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Alex Clayton Ellis

Thomas Hicks

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The Safe Bet:

An Exploration of Games of Chance

Alex Ellis

Thomas Hicks

University of Northern Colorado

Abstract

The purpose of this study is to explore motivations and behaviors related to games of chance. An online snowball sample of 70 gamers completed the 25-item questionnaire consisting of questions measuring intelligence, motivation, amenities, and motivation to learn games of chance. T-test results indicated that males were more motivated by complexity and house odds of games than females. A visual inspection of the crosstab scores of the knowledge test revealed that players who prefer table games scored higher on the knowledge test than players that prefer slot machines. Also, the data suggested that slot players prefer games that require little thinking. Overall, the data indicated differences in behaviors and motivations among gender as well as gaming preference among players.

Keywords: Casino, Games of Chance, Table Games, Slot Machines

Introduction

This study aimed to explore the two most popular types of games of chance offered by the casino industry. Looking at multiple factors, this study extracted reasoning for the continuing popularity of electronic games of chance within the United States of America. Many studies in this field concentrate on the addiction and recovery factors that coincide with gambling problems. This study is aimed more at the tourism and recreation perspective of the casino gaming industry. To reinforce this, vacation amenities offered regularly by casinos were included in this study.

Exploring Games of Chance

Games of chance date back to the earliest ancient civilizations. These games involve risk and reward based on probability and statistics. Games of chance have evolved to become one of the most lucrative businesses in the tourism industry to date. Casino gaming is often paired with lodging, food and beverage, entertainment and recreation, and retail stores (Titz, Andrus, and Miller, 2012). As preferences for the fields aforementioned differ from person to person, the preference of types of games played is no exception. In modern casinos, the majority of games of chance can be broken down into two separate groups: electronic games and table games. Electronic games such as computerized slot machines generate thousands of random numbers per second even when they are not being played (Cauchon, 2008). These numbers determine the outcome of each round the game is played. Table games are known as “traditional” or “classic” games referencing their long-standing history in casinos. Table games such as blackjack, craps, and roulette have a predetermined set of odds that exists through the rules of the game in the particular medium used for game play, e.g. a set of dice or a deck of cards. In the United States

of America, more participants are spending time at the slot machines and less time at the table games (Cauchon, 2008).

Implications of the popularity of electronic games of chance over table games do not necessarily translate to the rest of the world. Table games rather than electronic games in casinos in Macao, located in southern China, generate a large proportion of revenue for the casinos (Siu and Eadington, 2009). This is the opposite of the United States of America where the primary games of chance bringing in revenue are the electronic gaming machines. The preference for table games versus electronic games (or vice versa) is just one example of factors that play into preference of the game. Gender (LaPlante, Nelson, LaBrie, and Shaffer, 2006), culture (Siu and Eadington, 2009), and environment (Cauchon, 2008) are just a few social factors that have been studied and show a trend when it comes to preference of games of chance.

Since the creation of the first mechanical slot machine in 1895, the use of mechanical/electronic games of chance has become the most popular choice for American recreational gamers. Thirty-seven states in the US now have slot machines and the number continues to increase (Cauchon, 2008). With the widespread popularity of electronic games of chance, the participation in table games has experienced a drastic decrease (Cauchon, 2008). Some believe this influx of popularity should be credited to age of technology. With the everyday use of technology, the participation in an electronic game of chance is basically second nature for Americans (Cauchon, 2008). Considering the simplicity of electronic games of chance when compared with table games, it provides (in the player's eyes) a more simple and quick way to win without sitting down and playing for long periods of time.

A piece of the study that goes along with the simplicity of the game is the motive people have for participating in a game of chance. According to Cauchon (2008) people tend to gravitate

more towards flashy, loud, electronic gaming devices. Pop culture themed games draw the attention of most electronic gamers when they enter a casino. But according to Michael Shackleford (2008), the nicer the casino, the tighter the electronic game of chance will be. This means that the over-the-top machines placed in world class Las Vegas casinos actually pay out money to the player less frequently than a less popular casino's machine would. Because of the decreased frequency of payouts on these machines, when the machine actually hits, the payout is substantially more than it would be at a less popular casino. Shackleford (2008) goes on to explain that if a player insists on playing electronic games of chance, the better bet is to play at a simple machine that does not have a particular visual appeal to it.

