| Employed <br> Keeping House Not Employed Retired n | $58.9 \%$ $12.6 \%$ $5.5 \%$ $23.0 \%$ 2,325 | 75.8\% ${ }^{\text {a }}$ ( | $75.1 \%$ $5.4 \%$ $5.3 \%$ $14.2 \%$ 55 | $83.4 \%$ $6.8 \%$ $1.0 \%$ $8.8 \%$ 53 |
| Annual Household Income |  |  |  |  |
| Less than $\$ 10,000$ $\$ 10,000-19,999$ $\$ 20,000-29,999$ $\$ 30,000-44,999$ $\$ 45,000$ or More Median $n$ | $10.6 \%$ $17.4 \%$ $18.1 \%$ $21.7 \%$ $32.2 \%$ $\$ 30-34,999$ 2,852 |  | $11.7 \%$ $22.7 \%$ $13.6 \%$ $12.3 \%$ $39.7 \%$ $\$ 30-34,999$ 73 | $3.3 \%$ $5.9 \%$ $11.4 \%$ $35.6 \%$ $43.8 \%$ $\$ 35-44,999$ 73 |
| Annual Per Capita Income |  |  |  |  |
| Less than 10,000 <br> $\$ 10,000-19,999$ <br> $\$ 20,000-29,999$ <br> $\$ 30,000$ or More <br> Median <br> n | $26.9 \%$ $32.6 \%$ $18.8 \%$ $21.6 \%$ $\$ 16,249.75$ 2,749 |  | $25.8 \%$ $30.6 \%$ $21.7 \%$ $21.8 \%$ $\$ 17,499.50$ 72 | (19.1\% |

Among those who spent money on video poker lottery games in the preceding month, low VL Spenders are older, more likely to be retired, and about average in sex composition, education and household income. The median age of low VL Spenders is 45 and $15 \%$ are age 65 and older (compared to age 40 and about $10 \%$ age 65 and older for the average VL Players; see Table 1). Three-quarters of low VL Spenders are employed, comparable to the high employment rates of VL Players generally, but 18\% are retired, compared to $13 \%$ for all. Annual household income falls in the $\$ 35,000-$ 44,999 range, with per capita income about $\$ 17,860$, nearly two-thirds completing high school or some college, and $51 \%$ male -- all quite close to the average VL Player.

Medium VL Spenders are young, more female, and not very well educated, but with employment and income characteristics similar to other VL Players. Over half of medium VL Spenders are aged 30-49, with an additional $15 \%$ younger, and just $4 \%$ age 65 or more; median age is 40 . This is the only group of VL Players that is over half female ( $53 \%$ ). Fully four-fifths completed high school or some college; about $10 \%$ completed college, and about $10 \%$ did not finish high school. Three-quarters are employed, and $14 \%$ are retired, identical to VL Players overall. The distribution of household income shows a much greater concentration in the $\$ 10,000-19,999$ range than for VL Players generally, but median per capita annual household income is average, at \$17,500.

High VL Spenders are quite different than other VL Players: they are younger, predominantly male, highly educated, and high earning. Two-thirds of high VL Spenders are $30-49$, plus $16 \%$ are younger, with a median age of $40.63 \%$ are male. Fully $26 \%$ have earned bachelor's degrees or better. However, another $15 \%$ never completed a high school diploma -- twice as high as VL Players overall. Fully $83 \%$ of high VL Spenders are employed, and $44 \%$ earn $\$ 45,000$ per year or more. Annual per capita household income is the highest of all groups, at $\$ 20,000$.

## Video Lottery Spending and Game Playing Behaviors

In this section of the analysis, we examine how patterns of video poker lottery spending correspond to where VL Players go to play, when they play, spontaneous versus deliberate playing, time played, and receptiveness to changes in video poker. As with Traditional Lottery Players, we find that high spenders' behavior is quite distinct from low and medium spenders' behavior.

