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Examining the Effects of Casino Lottery Promotions

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EXAMINING THE EFFECTS OF CASINO LOTTERY PROMOTIONS

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Abstract

Casinos employ marketing and promotional activities to attract and retain customers within the competitive industry. Promotions awarding players thousands of dollars are not uncommon. To capitalize on this investment, the success of these promotional activities is crucial. The effectiveness of casino promotions has been scarcely examined within research. Only a few studies have directly examined the impact of casino lottery promotions (Lucas & Bowen, 2002; Lucas et al., 2006; Suh et al., 2014). Literature on promotional games can be used to fill the gap in knowledge regarding casino lottery promotions and to provide a starting point for future research. This study examines the existing literature on promotional games and provides suggestions for future studies on casino lottery promotions' effectiveness by proposing research hypotheses.

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Part One: Introduction

Introduction

Casinos employ marketing and promotional activities to attract and retain customers within the competitive industry. Promotions awarding players thousands of dollars are not uncommon. For instance, Ho-Chunk Gaming Wittenberg has a running promotion in which players earn points as they gamble to win entries in the “May 24 Grand Prize drawing for a chance to be one of four consolation winners for \$1,000 Cash or take home a 2014 Volkswagon Beetle” (Ho-Chunk Gaming Wittenberg, 2014). This type of promotion requires thousands of dollars to fund the pool prize and well as advertising costs. To capitalize on this investment, the success of these promotional activities is crucial. However, the effectiveness of casino marketing promotions has been questioned in multiple studies (Lucas, 2004; Lucas & Bowen, 2002; Lucas & Brewer, 2001; Lucas & Santos, 2003; Lucas, Dunn, & Karitonova, 2006; Suh & Lucas, 2011; Suh & Tsai, 2013; Suh, Dang & Alhaery, 2014; Tanford & Lucas, 2011). Given the substantial investment in these promotional activities, the effectiveness of such promotions should be carefully examined.

Purpose of the Study

This study aims to examine the existing literature on promotional games and provide suggestions for future studies focusing on casino lottery promotions’ effectiveness by proposing research hypotheses.

Conceptual Framework

There is limited research on the effectiveness of casino promotions. Very few studies have directly examined the impact of lottery promotions (Lucas & Bowen, 2002; Lucas et al., 2006; Suh et al., 2014). These studies have looked at the impact of casino lottery promotions on slot machine gaming volume. Non-casino promotional games literature is also limited but more extensive. Researchers have studied promotional games participation intentions, game promotions participants, the role of uncertainty and prize structure including the effect of consolation prizes (Goldsmith & Amir, 2010; Kalra & Shi 2010; Yao, Chen & Zhao, 2013; Yan & Muthukrishnan, 2014; Ward & Hill, 1991).

Statement of the Problem

Casino lottery promotions require a significant investment to fund the prize pool as well as cover the cost of marketing of the promotion. Very little empirical research has been done to examine the effectiveness of these promotions. Ineffective promotions can be detrimental to casinos as their operational margins are eroded. Additional understanding of what might determine the effectiveness of these promotions is necessary.

Scope and Delimitations

This study focuses on the literature related to promotional games which include lottery promotions, sweepstakes promotions, contest promotions and game promotions. This literature was used to propose future research in the gaming industry in an attempt to fill the knowledge gap.

Part Two: Literature Review

Introduction

This section provides a review of the existing and relevant literature in efforts to better understand lottery promotions. The review is divided into three sections. The first section discusses the industry perspective on casino promotions. An overview of general marketing literature, which includes promotions and promotional games-specific literature, is presented in the second section. Finally, casino marketing-specific literature is reviewed in the third section.

Industry Perspective

Two of the most crucial expenses casino executives can control are marketing and promotions. If utilized effectively, promotions create incremental profits; however, if utilized ineffectively, casinos can end up paying too much for their revenue and cause erosion of operating margins (Zarnett & Rajagopalan, 2013). A slot industry survey was conducted in January 2014. Survey responses were received from approximately 200 casino properties. Approximately 76% of casino operators reported that they were using free-play promotions as a strategy to get players to their floor (Theodore, Farley, Sundram & Kocharyan, 2014). Free-play promotions are direct marketing activities that award players money to be wagered at the casino (Lucas & Kilby, 2012). Casino executives have their own beliefs of which promotions work best. A director of slot operations of a tribal casino stated, “When promoting more visits by slots players, I find

that cash is king” (Slot Manager, 2010). According to him, cash giveaways promote more and longer visits; this casino offers players cash drawings during which tickets are earned by playing slot machines. This casino also features a “hot seat” promotion through which a winning player is selected at random without qualification period (Slot Manager, 2010). A general manager of a casino in New Mexico believes that bringing customers to the casino floor is not hard; the challenging part is getting them to engage in lengthy slots-playing sessions. Therefore, a two-tier marketing strategy is needed (Slot Manager, 2010). A trade magazine cited the following attributes as characteristics of an effective slot promotion:

- “Strategically designed to drive visitation and revenue
- Selectively diverse to attract a variety of players
- Creatively implemented to offer a fun and memorable guest experience
- Logistically planned to be user-friendly for guests and employees
- Measurably profitable to positively influence the bottom line” (O'Brien, 2011, p.14)

Outsiders have a different perspective of casino promotions effectiveness. A gaming consultant stated that casino marketing promotions are often designed so that the promotion appears successful at the expense of margins. Promotions that create a lot of traffic and excitement are not necessarily successful if they fail to generate additional profits. Promotions are often layered, offered during peak times when the casino floor is normally busy anyway, and no additional visits are generated. This practice creates additional and unnecessary expenses and is quite common in the industry (Zender, 2014).