Purpose

The purpose of this study is to explore motivations and behaviors related to games of chance. To find preferences to a certain type of game, these research questions guided the study:

R1: What relationships do demographics have with motivation to learn games of chance?

R2: What is the draw of particular games in a casino?

R3: What differences exist among table players and slot players?

R4: What types of amenities within a casino are utilized the most while playing games of chance?

Methods

Participants

An online snowball sample was conducted by creating a link to the survey instrument on *SurevyMonkey.com*. The study invitation and link to the questionnaire were posted on *Facebook.com* from October 30, 2013 to November 11, 2013. The questionnaire link was also sent out as an e-mail to known participants of games of chance. Respondents were encouraged to

send the questionnaire link to friends that play games of chance. In all, 77 participated in the study; however, seven participants failed to complete at least 75 percent of the questionnaire and were eliminated from analysis. The remaining participants (n=70) were analyzed.

Respondents ranged in age from 21 to 83 years. The study included 32 males and 38 females. 52.9% of the participants reported having some college as their highest level of education. Of the 70 participants surveyed, 82% agreed to participate in games of chance for fun, while 18% did not participate in games of chance for fun. The top three games of chance reported in the sample ranked as the most frequently played include: mechanical slots at 24.2%, blackjack at 22.7%, and poker at 25.8%. Of the participants 39% expected to profit from playing games of chance, whereas the other 61% did not expect to profit. 71.5% of the participants agreed that they consume at least one beverage per hour while participating in games of chance.

Measures

The instrument for this study was a 25-item questionnaire assessing participants' behaviors and motivations related to games of chance. The questionnaire was divided into five sections: intelligence, motivation, amenities, motivation to learn new games, and demographics. The intelligence section consisted of five dichotomous questions (incorrect or correct response). For the motivation, amenities, and motivation to learn new games sections, a six point Likert scale format was used for all questions. To assess the preferred game of chance for each participant, a five rank order question was posed consisting of five different games of chance. Finally, participants were asked to provide certain demographic information.

Procedures

In order to answer three of the four research questions, three independent samples t-tests were conducted. The grouping variables for t-testing included males vs. females across

motivation to learn new games, slot players vs. table players across motivation to play games of chance, and participants under thirty years old vs. participants over thirty years old across the influence of amenities at casinos. The slot player and table player dichotomy was determined by extracting participants that ranked video slots or mechanical slots as their number one choice, and participants who ranked blackjack, craps, or poker as their number one choice, respectively. Last, in order to determine the highest scores on the intelligence section between slot players and table players, the total score of each influence was calculated.

Results

For the first research question, a paired samples t-test was conducted to assess mean differences between male and female players across their motivation to learn new games of chance. Results indicated that the complexity of the rules and the house odds (odds of winning or losing) have a distinct difference between males and females. Males are more motivated to learn games that are complex than females. Also, the odds of winning have more influence on the males' motivation to learn new games than the females'. See Table 1 for mean comparisons between male and female motivation for learning new games of chance.

For the second research question, a paired samples t-test was conducted to assess mean differences between players that prefer slots and players that prefer table games across motivation to engage in playing games of chance. Participants who ranked either mechanical slots or video slots as their number one preferred game of chance were considered slot players. Participants who selected blackjack, craps, or poker as their preferred game of chance were considered table game players. Means testing of these groups revealed that only one factor was significantly different. See Table 2 for mean comparisons between slot and table game players. The largest difference in mean scores appeared in participating in games of chance that require

little thinking. The slot players reported a higher preference for games of chance that require little thinking.

For the third research question, a knowledge test portion of the questionnaire was conducted during the study. Cumulative scores of the five questions were compiled to create an overall score for the knowledge test. Visual inspection of the knowledge test scores revealed that table players yielded more perfect scores (25) than slot players (7). Also, there were no table players that scored a zero on the knowledge test compared to the two slot players who did. See Figure 1 for knowledge test scores between slot players and table game players.

For the fourth research question, a paired samples t-test was conducted to assess mean differences between participants under the age of 30 and over the age of 30 across the importance of amenities within the casino they are playing at. Means testing of these groups indicated that three of the four amenities presented were similar for both groups. The only significant difference in the amenities between the two separate age group mean scores appeared in shopping within the casino. Participants under the age of 30 ranked this particular aspect of the casino higher than participants over the age of 30. See Table 3 for mean comparisons between player under and over the age of 30.