Two-thirds of low VL spenders play mostly in bars and taverns. They are also the most likely VL Player to play in bowling alleys, at $15 \%$. Low VL spenders are also the mostly likely to play in one place ( $83 \%$ ) and to play 7 days or less per month ( $100 \%$ ). Threefifths play only on weekends, and they evenly divide their playing time between 5:008:00 p.m. (38\%) and after 8:00 p.m. (38\%).

Fully $91 \%$ of low spending VL Players do not plan in advance to play, but decide spontaneously, and $94 \%$ go to places mainly to do something besides play video lottery.

Identical to the other VL spending groups, two-fifths of low VL spenders usually have an idea of how long they will play in advance, and nearly three-quarters have an idea of how much money they will spend. Nearly all ( $94 \%$ ) play until they use up a predetermined amount of money rather than a predetermined amount of time. Nearly three-quarters ( $72 \%$ ) play less than 30 minutes per session.

Medium VL spenders are most likely to play video lottery in bars and taverns (69\%), and most likely to report playing "someplace else" than bowling alleys, restaurant lounges, and bars/taverns (15\%). Three-fifths play in just one place, and $37 \%$ play in 2 or 3 places. Nearly all ( $94 \%$ ) play 7 days per month or less, and over half play on weekends only ( $52 \%$ ). Most medium VL spenders play between 5:00-8:00 p.m., but $34 \%$ play after 8:00 p.m., and $26 \%$ play between noon and 5:00 (the largest group to play in that time slot). Over three-quarters usually plan in advance to play ( $77 \%$ ) and go to the place to do something besides play video lottery ( $81 \%$ ). Identical to the other VL spending groups, two-fifths usually have an idea of how long they will play, $70 \%$ have an idea of how much money they will spend on it, and $80 \%$ play until they use up a certain amount of money, not time. Just over half ( $52 \%$ ) play fewer than 30 minutes when they play, with another $27 \%$ at $30-60$ minutes, and one-fifth at an hour or more. The majority of Medium VL Players' playing activities would be unaffected by changes: $66 \%$ would play the same amount in alcohol-free environments, $54 \%$ would play the same amount in smoke-free place, and $72 \%$ would play the same amount if there were new games.

The majority of high VL spenders play video poker lottery in bars and taverns (63\%), but they are also the most likely to play in restaurant lounges ( $21 \%$ ). They are the least likely to play in one place only ( $28 \%$ ), and the most likely to play in 2-3 places (51\%) and several places ( $21 \%$ ). While close to all low and medium spending VL Players played fewer than 7 days per month, one-third of high VL spenders played eight days or more in the previous month. This group is the most likely to play all days of the week ( $34 \%$ ) and at all times of the day ( $21 \%$ ). The are the least spontaneous players, with nearly half usually planning in advance to play ( $46 \%$, plus $12 \%$ saying it depends), and a quarter going to places mainly to play ( $26 \%$, plus $19 \%$ who say they go to places both to play and do something else). Similar to the other groups, the majority of all VL Players play to money limits rather than time limits; however, this respondents in this group are more likely to play until they use up a certain amount of time ( $15 \%$ ) or both money and time ( $10 \%$ ). They also play longer lengths of time, with nearly one third playing an hour or more per sitting ( $31 \%$ ) and half playing 30-59 minutes per sitting. High VL spenders are the least potentially responsive to alcohol-free and smoke-free places to play, with approximately one-third saying these innovations would result in them playing less often; still, over half say it wouldn't affect their playing. This groups is the most potentially responsive to new types of video lottery games, with $40 \%$ saying they would play more often.


Graph 11: Number of Different Places to Play Video Lottery by Amount Spent on Video Lottery Last Month





Graph 15: Usually Plan to Play Video Lottery in Advance
by Amount Spent on Video Lottery Last Month


Amount Spent on Video Lottery Last Month









Eating Out as a Measure of Exposure to Video Lottery

In order to assess the extent to which players and non-players alike are exposed to the possibility of playing video lottery games, the survey asked respondents "In the last 4 weeks, how many times did you go to a restaurant, bar, tavern, lounge or private club where alcohol can be served?" Responses were categorized into $0,1-3$, and 4 or more times. The patterns of responses vary significantly with player group categories and with money spent on the lottery.