General Marketing Literature

Leisure Industry Promotions

Consumption in the leisure industry is primarily hedonic (Hirschman & Holbrook 1982). Given the hedonic consumption of customers in the leisure industry, sales promotions in this area tend to emphasize added value rather than price discounts (Wakefield & Barnes, 1996). Research suggests that non-monetary promotions of hedonic products are more effective (Chandon, Wansink & Laurent, 2000).

Promotional Games

Promotional games are designed to promote a product or a service while giving customers the opportunity to win a prize. Prizes are won by luck or by skill. Promotional games where prizes are won by luck are called sweepstakes, while promotional games where prizes are won by skill are referred to as contests (Ward & Hill, 1991). The McDonald's Monopoly Game is an example of a promotional game that offers over one million dollars in sweepstakes prizes. Customers are given game pieces with their purchases during the promotional period which can produce an instant win or can be collected and traded in for prizes once a winning set is completed. This promotion generates customer attention and brand awareness and increases sales in the short term. Once the promotion is over, customers go back to their usual visitation frequency (Zichermann & Linder, 2010). Sweepstakes can be a good tool to call attention to a product that does not have any new features to advertise (Smith & Schultz, 2004). In addition, promotional games can also be used to affect behavior and increase revenue in the short term (Zichermann & Linder, 2010). Promotional games should be regarded as a

proactive strategy, as their planning and implementation take time (Brito & Hammond, 2007).

The Role of Uncertainty

A major component of lottery promotions is uncertainty— customers are uncertain about the outcome of these promotions, and not every participant gets an award. The literature regarding attitudes towards uncertainty of gains suggests that people tend to be risk averse (Gneezy, List & Wu 2006; Kahneman & Tversky, 1979). Given this finding, adding uncertainty to a promotion might make it less attractive to consumers. However, studies have analyzed the effect of uncertainty on promotions and have found that uncertainty can have a positive effect of promotions (Goldsmith & Amir, 2010; Yao, Chen & Zhao, 2013). Goldsmith and Amir (2010) conducted various experiments, including a field experiment, and reported a positive effect of uncertainty on promotions, as customers' responses to uncertain incentives were close to their responses to the best possible outcome. However, this relationship only holds if the decisions do not require thoughtful consideration, since thoughtful consideration reduces the positive effect of uncertainty. These findings can help companies reduce promotional cost as they do not have to give everyone an incentive and can generate similar responses to the promotion. Similar results were obtained by experimental studies conducted by Yao, Chen and Zhao (2013). They reported that people tend to be risk-seeking when they have a small probability of winning a large award.

Promotional Games Participation

Promotional games are effective if they achieve their objectives; in order to achieve these objectives, customers' motivation to participate in the promotion is needed.

Ward and Hill (1991) proposed a theoretical model (Figure 1) that explored the causes and consequences of promotional games participation. The model suggested that customers' perception of value (intrinsic and extrinsic) of promotional games was influenced by their demographics, personality, beliefs, and experiences with promotional games. The probability that a customer will participate in the promotional games increases as the perceived value of the promotion increases. Customers' perception of extrinsic value is based on the perceived value of the prize and the odds of winning. The intrinsic value of promotional games increases as games are more absorbing and fun and provide positive feedback to all participants. Customers' experience within the promotional game's process and the outcome of the promotional game influence their future decisions to participate. Understanding the principles behind how and why customers respond to promotional activities can help companies improve the effectiveness of their promotional games (Ward & Hill, 1991).

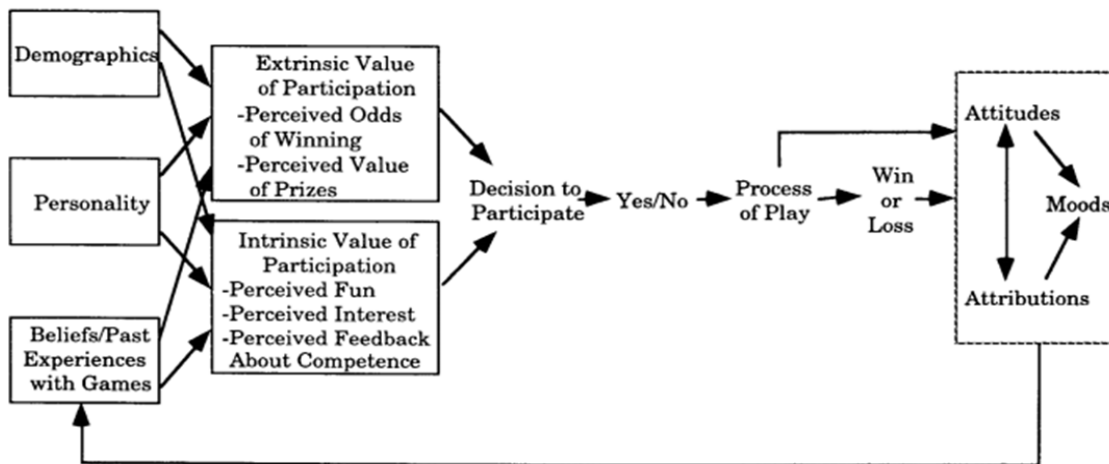


Figure 1. The Causes and Consequences of Promotional Games Participation. Reprinted from "Designing effective promotional games: Opportunities and problems" by J.C.

Ward and R.P. Hill, 1991, Journal of Advertising, 20, 3, 70.