Conclusion

The purpose of this research was to explore motivations and behaviors related to games of chance. The comparison between males and females across their willingness to learn new games of chance suggested that males were overall more willing to learn new games of chance. A large indicator for males depended on the house odds. For females, the reason was learning games that friends play. These results appear to indicate that motivations for males is more competition based, while motivations for females lies in the social aspect of games of chance.

These differences are supported by the findings of LaPlante, Nelson, LaBrie, and Shaffer in 2006.

Participants who preferred table games had a significantly higher amount of perfect scores on the knowledge test than those participants who preferred slot games. These results indicate that table players have a higher level of intelligence than those who prefer slot games. Table players also reported having less interest in games of chance that require little thinking. This data reinforces the prior statement, indicating that table players prefer games that are intellectually stimulating.

The research appeared to be evenly distributed in regards to gender and game preference. However, the sample consisted of an overwhelming number of twenty-one-year-olds, which could have yielded inconsistent results due to the limited amount of time available to engage in games of chance. Moreover, the survey was presented to groups of people specifically tied to table games. This could present a false representation for the actual amount of table players that exist. For future studies, a more diverse range of age groups and a frequency of participation in games of chance should be taken into consideration.

The research of this study also found that all participants engaging in games of chance utilize some sort of amenity at the casino they are playing in. The integration of entertainment, food and beverage service, and shopping within the casino seems to be just as relevant to most participants as the game of chance they participate in. An increase in amenity options could amplify popularity of certain casinos geared primarily towards games of chance alone. Moreover, the ambiance of the casino also factors in to attendance.

The research done in the study also indicates a distinct difference between table game players and slot players. Because of the overwhelming popularity of slot games in the US

(Cauchon, 2008), casinos are accurate in placing an emphasis on these types of games. Continuing to place slot machines and video slot games at the heart of the casino allows for people less interested in the intellectual side of the games to experience them. The separation between these types of games with a casino seems to be a growing trend (establishing rooms specifically for poker, blackjack, or craps). Being cognizant of these two distinctly different types of players will allow casinos to adapt the layout and day-to-day operations to fit player preference.

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Table 1

Mean Comparisons Between Males and Females Across Motivation to Learn New Games

Measure <i>Question</i>	<u>Males</u>		<u>Females</u>		<i>t</i>	<i>df</i>	<i>p-value</i>
	Mean	SD	Mean	SD			
<i>I enjoy learning new games of chance</i>	4.10	1.375	3.89	1.351	.613	67	.542
<i>I am willing to learn complex rules for a new game of chance</i>	4.26	1.290	3.16	1.462	3.276	67	.002
<i>The teachers motivate my willingness to learn a new game of chance</i>	4.10	1.326	4.03	1.404	.213	67	.832
<i>I learn games that my friends play</i>	4.19	1.250	4.24	1.384	.625	67	.893
<i>The house odds influence my motivation to learn a new game of chance</i>	4.58	1.232	3.53	1.520	3.182	66.9	.002

Games of Chance Behaviors and Motivations

Table 2

Mean Comparisons Between Slot Players and Table Players Across Motivation to Play Games of Chance

Measure <i>Question</i>	<u>Slot Players</u>		<u>Table Players</u>		<i>t</i>	<i>df</i>	<i>p-value</i>
	Mean	SD	Mean	SD			
<i>I play games of chance for fun</i>	4.27	1.507	4.69	1.132	-1.278	63	.206
<i>I prefer to interact with others when I play games of chance</i>	4.48	1.479	4.71	1.017	-.715	48.1	.478
<i>I prefer games of chance that require little thinking</i>	4.20	1.375	3.11	1.549	2.966	63	.004
<i>I enjoy visually appealing games of chance</i>	4.97	1.217	4.63	1.190	1.130	63	.263
<i>I don't expect to profit from games of chance</i>	4.10	1.539	3.40	1.557	1.817	63	.074

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Table 3

Mean Comparisons Between Players Under 30 Years Old and Players Over 30 Years Old Across Amenities of Casinos