Over half of VL Players (57\%) go to places that serve alcohol 4 or more times per month, compared to about one-third of TL Players and Lapsed Players, and just $23 \%$ of Nonplayers.

Among those who spent money on lottery games (traditional or video) in the month preceding the survey, $57 \%$ of high spenders, $43 \%$ of medium spenders, and $36 \%$ of low spenders go to places that serve alcohol 4 or more times per month. Among VL Players only, fully $88 \%$ of high spenders, $58 \%$ of medium spenders, and $66 \%$ of low spenders went to places that serve alcohol 4 or more times per month.



## Results of the Multivariate Analyses

The preceding analyses have focused upon the bivariate relationships between the four player groups and various demographic, attitudinal, spending and behavioral variables. The purpose of this part of the analysis is to assess the net effects of the independent variables on player status. Specifically, what are the net effects of key independent variables in determining who is a TL Player compared to a VL Player? What determines the differences between VL Players and Non-players, and TL Players and Non-players? What determines the differences between VL Players and Lapsed Players, and between TL Players and Lapsed Players?

In order to answer these questions, we ran five multivariate regression equations in which player status (the dependent variable) was coded zero or one. Each equation compares two player groups: TL Players to VL Players, VL Players to Non-players, TL Players to Non-players, VL Players to Lapsed Players, and TL Players to Lapsed Players. For each equation, the following independent variables were used: Number in household, presence of children in household, household income, never eats out in places where alcohol is served, age, sex, education, labor force status, and attitudes toward the lottery in general.

All of the equations were highly statistically significant, and in all equations the effects of attitudes were greater than the effects of demographic and household characteristics. Each paragraph below describes the results of one of the equations.

What distinguishes TL Players from VL Players? TL Players are significantly more likely to be negative and neutral in their attitudes toward the lottery than VL Players. They are also significantly more likely to have children, eat at home, be older, be female, and have higher levels of education than VL Players. The results also show that employed and retired persons are significantly more likely than non-employed persons to play video lottery than traditional lottery games. The effects of household income, employment, and household size are insignificant.

What distinguishes VL Players from Non-players? VL Players are significantly more positive in their attitudes toward the lottery, more likely to eat in places where alcohol is consumed, younger, less educated, and more likely to be employed. Household income, household size, the presence of children, sex, and retirement have no significant effects.

What distinguishes TL Players from Non-players? TL Players are significantly more positive in their lottery attitudes, have higher household incomes, are more likely to be employed, and have lower education. The other independent variables were insignificant.

What distinguishes VL Players from Lapsed Players? Again, VL Players are much more strongly positive in their lottery attitudes. In addition, they are more likely to eat at places where alcohol is served, have lower education, have higher household incomes,
and be male. While the effects of these variables are statistically significant, the effects of attitudes are much stronger. The other independent variables were insignificant.

What distinguishes TL Players from Lapsed Players? TL players' attitudes toward the lottery are significantly more positive than Lapsed Players', but this effect is less strong than in the other comparisons. TL Players significantly more often eat at home, have higher incomes, and are older. The results also show that retired persons are significantly more likely than non-employed persons to be Lapsed Players than TL Players. The effects of the other independent variables are insignificant.

In summary, the only variable which consistently significantly differentiated the player groups was lottery attitudes. The effects of household (size, composition, income) were inconsistent -- sometimes significant and sometimes not. The effects of demographics (age, sex, education, labor force status) were more effective, as was exposure to video lottery by frequenting places that serve alcohol. It is important to look at multivariate equations because they take multiple, variables into account simultaneously; as a result, some bivariate relationships end up accounted for by other independent variables in the equation. For instance, the strong bivariate relationship we observed between income and Video Lottery Player status was diminished by taking the effect of sex into account since males tend to have higher incomes than females.

## Indian Gaming

## Awareness of Indian Gaming

Over four-fifths of the survey sample has heard of Indian gaming, including $93 \%$ of VL Players, $89 \%$ of TL Players, $88 \%$ of Lapsed Players, and $80 \%$ of Non-players. Feelings about Indian gaming vary significantly by player type, with half of VL Players favorable, nearly two-fifths of TL Players and Lapsed Players favorable, and one-fifth of Nonplayers favorable. Approximately one-third of each group is neutral.



