Preliminary Report of The Quinn-Pike Video Gaming Study

Submitted by Cathy Pike, PhD. and Frank L. Quinn, PhD. December 22, 1997

The Quinn-Pike Video Gaming Study is a survey of video gambling involvement across the 46 counties of South Carolina. The data that are reported here are from a study of individuals at playing locations in South Carolina. Data analyses are in the early stages. This report is a preliminary report of those findings. Additional analyses and further results will be included in a final report of this study.

Frank Quinn, PhD developed the research design, conducted the research, and administered data collection through the auspices of Carolina Psychiatric Services, P.A. [9 Richland Medical Park, Columbia, S. C.; also founder of South Carolina Center for Gambling Studies]. Cathy Pike, PhD served as a research consultant and developed the informed consent form, the survey instrument, and analyzed and reported the research results. Copies of the informed consent form and survey questionnaire are located in Appendix A.

Research Method

Each of the 46 counties in South Carolina were included in the sampling design for this study. A random selection of playing locations for each county was drawn from records of the South Carolina Department of Revenue. Approximately 50 research assistants, most of whom were graduate students, participated in collecting the data for this study. Generally, one research assistant was assigned to collect data from a random list of playing locations in each county. These locations included casinos, convenience stores, restaurants, bars, and other sites in which video gaming devices were located and known to the South Carolina Department of Revenue. A few counties had substantially larger numbers of playing locations, and larger samples were collected in these counties to account for these differences. Two to three research assistants were assigned to collect data in these counties. Each was provided a random list of playing locations for the county from which they collected data.

Before beginning data collection, the research assistants participated in training sessions on the methods to be used in the research. Research assistants were instructed to sample no more than 2 persons from each of the randomly sampled playing locations. Virtually all of the data were collected on November 7, 1997. In a few cases, some data were received within the week following November 7, 1997 and this was due to practical issues related to the research.

Results

The Sample

A total of 553 people were sampled from playing locations in all South Carolina counties. (Detailed socio-demographic information for this sample is located in Appendix B.) The vast majority of respondents were South Carolina residents (N=484, 91.3%). Sixty-two percent of

respondents (N=338) were males, and approximately 38% (N=207). were females. Almost 67% (N=364) of respondents were white, about 29% (N=160) were African-American, and about 4% (N=9) reported ethnicity as "other". Respondents ages ranged from 17 to 79 years (mean=36.57, median=33.0). Fifty-five percent of respondents (N=300) were either single or divorced, while 45% (N=245) were married or living with a partner. Respondents reported that their number of dependents ranged from none to 11 (median=2).

About 50% of respondents (N=271) reported that their educational level was 12 years or less, while about 50% (N=273) reported some form of post-secondary education, e.g., technical training or some college, baccalaureate degree, and graduate education. About 21% of the sample (N=115) reported having some military service. Most of the respondents were employed (79.5%, N=435). The number of years that they had been employed in their current job ranged from 0 to 45 years (mean=7.34, median=4.0). About 48% of the respondents (N=249) reported having individual incomes of less than \$20,000 per year and about 49% (N=257) reported their annual incomes as ranging from \$20,001 to \$60,000.

Extent of Video Gaming Involvement

A primary purpose of this study was to examine the extent of video gaming involvement and problem gambling among players in South Carolina. Several variables from the survey instrument provided preliminary information about the extent of video gaming involvement and problem gambling among players. The sample included all respondents who reported ever having played video gaming devices. Variables that measured gambling involvement included those that measured frequency of play, the longest period of time that respondents had played video gaming devices, the number of times respondents had lost more than \$50 in one sitting, and the number of times that respondents had won more than \$125 in one sitting. Additional variables that suggest the potential for problem gambling were analyzed by groups: The total playing sample, women players, and African-American players. Information on video gaming inducements reported by respondents are provided as well. Additional information about the extent of video gaming involvement is located in Appendix C.

Approximately 38.6% (N=174) of those who had ever played video gaming devices reported that they played 2 or more times per week. Of these, 13% reported playing video gaming devices 4 or more times per week; and 5.8% reported that they play every day. More than a quarter (25.6%) of the sample reported that they have played for 5 or more hours in one sitting. Of those who had ever played video poker devices, 64.8% (N=269) reported that they had won more than \$125 in one sitting. In addition 68.6% (N=289) of the sample reported losing more than \$50 in one sitting.