Measure <i>Question</i>	<u>Under 30 Years Old</u>		<u>Over 30 Years Old</u>		<i>t</i>	<i>df</i>	<i>p-value</i>
	Mean	SD	Mean	SD			
<i>I enjoy entertainment at the casino I am playing in</i>	4.50	1.149	4.17	1.295	-1.014	64	.314
<i>The atmosphere of the casino is important to me when I play games of chance</i>	4.65	1.229	4.33	1.188	-.928	64	.357
<i>I enjoy eating at a restaurant within the casino I am playing at</i>	4.33	1.358	4.33	.840	.000	64	1.000
<i>I enjoy shopping at the casino I am playing at</i>	3.81	1.483	3.00	.907	-2.685	49.959	.010

Games of Chance Behaviors and Motivations

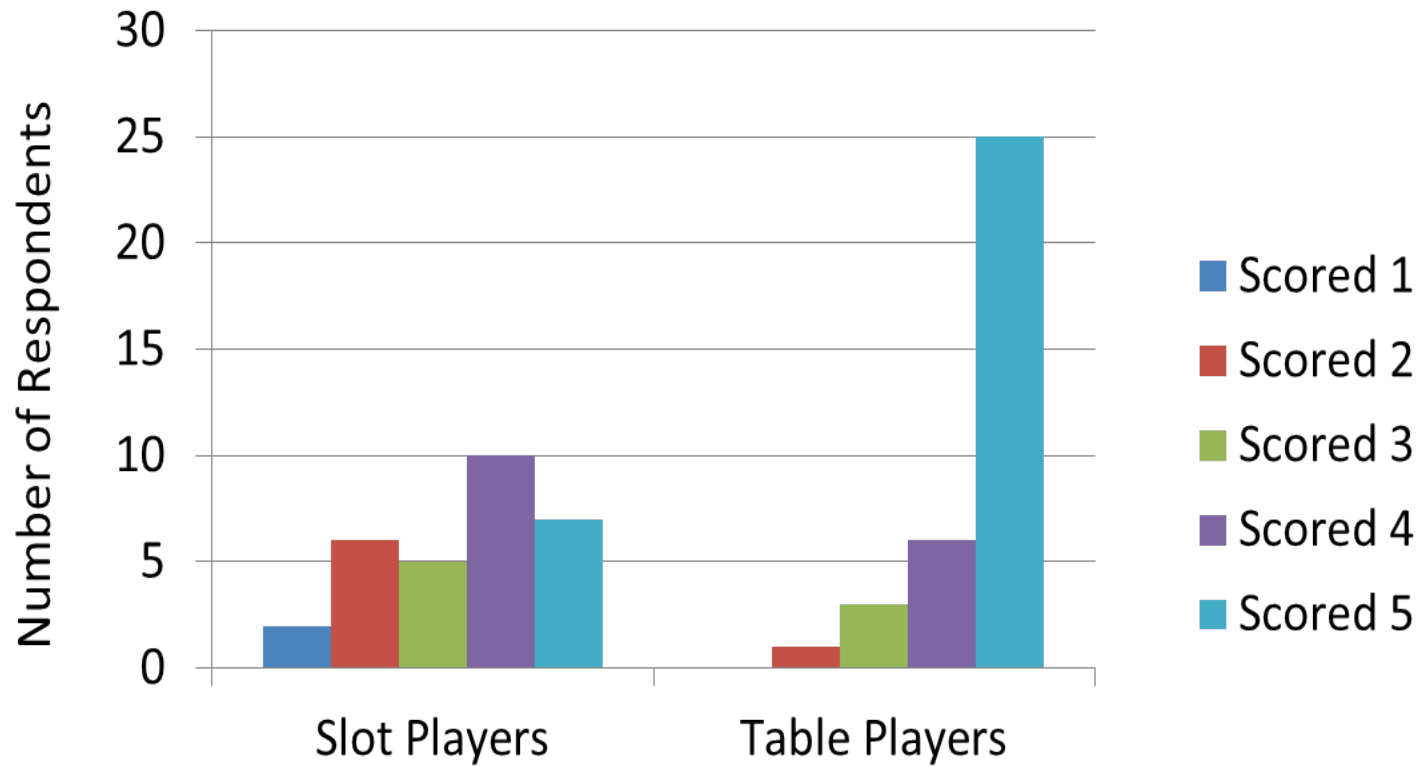


Figure 1. Scores of Knowledge Test Between Slot Players and Table Players. The higher the number, the higher the score.