Promotional Games Participants

Participants are essential for the success of a promotional game. Given the similarity between promotional games and gambling, researchers have studied the similarities between these two groups (Browne, Kaldenberg & Brown, 1992; Fang & Mowen, 2009; McDaniel, 2002). Gamblers have been found to be more likely to participate in promotional games than non-gamblers (Browne et al., 1992). McDaniel (2002) conducted a telephone survey of 555 randomly selected adults in two major cities in the U.S. The results reported similarities between promotional game participants and gamblers; inclination to participate in promotional games was associated with race, gambling interest levels, various gambling activities and sensation seeking. Additionally, the logistic regression results indicated that participants who reported interest in gambling were more likely to participate in promotional games. Fang and Mowen (2009) also found similarities between promotional games participants and slot gamblers using the hierarchical model of motivation and personality. Promotional games participants and slot gamblers demonstrated a tendency to be impulsive and materialistic. Both groups are primarily composed of women with lower education. However, some differences were also found; the motivation to participate in promotional games is money, while motivation to play slots also includes excitement, escape and lack of desire to increase self-esteem. Given the similarities between the two groups, promotional games, such as lottery promotions, could be effective in attracting gamblers participation.

Prize Structure

A fundamental part of promotional games is the prize. Prizes can either be monetary or non-monetary. Existing literature suggests that non-monetary—

merchandise—promotions are better at creating brand awareness, as merchandise reminds customers of the brand (Chandon, Wansink & Laurent, 2000; Kendrick, 1998; Smith & Schultz, 2004). In addition to determining the type of prize, the amount and quantity of awards is also important. Kalra & Shi (2010) examined the sweepstakes reward structure to determine which format maximizes consumers' valuations. They conducted different experiments with business undergraduate students who agreed to participate in the experiment in exchange of extra credit; the sample for the experiments included between 86 and 122 students. During the experiments, participants rated certain convenience products to indicate their brand loyalty. Participants were presented with different sweepstake rewards structures, which had different numbers of winners and different allocations of the prize pool, and participants were asked to rate them. They were given the option to participate in a sweepstake by buying the product or to keep the money. In addition, a questionnaire was given to determine participants' level of risk aversion. The results suggested that the sweepstakes reward structure should be based in terms of promotional objectives, consumers' level of risk aversion and consumers' level of subadditivity. High subadditivity occurs when participants perceive a higher probability (versus actual) of the outcome. One way of increasing subadditivity is by creating an illusion of control, such as by allowing participants to select their lottery numbers (Langer, 1975; Wu & Gonzalez, 1999). Kalra and Shi's results suggested that one large grand prize is recommended when the promotion is targeted to current customers who are risk neutral, but if the current customers are risk averse, then multiple large prizes are recommended. This study also suggests that the frequency of promotional games should be higher when targeting switchers. This result contradicts the literature on

sales promotions, which suggests that increasing the frequency of promotional activities leads to a decrease in their effectiveness (Blattberg & Briesch, 1995).

Consolation Prizes

The valuation of promotional games can also be affected by having multiple awards—consolation prizes. Yan and Muthukrishnan (2014) conducted a study to examine the effects of consolation prizes on customers' valuation of promotional lotteries. Consolation prizes are small prizes with higher winning probability available in promotional games that feature high-value awards. These researchers wanted to investigate if and how the reward structure affected participants' valuation, perception and intentions to participate in the promotional activity. Contrary to economic theories of customer choice under risk, they predicted that consolation prizes, even though they have a greater expected value, would decrease the overall valuation of the lottery promotion, given that the consolation prizes lower customers' expectations of winning the grand prize and the valuation of the lottery. Yan and Muthukrishnan conducted four experiments to test their hypothesis. For the first experiment, 91 randomly selected Hong Kong college students were divided into two groups and given two different hypothetical promotion scenarios; one included a consolation prize, and participants were asked how likely they would be to participate in the promotion. Analysis of variance was used to compare the two groups; those in the non-consolation prize group indicated a greater intention of participating in the promotion which was statistically significant. In addition, the non-consolation prize group indicated a higher perceived likelihood of winning the grand prize. The results of this experiment support their hypothesis that consolation prizes lower the perceived likelihood of winning the grand prize. The second experiment

consisted of a survey asking 127 Hong Kong college students if they would be willing to participate on a future survey. Half of the participants were told that an iPhone would be raffled to one of the participants of the survey. The other half were also told that those who did not win the iPhone would be given a consolation prize. Comparing the two groups, the willingness to participate was statistically higher in the group with no consolation prize. A post-study was conducted in which 56 undergraduate students were presented the two scenarios and asked which one they preferred. Given the two choices, all participants preferred the scenario with the consolation prizes, implying that some value is placed on the small prizes. The third experiment consisted of four scenarios with varying likelihood of winning a consolation prize, from no consolation prize to a guaranteed consolation prize. The authors propose that, to shift participants' focus to the likelihood of winning the grand prize, the likelihood of winning the consolation prizes needs to be great. Undergraduate students (275) were randomly assigned to one of four scenarios and asked how much they were willing to pay for the given lottery and their perceived likelihood of winning the grand prize. Similar to the findings from the first two experiments, the perceived likelihood of winning the grand prize was larger for the no consolation group versus that of the consolation group ($p < .05$). However, no statistically significant difference was found between the no consolation prize group and the low probability consolation prize group. This suggests that a certain level of likelihood is needed for consolation prizes to affect the lottery valuation. Willingness to pay exhibits similar results; participants in the no consolation groups were willing to pay more than those in the guarantee consolation prize group and high probability of consolation prize group. The willingness to pay between the groups with no consolation prize and low

probability consolation prizes was not statistically different. The fourth experiment, similar to the other three experiments, consisted of a survey given to students (275) asking them about their participation intentions under different scenarios, varying the prize amount, probability and presence of consolation prizes. A larger grand prize had a statistically significant and positive effect on intention to participate. The probability of winning the large prize was only statistically significant in explaining participation intentions when consolation prizes were present; otherwise it was not significant. This result supports the theory that the presence of a consolation prize affects participants' valuation of the lottery, as it changes the focus to the probability of winning the grand prize. The results of this study can help marketers reduce their promotional cost as the findings suggest that consolation prizes have a negative effect in customers' willingness to participate in the promotions. In addition, consolation prizes are costly and might not be necessary.