Visits to Indian Gaming Centers by Player Group
VL Players were the most likely to have visited Indian gaming centers ( $25 \%$ ), followed by Lapsed Players (19\%), TL Players (14\%), and Non-players (7\%).


Among those who visited Indian gaming centers, significant proportions bet money. Fully $69 \%$ of VL Players, $51 \%$ of Lapsed Players, $39 \%$ of TL Players, and even one-fifth of Non-players bet money when they visited an Indian gaming center.


Persons who had not yet visited an Indian gaming center were asked how interested they were in visiting one, and, if interested, a series of questions about the nature of that visit. VL Players are most interested in trying out Indian gaming, followed by TL Players and Lapsed Players. Three-fifths of VL Players are interested in trying them out, along with nearly two-fifths of TL Players and Lapsed Players. Just one-tenth of Non-players are interested.


Among those who had not yet visited an Indian gaming center but who are interested in doing so, roughly one-third would go out of their way to visit one, with VL Players more likely to go out of their way ( $37 \%$ ) and Non-players least likely ( $22 \%$ ). Roughly twofifths of all persons in players groups who said they would go out of their way to try out an Indian gaming center said they would go 100 miles or more out of their way to do so.



Roughly two-thirds of all player groups would plan these trips in advance (with VL Players and Lapsed Players somewhat more likely to plan in advance, at 70\%). Roughly half would stay overnight on these visits (again with VL Players and Lapsed Players more likely to stay overnight, at $54 \%$ and $49 \%$, respectively).



## Visits to Indian Gaming Centers by Lottery Spending Levels

Persons who have spent high and medium amounts of money on lottery games are more likely to have visited Indian gaming centers and bet money there than Lapsed Players and Non-players. Moreover, if they have not visited yet, high and medium spenders are more interested in visiting and going out of their way to do so.

Among those who spent "high" amounts of money on the lottery in the month preceding the survey ( $\$ 22$ or more), $29 \%$ have visited Indian gaming centers, compared to $22 \%$ of medium spenders and $15 \%$ of low spenders.


Among those who visited Indian gaming centers, three-quarters of high lottery spenders spent money there, and roughly half of medium and low spenders did ( $45 \%$ and $51 \%$, respectively).


Lottery players who have not yet visited Indian gaming centers are more interested in visiting them than most Lapsed Players and Non-players, and interest varies directly with amount spent. Two-thirds of high lottery spenders who have not yet visited Indian gaming centers are interested in doing so, as well as nearly half of medium spenders and $37 \%$ of low spenders.


Among those who have not yet visited Indian gaming centers who are interested in doing so, their willingness to go out of their way to visit one also varies directly with lottery spending sums. That is, nearly half of high spenders would go out of their way, compared to $35 \%$ of medium spenders and $21 \%$ of low spenders. $44 \%$ of high spenders would go 100 miles or more out of their way to visit an Indian gaming center, while about one-third of low and medium spenders would go 100 miles or more.



The majority of lottery players who visited an Indian gaming center would plan their trip in advance ( $72 \%$ of high and medium spenders, as well as $55 \%$ of low spenders). The likelihood of spending the night there varies directly with lottery spending levels: almost two-thirds of high spenders would be likely to spend the night, compared with nearly half of medium spenders and $37 \%$ of low spenders.



Indian gaming activities would not affect the majority of players' spending on traditional lottery and video lottery games: among traditional players, $74 \%$ of high spenders, $59 \%$ of medium spenders, and $63 \%$ of low spenders would spend about the same, regardless of their Indian gaming activities; video lottery players were even more intractable: 77\% of high spenders, $94 \%$ of medium spenders, and $80 \%$ of low spenders said that Indian gaming would not change their video lottery playing activities. Far fewer players
responded that Indian gaming would change their lottery playing behavior. Among traditional lottery players, $23 \%$ of high spenders, $30 \%$ of medium spenders, and $29 \%$ of low spenders think they would spend more on the lottery overall if they played at Indian gaming centers. Video lottery players are less likely to spend more on video lottery as a result of Indian gaming: $22 \%$ of high spenders, $5 \%$ of medium spenders, and $11 \%$ of low spenders think they would spend more. Very few respondents of either player type said that Indian gaming would reduce their lottery spending.