Several variables were analyzed to provide preliminary information about the extent of problem gambling among video gaming device players in South Carolina. These variables were analyzed for all respondents in playing locations who said they had ever played video poker devices. In addition to the total sample percentages of respondents who have ever played video gaming devices, women and African-Americans were examined separately to provide information about gender and ethnic differences with regard to problem gambling. Table 1 below presents this information.

Preliminary findings suggest that approximately 20% of players (1 in 5) are problem gamblers. Further analyses of the data are expected to provide more specific information about the extent of problem gambling. The percentages of women responding "yes" to potential problem gambling variables tend to be slightly lower but are similar to the total sample. In addition, African-American players appear to suffer substantially greater problems that the total sample with regard to problem gambling. For each of the variables examined with regard to problem gambling, African-Americans reported "yes" with substantially higher percentages than the total sample percentages. For two variables, their percentages were more than twice as large as the total sample.

Table 1

Percentages of Players Responding "Yes" to Questions Related to Problem Gambling

Survey Item Number	Survey Item Statement	Percent of Total Sample	Percent Women	Percent African- Americans
8.	"I have thought about ways to get money to play video gaming devices."	19.0%	16.4%	40.6%
15.	"I have spent the last dollar in my pocket while playing video gaming devices."	33.4%	25.9%	41.6%
16.	I have sold things to get money to play video gaming devices."	8.1%	7.9%	16.5%
20.	"I have had problems with loved ones because of my playing video gaming devices."	14.3%	16.4%	21.9%
22.	"I have borrowed from friends or family to play video gaming devices."	19.0%	14.7%	30.5%
38.	"I have felt guilty about playing video gaming devices."	28.3%	21.9%	35.5%
39.	"I have felt depressed about playing video gaming devices>"	14.3%	12.7%	20.0%
40.	"I have wished I could stop playing video gaming devices."	18.5%	17.4%	24.8%
43.	"I have considered suicide at least once because of video gaming devices."	5.3%	3.1%	8.7%

In addition to examining individual variables related to problem gambling, two analyses examined the extent of problem gambling for the past 4 years that video gaming devices have been legal in South Carolina. A Kruskal-Wallis test was computed for variables that measured problems related to the emotional allure (Interest) of video gaming devices by years of playing. Groups for this analysis were respondents reporting that they had played video gaming devices for 1,2,3, and 4 years. The results were significant (p < .000) and indicated that those in the

groups who have been playing video gaming devices the longest scored highest in emotional allure (Interest). However, the greatest number of respondents (41.7%) reported that they had played video gaming devices for only 1 year. Almost 29% reported playing for 2 years, and 18.6% had played for 3 years. Those with the highest scores on problems related to the allure of video gaming devices, those who reported playing for 4 years, comprised only 10.9% of the sample. The scores increased substantially beyond the first year of playing video gaming devices.

A second Kruskal-Wallis test examined variables that measure problems associated with the consequences (Effects) of video gaming devices across groups of respondents who had played for 1, 2, 3, and 4 years. The results of this test also were significant (p <.015). Again, those who had played the longest scored the highest on consequences related to problem gambling. As was the case with the Interest variables, the greatest number of respondents were those who had played for shorter periods. Almost 42% of the sample had played for only 1 year, while an additional 28.8% had played for 2 years. About 18.4% had played for 3 years. The group scoring the highest on video gaming consequences, those who had played for 4 years, comprised only 11% of the total sample. Similar to the 1st analysis, scores indicating problems related to the consequences of video gaming devices increased substantially beyond the 1st year of playing.

A number of potential inducements were examined in this study for those respondents who had reported that they had ever played video gaming devices. Respondents were asked which of these had been made available to them by playing houses and encouraged them to play longer or more often. A total of 15 potential inducements were examined. Of these, 8 are illegal in South Carolina. The illegal inducements include the following: free or discounted food, alcohol on site, large jackpots, bonus systems, advertising, owners covering or holding checks, owners giving easy credit, and sexual companionship. Table 2 lists the percentages of players who responded that these illegal inducements had been made available to them and encouraged them to play longer or more often.