The prize structure of casino lottery promotions vary from promotion to promotion; some may offer multiple subordinate prizes, while others may offer consolation prizes. The difference between subordinate and consolation prizes is their value as compared to the value of the grand prize of the promotion. The value of a consolation prize is relatively small when compared to the grand prize. Additionally, the heart of a promotion with consolation prizes is the grand prize. Participants enter these promotions in hope of winning the grand prize. For instance, during the month of May 2014, Viejas Casino & Resort is running a lottery promotion in which participants earn one drawing entry for every five points of carded play. They will be conducting drawings every Saturday in May. The focal point to the promotion are the five 2014

BMW 428i convertibles that will be awarded. In addition to the convertibles, 45 players will be awarded \$1,000 (Viejas Enterprises, 2014). The convertible is considered the grand prize of the promotion and has a starting market suggested retail price of \$48,750 USD (BMW of North America, LLC, 2014). The \$1,000 prize could be regarded as a consolation prize as its value is approximately 2% of the value of the grand prize. Players have a higher probability of winning these prizes since there are 45 cash prizes versus 5 cars. Players are likely to participate and invest in the promotion because they want to win the grand prize not the consolation prize. The desirable award in this promotion would be the convertible car, and the presence of the small cash prizes could affect players' valuation of the promotion, as the higher probability of winning the small prize could make more noticeable the lower probability of winning the grand prize. Promotions that feature multiple prize levels with similar prize amounts offer subordinate prize which are not dramatically different from the grand prize.

Loss Leader and Cherry Picking

Companies often implement promotions in which the promotional product is sold at a loss. The objective of these promotions is to increase sales or consumption of other products. Walters and Rinne (1986) studied the effect of loss-leader and deep discount promotions on overall store sales and profits by examining 30 loss-leader promotions in three grocery stores. Only 2 of the 30 promotions were found to significantly and positively influence overall store profits. While only two promotions increased profits, nine promotions increased overall sales; however, this increase was due to the increase in sales of loss-leader promotional product. The increase of sales of only promotional items was described as "cherry picking," where customers only buy promotional and

discounted items while not changing their non-promotional items buying patterns. These customers are deal-prone customers who are attracted to value and visit the stores with the best deals (Blattberg, Buesing, Peacock, & Sen, 1978). Casino managers need to acknowledge the existence of “cherry pickers” who only come to the casino to take advantage of the promotions. Casino lottery promotions could be bringing players to the casino only during the promotional period, and once the promotion is over, they might stop coming. Players could be loyal to the promotion, not the casino.

Casino Marketing Literature

Casino Promotions

Multiples studies have been conducted that aim to estimate the effectiveness of specific casino marketing efforts (Lucas, 2004; Lucas & Bowen, 2002; Lucas & Brewer, 2001; Lucas & Santos, 2003; Lucas et al., 2006; Suh & Lucas, 2011; Suh & Tsai, 2013; Suh, Dang & Alhaery, 2014; Tanford & Lucas, 2011). To estimate the effectiveness of a casino promotion, the incremental revenue generated by the specific promotion needs to be identified (Lucas & Kilby, 2012). Researchers have used a theoretical model to estimate the impact of these promotions in terms of incremental revenue. Figure 2 illustrates a basic form of the theoretical model that has been used for gaming volume predictions in past studies (Lucas, 2004; Lucas & Bowen, 2002; Lucas & Brewer, 2001; Lucas & Santos, 2003; Lucas et al., 2006; Suh & Lucas, 2011; Suh & Tsai, 2013; Suh, Dang & Alhaery, 2014; Tanford & Lucas, 2011). This model controls for major holidays, special events and days of the week which have been found to significantly impact gaming volume. Casino marketing variables are added to measure the

effectiveness of the promotions of interest such as direct mail offerings, cash drawings, free-play, slot tournaments and lottery promotions.