## Beliefs about Prize Sizes at Indian Gaming Centers

Roughly half of the members of the survey sample do not know if prizes at Indian gaming centers are larger or smaller than prizes at casinos outside of Oregon, and fewer than $10 \%$ think the prizes are larger. This varies substantially, however, by player group. VL Players are the most knowledgeable, with just $43 \%$ don't know, $25 \%$ believing prizes are about the same, $27 \%$ believing they are smaller, and just $6 \%$ believing they are larger. Three-fifths of VL Players and Lapsed players don't know, and 76\% of Non-players don't know.


Among those who have spent money on lottery games in the month preceding the survey (traditional or video lottery games), knowledge about the size of prizes at Indian gaming centers is somewhat higher, at roughly half, but again fewer than $10 \%$ think prizes are higher. About one-fifth of low- , medium-, and high-spenders think prizes at Indian gaming centers are about the same as prizes at casinos outside of Oregon. Between 19\% and $26 \%$ of the three groups think they are smaller.


## Technical Note on Variation in " $n$ 's" on Tables and Graphs:

Note that the " n 's" on tables and graphs may vary somewhat, due to missing data (refusals and don't know responses) and due to skip logic built into the survey interview. Missing data is more likely to occur on difficult or sensitive survey questions, e.g., those that require a lot of effort for respondents or those that are regarded as personal in nature. Some respondents, for example, simply do not know certain pieces of information, such as their annual household income and are not capable of finding out; others regard questions on things like income as too personal to report, even in an anonymous interview.

The general skip logic of the survey instrument also results in different n's, depending upon respondents' answers to questions. The next two paragraphs define, in general terms, the skip logic through the lottery and gaming questions. Variable names are reported in capital letters.

Respondents who did not engage traditional lottery playing in the previous 5 years (LOTT5) were skipped past specific traditional lottery questions to questions about video poker lottery (VL3). Persons who played traditional lottery games in the past 5 years were asked if they played them in the past 1 year (LOTT1); if yes, they were asked questions about playing and spending on those games, and if no they were skipped to video lottery questions (VL3). Persons who played video poker lottery in the previous 3 years (VL3) were asked if they had played in the previous 1 year (VL1) and the previous month (VLMO); if yes, the survey continued with a detailed series of questions about their playing and spending. Those who did not play video lottery in the previous 3 years were skipped to non-player questions. Those who played 2 or 3 years ago, but not in the last 1 year were asked questions about why they stopped. Those who never played video poker lottery were asked if they had ever heard of it.

All potential playership routes through the survey questions on traditional and video poker lottery games re-converged at the Indian gaming questions (INDHEAR). Respondents who never heard of Indian gaming were skipped to EATOUT ("In the last four weeks, how many times did you go to a restaurant, bar, tavern, lounge, or private club where alcohol can be served?") and the concluding demographic questions. Those who had heard of Indian gaming were asked if they had ever visited an Indian gaming center, and if yes, questions about it; if no, respondents were asked how interested they were in visiting one and, if interested, if they would go out of their way to visit one, and if yes, how far out of their way they would go. All respondents who had heard of Indian gaming, including those not interested and those interested but who would not go out of their way to visit a center, re-converged at the question INDGEN ("Do you think prizes at Indian gaming centers are generally larger, generally smaller, or about the same as casinos outside Oregon?").

These skip logic patterns were designed to keep the survey as conversational and appropriate for respondents' unique experiences with the lottery and gaming. They result naturally in different n's for different variables.


[^0]:    ${ }^{1}$ In order to standardize household income to a rate based upon the number of persons who derive benefit from it, we divided annual household income by the number of persons in the household. Thus, unlike household income, per capita income is independent of number of persons in the household, and therefore represents a better measure of the disposable income of the individuals in the household.