The category having the greatest proportion of respondents reporting having received illegal inducements was for alcohol on site, and it comprised almost 47% of the sample. Large jackpots was the second highest proportion at 43.5%. The availability of bonus systems comprised 22.4% of the sample. Over 11% of players reported owners giving easy credit, while 9% reported owners covering or holding checks. Approximately 10% reported that sexual companionship had been made available to them and encouraged them to play longer or more often.

Approximately 78% of players reported having received 1 or more illegal inducements. Nearly 55% of the players reported having received 2 or more illegal inducements. Of these 28% reported having received 3 or more illegal inducements.

Table 2 Percentages of Those Reporting Having Received Illegal Inducements

TYPE of INDUCEMENT	PERCENTAGE of PLAYERS
Free or discounted food	29.6%

Alcohol on site	46.9%
Large jackpots	43.5%
Bonus systems	22.4%
Advertising	12.9%
Owners covering or holding checks	9.0%
Owners giving easy credit	11.5%
Sexual companionship	10.2%

Seven variables examined inducements that are legal in South Carolina but were reported by players as having encouraged them to play longer or more often. Table 3 lists the percentages of players who responded that these had been made available to them by playing houses and encouraged them to play longer or more often.

Having video machines close to home was by far the category with the greatest proportion of players (61.9%) reported having this inducement available and that it encouraged them to play longer or more often. This is not a surprising finding, given the South Carolina Department of Revenue's estimate that approximately 31,000 machines are located within South Carolina. The 2nd highest category for these inducements was having friendship or social ties with employees of playing houses (35.9%). This category was followed closely by about 34% of players who said they were encouraged to play longer or more often because the playing houses were exciting places to be. Approximately 24% of players reported having received information when machines were "hot".

Table 3 Percentages of Players Reporting Legal Inducements

TYPE of INDUCEMENT	PERCENTAGE of PLAYERS
Alcohol setups for "brown bags"	5.8%
Exciting place to be	34.4%
Video machines close to home	61.9%
ATM machines in or near location	35.0%
Information when machines are "hot"	24.4%
Friendship or social ties with employees	35.9%
Treated like a special person	15.1%

Discussion

The information reported here is based on preliminary analyses of the data. However, these analyses provide 4 major indications about video gambling among players in South Carolina: (1) extent of gambling on video gaming devices, (2) general signals of problem gambling, (3)

problem gambling with regard to the number of years having played video gaming devices, and (4) regulatory issues related to video gaming devices.

First, a substantial number of respondents in playing locations have played video gaming devices and do so on a regular basis. More than one-third of the players in this study reported that they play 2 or more times per week. Of these, 13% reported playing 4 or more times per week, and nearly 6% reported that they played every day.

Second, approximately 1 in 5 of these players are problem gamblers. The percentages of women evidencing problem gambling tend to be slightly lower than those in the total sample but do not differ substantially from those of the total sample. In addition, African-Americans are disproportionately affected by problem gambling. African-American players comprised only about 20% of those who had ever played, but they had the highest proportion of players evidencing problem gambling.

Third, those respondents who had been playing for 4 years evidenced significantly more problem gambling than those playing a shorter period of time. A distressing finding from these analyses relates to the proportions of years that respondents have played video gaming devices. A considerably higher proportion of players have played for only 1 year, while the scores on problem gambling are substantially higher for those having played 2 or more years. This suggests the possibility that South Carolina has only begun to bear the consequences of video gaming.

Fourth, regulation of video gaming is a problem within South Carolina. Substantial proportions of players reported that illegal inducements have been made available to them and encouraged them to play longer or more often. Approximately 78% reported 1 or more illegal inducements. Nearly 55% of the players reported having received 2 or more illegal inducements. Of these, 28% reported having received 3 or more illegal inducements. In addition, substantial proportions of players reported inducements that are not illegal but have been made available to them and encouraged them to play longer or more often. Another regulatory issue relates to state laws specifying total legal winnings and losses per sitting. Almost 69% of players reported that they had won more than \$125 in one sitting, and 68.9% had lost more than \$50 in one sitting.

Taken together, these 4 major indications suggest that the current involvement of players of video gaming devices and their levels of problem gambling are substantial. Attempts to regulate gambling on video gaming devices by setting limits for total legal winnings and losses per sitting have been unsuccessful. The future levels of problem video device gambling that will be sanctioned and tolerated within South Carolina depend on the wisdom of decisions that are made in the present.

Taken from http://poptop.hypermart.net/qpvpoker.html