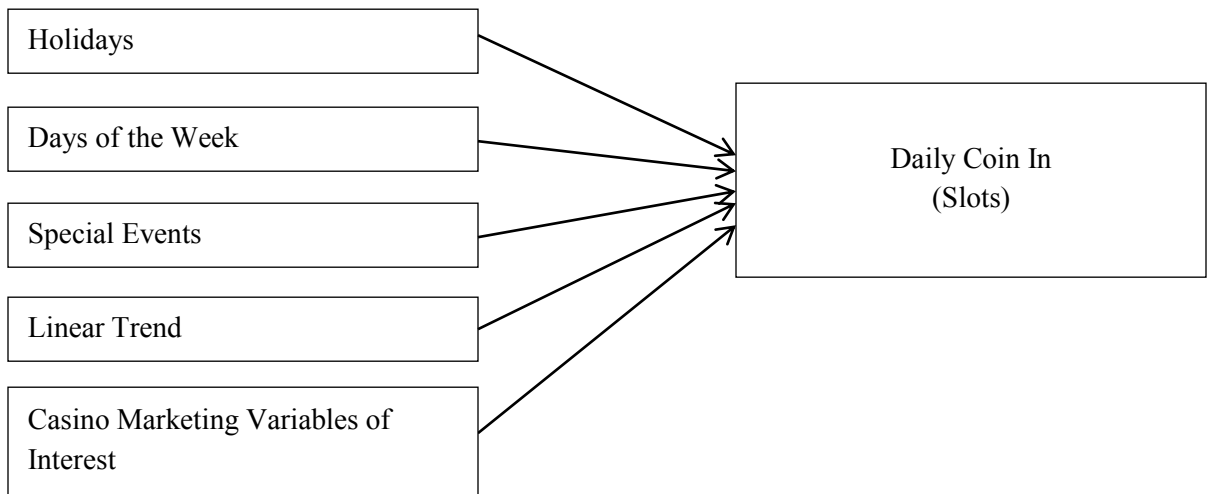


Figure 2. Theoretical model of influences on aggregate daily slot gaming volume

Free-Play Promotions

Free-play promotions are direct marketing activities mainly used in the repeaters' market. Players are awarded a specific dollar amount to be redeemed during a given time window. To redeem their free play, players have to play the slots. Often free-play offers require players to wager the amount awarded at least once; this reduces casinos' promotional cost by the house advantage (Lucas & Kilby, 2012). To reduce the cost of these promotions, players have to play beyond the minimum requirement, and for them to be effective, they have to generate incremental revenue in excess of the promotional cost. Multiple studies have measured the effectiveness of free-play promotions, and conflicting evidence has been found (Lucas & Bowen, 2002; Lucas & Brewer, 2001; Lucas et al., 2005; Lucas et al., 2006; Lucas & Santos, 2003; Suh, 2012; Suh et al. 2014). Lucas et al. (2005) studied the effects of direct mail cash incentives in a Las Vegas Strip property targeting non-local players. Players were issued either \$50 or \$100 in free play. The

effectiveness of the promotion was analyzed by comparing the trip coin-in versus the coin-in of trips made within the last three years when the free-play offer was not given. Multiple regression analysis revealed a significant negative relationship between slot coin-in and the \$50 free-play offer. The slot coin-in relationship with the \$100 offer was not statistically significant. Likewise, Lucas et al. (2006) and Suh (2012) reported no significant effects between direct mail offers and slot coin-in. Contrary to these findings, Lucas and Brewer (2001) reported a significant positive effect of direct mail cash offer in slot coin-in. The property was also in Las Vegas but targeted a local clientele. Even though the promotion was found to increase coin-in, the increase was not sufficient to cover the cost of the promotion. A significant positive relationship between direct mail free-play incentives and slot coin-in has also been found in other studies looking at various regions: Las Vegas, Midwest and South (Lucas & Bowen, 2002; Lucas & Santos, 2003; Suh et al., 2014). The effectiveness of direct mail free-play offers is inconclusive, given the existence of conflicting findings. However, this is expected, as every offer is different and results will vary by property.

Casino Lottery Promotions

Lottery promotions are drawing-based promotions primarily used in the repeaters' market. This type of marketing promotion usually targets slot players and has a duration of approximately four weeks. This period includes qualification days and drawings days; drawings usually take place twice a week, and players must be present to win. Casino operators decide how players earn tickets; usually tickets are earned by winning top-award jackpots, by earning a specific amount of points via carded play or by getting a specific hand in a card game. The methods of earning drawing tickets are aimed to

provide incentive for increase play, as more play translates into more tickets, which in turn translates into higher probability of winning the drawing. Lottery awards typically consist of cash prizes and brand new cars (Lucas & Kilby, 2012).

The literature measuring the effectiveness of casino lottery promotions is limited (Lucas & Bowen, 2002; Lucas et al., 2006; Suh, Dang & Alhaery, 2014). Lucas et al. (2006) conducted a study to measure the impact of bingo on aggregate slot coin-in. Their model controlled for lottery promotions in the form of drawing days. Their sample consisted of 42 lottery promotional days, six of which were drawing days from a Southern California casino. This study used a regression model to explain aggregate coin-in value. A binary variable was used to flag the drawing days. Two models were run—one for the total aggregate coin-in and a second for low denomination slot coin-in. The study reported a significant and positive effect of drawing days on daily slot gaming volume. The relationship was statistically significant at the 0.10 alpha level for the total aggregate coin in and statistically significant at the 0.01 level for low-denomination coin-in. Opposing findings were reported by Lucas and Bowen (2002) and Suh et al. (2014). Lucas and Bowen (2002) analyzed promotions over a six-month period, which included 95 lottery promotional days, from a Las Vegas Casino. A binary variable was used in the regression model to identify lottery promotional days; however, contrary to the previous study, this variable flagged all promotional days, including the qualification period, as opposed to only drawing days. The promotional days variable failed to significantly influence slot gaming volume. This study also measured the impact of the magnitude of the drawing prize on slot volume by controlling for the dollar amount awarded at each of the drawings. This study found a positive and significant relationship between prize

amount and slot volume. The results suggested that bigger prizes generate more business volume. However, the incremental revenue generated was not sufficient to cover the cost of the promotion. Finally, Suh et al. (2014) examined the effectiveness of lottery promotion on slot gaming volumes of two riverboat casinos in United States over a 242-day period in 2006. Similarly to the previous studies, they conducted multiple regressions analysis to explain the impact of multiple variables on slot coin-in. Drawing frequency was not statistically related to slot gaming volumes, similar to Lucas and Bowen's findings. The results of the analysis reported a positive and significant relationship between slot gaming volumes and large monetary and non-monetary prizes. In contrast, small non-monetary prizes and random drawings failed to significantly influence slot gaming volumes.

Part Three: Discussion and Implications

Introduction

The literature on promotional games can be used to better understand the gaps in casino lottery promotions and provide a starting point for future research. This section connects the two strands of literature (general marketing literature and casino marketing literature) and provides suggestions for future studies focusing on casino lottery promotions' effectiveness by proposing research hypotheses. This section is divided into the following subsections: lottery promotions as a way to attract casino players, promotional frequency, award structure, managerial implications, limitations, and recommendations for future research.

Lottery Promotions as a Way to Attract Casino Players

Casino gambling is a leisure activity. In this type of industry, sales promotions tend to emphasize added value rather than price discounts (Wakefield & Barnes, 1996). Promotional games such as lottery promotions focus on adding value to the customer. A main component of lottery promotions is uncertainty—not every participant gets an award. Studies have suggested that, unless thoughtful consideration is needed, uncertainty can have a positive effect on promotions (Goldsmith & Amir, 2010; Yao, Chen & Zhao, 2013). Research suggests that responses to uncertain incentives can approximate the responses to the best possible outcome. These results suggest that, if lottery promotions are designed properly, they could be cost-effective.

Lottery promotion effectiveness largely depends on participation. Players' engagement to participate in the promotion and earn entries is needed. Increase play leads to more entries, which leads to an increase in incremental revenue for the casino. To increase participation, it is important to understand why and how customers respond to this type of promotion. The theoretical model presented by Ward and Hill (1991) suggested that customers' decision to participate in promotional games is based on the perception of value of promotion, which is influenced by their demographics, personality, beliefs, and past experiences with promotional games. Studies have found similarities in gamblers and promotional game participants (Browne, Kaldenberg & Brown, 1992; Fang & Mowen, 2009; McDaniel, 2002). The results of these studies suggest that promotional game participants and gamblers have some similarities in terms of demographics and personality, which are two of the influencers of promotional game participation. Given that gamblers and promotional game participants have similarities in these categories, it could be deduced that gamblers are more likely to participate in this type of promotion than non-gamblers.

Proposed Model

Gaming volumes have been successfully predicted using the theoretical model shown in Figure 2. This study proposes the use of the theoretical model to measure and test different hypotheses related to casino lottery promotions.

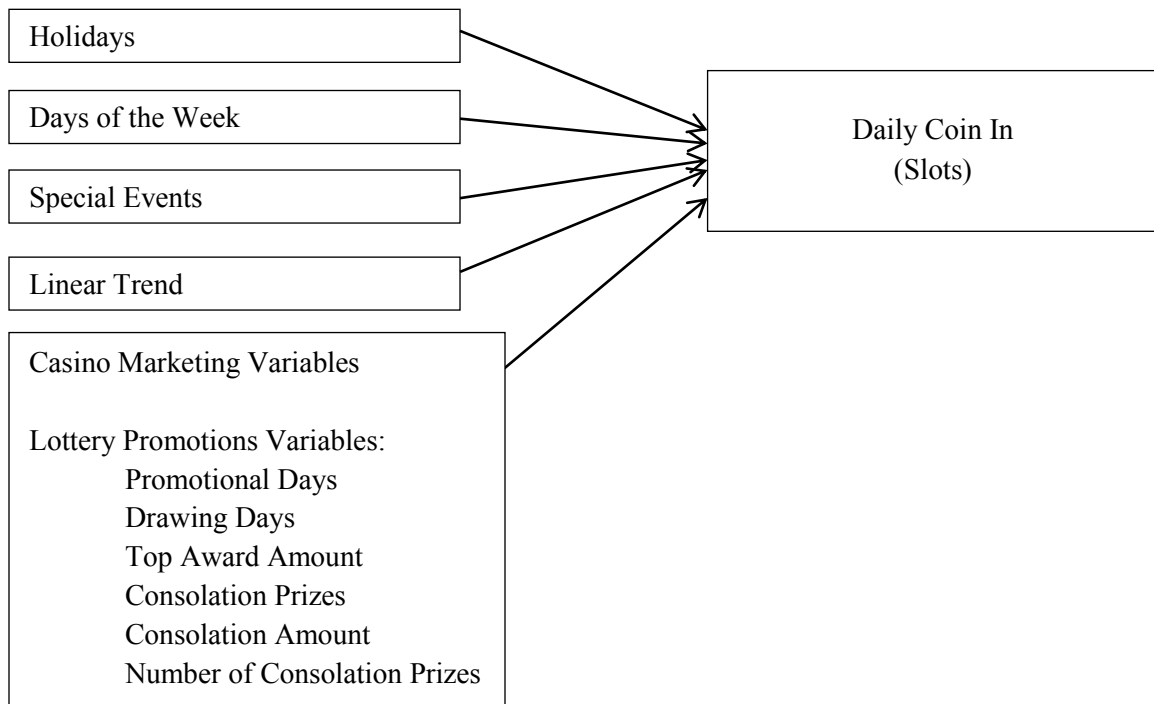


Figure 3. Proposed model to study casino lottery promotions

Promotional Frequency

Promotional literature suggests that increasing the frequency of promotional activities decreases their effectiveness (Blattberg & Briesch, 1995). However, promotional games literature suggests that promotional frequency should be based on the objectives of the promotion, targeting switchers versus current customers (Kalra & Shi, 2010). Current customer promotions should be less frequent than promotions targeting switchers.

Empirical studies on lottery promotions found conflicting evidence regarding promotional frequency (Lucas & Bowen, 2002; Lucas et al., 2006; Suh et al., 2014).

These studies measured promotional frequency by either flagging promotional days or drawing days. This study proposes the inclusion of both variables into the model.

Promotional days would include the drawing entry tickets' earning period, excluding drawing days. Drawing days should be measured separately, as most of the time, players

must be present to win, which might lead to greater impact on business volume on those days. Given the conflicting results found by previous studies, the expected direction of the “promotional days” variable is unknown.

Proposed Hypotheses:

H1: The binary “promotional days” variable, flagging promotional qualification days, will produce a significant effect on slot volume.

H2: The binary “drawing days” variable, flagging drawing days, will produce a positive and significant effect on slot volume.

Award Structure

When designing a lottery promotion, the award structure is crucial. Casinos need to determine the optimal type, amount and number of prizes to offer. Casinos can offer either cash awards or non-monetary awards such as cars and boats. Literature suggests that non-monetary awards are better at creating brand awareness (Chandon, Wansink & Laurent, 2000; Kendrick, 1998; Smith & Schultz, 2004). Casino lottery promotions primarily target repeater clientele, while game promotions’ literature suggests that one large grand prize is recommended when the promotion is targeted to current customers who are risk neutral (Kalra & Shi, 2010). This finding has been supported by empirical studies on casino lottery promotions that have found a significant and positive relationship between large monetary and non-monetary awards and casino business volume (Lucas & Bowen, 2002; Suh et al., 2014). Since casino lottery promotions target a local clientele, a large grand prize is expected to have a positive effect on slot volume.

Proposed Hypothesis:

H3: The dollar amount of the top award will produce a positive and significant effect on slot volume.

The presence of consolation prizes can also affect the effectiveness of casino lottery promotions. It is important to note that not all casino lottery promotions feature consolation prizes. A promotion features a consolation prize when the value of a consolation prize is relatively small when compared to the grand prize. Additionally, the heart of a promotion with consolation prizes is the grand prize. Despite the fact that consolation prizes have a higher expected value (since there is a higher probability of winning the smaller prize) and would be expected to increase the valuation of the lottery promotions, they have the opposite effect. Consolation prizes decrease the overall valuation of the lottery promotion, given that they lower customers' expectations of winning the grand prize (Yan & Muthukrishnan, 2014). Casino lottery promotions often include consolation prizes, and the effect they have on the promotion effectiveness has not been studied. Going back to the previous lottery promotion example in part two, players participating in the lottery promotion to win the convertible may switch their valuation of the promotion from the value of the grand prize to the probability of attaining it. Since there is a higher probability of attaining the consolation prizes, players might regard the promotion as less valuable. Based on the current non-casino lottery literature, consolation prizes are expected to have a negative effect on casino lottery promotions' effectiveness.

Proposed Hypotheses:

H4: The binary consolation variable, indicating the existence of consolation prizes, will produce a negative and significant effect on slot volume.

H5: The dollar amount of consolation awards will produce a negative and significant effect on slot volume.

The presence of consolation prizes is not sufficient to affect lottery valuation; a certain level of likelihood of winning them is needed (Yan & Muthukrishnan, 2014). As the odds of winning a consolation prize increases, the expectations of winning the grand prize decreases, which decreases the lottery valuation. Previous casino lottery promotion studies have not captured this effect on the model. Given that the odds of winning the different prizes are rarely published to participants, the number of consolations prizes could give participants an indication of the odds. As the number of consolation prizes increases, the odds of winning a consolation prize increases, which lowers the lottery valuation and participation. Referring back to the example provided in part two, the \$1,000 consolation prizes would have less of an impact on the lottery valuation if there were only a few of them, as the probability of winning them would be similar to the probability of winning the grand prize.

Proposed Hypothesis:

H6: The number of consolation prizes will produce a negative and significant effect on slot volume.

Managerial Implications

This study looks into the factors that affect the effectiveness of casino lottery promotions. Casinos spend millions of dollars on casino promotions to create incremental revenue and increase profits. Promotional effectiveness directly impacts casinos' bottom line. The promotional games literature suggests similarities between gamblers and promotional games participants. Casino managers should view this relationship positively, as it gives them an indication that gamblers are likely to participate in lottery promotions. In addition, this study uncovers some variables that might affect the effectiveness of casino lottery promotions. Some of the crucial elements casino managers need to consider are promotional objectives and prize structure. Different promotional objectives require different promotional designs, and promotions targeting switchers may need to be more frequent and have multiple prizes, as participants have low brand loyalty. To be effective, promotions targeting current customers may need to be less frequent and contain a single large prize. In terms of awards structure, the current promotional game research suggests that consolation prizes negatively affect promotion valuation and hence participation. Even though further research needs to be conducted to validate this finding in the gaming industry, casino managers need to be aware of this possibility.

Other factors discussed in this paper that might affect the effectiveness of casino lottery promotions are "cherry picking" and peak period promotions. Casino managers need to acknowledge the existence of "cherry pickers" who only come to the casino to take advantage of the promotions. Managers should design promotions in such a way in which participants are required to invest in the promotion. In addition, managers need to

pay attention to the promotion design and evaluate the best time to conduct the lottery drawings. Peak periods may seem to be a good time to conduct drawings, as people are already present; however, conducting them on slow business days may bring additional business to the casino.

Limitations and Future Research

Any theoretical model advanced in a paper such as this is subject to differences in the execution of lottery promotions. That is, the results could vary according to the differences in the timing and structure of the lotteries that are measured. For example, concurrent promotional offerings from competitors in the same market could affect the results. Also, more or less stringent qualification conditions could affect the efficacy of the promotions in cross-property comparisons.

Despite the popularity of casino promotions, there is limited empirical research on their effectiveness. Additional studies on this subject would be beneficial to broaden the understanding of the effectiveness of casino promotions in general as well as promotion-specific research. Future research could test the hypotheses proposed in this paper (Table 1) to broaden the understanding of casino lottery promotion as well as add to the general promotional game literature. A field experiment testing the influence of consolation prizes on promotional effectiveness could also be conducted. It is recommended that different prize structures be tested to understand the potential effects of prize structure variations. It is recommended that future research on casino promotions be conducted in different markets to compare the results between destination and repeaters' markets. Researchers may also want to consider studying other types of promotional games offered by casinos such as instant-win promotions. The effect of consolidation prizes

could be significant in these promotions, as they often feature a prize guarantee. Finally, qualitative research that looks into casinos’ promotional goals, objectives and procedures could provide a different perspective and add to the understanding of casino promotions.

Table 1

Proposed Hypotheses

H	Proposed Hypothesis
1	The binary “promotional days” variable, flagging promotional qualification days, will produce a significant effect on slot volume.
2	The binary “drawing days” variable, flagging drawing days, will produce a positive and significant effect on slot volume.
3	The dollar amount of top award will produce a positive and significant effect on slot volume.
4	The binary consolation variable, indicating the existence of consolation prizes, will produce a negative and significant effect on slot volume.
5	The dollar amount of consolation awards will produce a negative and significant effect on slot volume.
6	The number of consolation prizes will produce a negative and significant effect on slot volume.

REFERENCES

- Blattberg, R. C., Briesch, R., & Fox, E. J. (1995). How promotions work. *Marketing Science*, *14*(3_supplement), G122-G132.
- Blattberg, R., Buesing, T., Peacock, P., & Sen, S. (1978). Identifying the deal prone segment. *Journal of Marketing Research (JMR)*, *15*(3)
- BMW of North America, LLC. (2014). The all-new 428i convertible. designed for driving pleasure.. Retrieved May 7, 2014, Retrieved from <http://www.bmwusa.com/Standard/Content/Vehicles/2014/4/428iConvertible/default.aspx>
- Brito, P. Q., & Hammond, K. (2007). Strategic versus tactical nature of sales promotions. *Journal of Marketing Communications*, *13*(2), 131-148.
- Browne, B. A., Kaldenberg, D., & Brown, D. J. (1992). Games people play: A comparative study of promotional game participants and gamblers. *Journal of Applied Business Research*, *9*(1), 93.
- Chandon, P., Wansink, B., & Laurent, G. (2000). A benefit congruency framework of sales promotion effectiveness. *Journal of Marketing*, *64*(4), 65-81.
- Fang, X., & Mowen, J. C. (2009). Examining the trait and functional motive antecedents of four gambling activities: Slot machines, skilled card games, sports betting, and promotional games. *Journal of Consumer Marketing*, *26*(2), 121-131.

- Gneezy, U., List, J. A., & Wu, G. (2006). The uncertainty effect: When a risky prospect is valued less than its worst possible outcome. *The Quarterly Journal of Economics*, 121(4), 1283-1309.
- Goldsmith, K., & Amir, O. (2010). Can uncertainty improve promotions? *Journal of Marketing Research*, 47(6), 1070-1077.
- Hirschman, E. C., & Holbrook, M. B. (1982). Hedonic consumption: Emerging concepts, methods and propositions. *Journal of Marketing*, 46(3)
- Ho-Chunk Gaming Wittenberg. (2014). April showers bring may flowers. Retrieved May 6, 2014, Retrieved from <http://www.ho-chungaming.com/wittenberg/promos-events/promotions.html>
- Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica: Journal of the Econometric Society*, 263-291.
- Kalra, A., & Shi, M. (2010). Consumer value-maximizing sweepstakes and contests. *Journal of Marketing Research*, 47(2), 287-300.
- Kendrick, A. (1998). Promotional products vs price promotion in fostering customer loyalty: A report of two controlled field experiments. *Journal of Services Marketing*, 12(4), 312-326.
- Langer, E. J. (1975). The illusion of control. *Journal of Personality and Social Psychology*, 32(2), 311.

- Lucas, A.F., 2004. Estimating the impact of match-play promotional offers on the blackjack business volume of a Las Vegas hotel casino. *Journal of Travel & Tourism Marketing* 17 (4), 23–33.
- Lucas, A. F. (2005). Estimating the impact of match-play promotional offers on the blackjack business volume of a las vegas hotel casino. *Journal of Travel & Tourism Marketing*, 17(4), 23-33.
- Lucas, Anthony F.Dunn,William T.Karitonova, Anna. (2006). Estimating the indirect gaming contribution of bingo rooms. *UNLV Gaming Research & Review Journal*, 10(2), 39.
- Lucas, A. F., & Brewer, K. P. (2001). Managing the slot operations of a hotel casino in the las vegas locals' market. *Journal of Hospitality & Tourism Research*, 25(3), 289-301.
- Lucas, A. F., & Kilby, J. (2012). *Introduction to Casino Management* Okie International.
- Lucas, A. F., & Santos, J. (2003). Measuring the effect of casino-operated restaurant volume on slot machine business volume: An exploratory study. *Journal of Hospitality & Tourism Research*, 27(1), 101-117.
- Lucas, A. F., & Bowen, J. T. (2002). Measuring the effectiveness of casino promotions. *International Journal of Hospitality Management*, 21(2), 189-202.

- McDaniel, S. R. (2002). Investigating the roles of gambling interest and impulsive sensation seeking on consumer enjoyment of promotional games. *Social Behavior & Personality: An International Journal*, 30(1), 53.
- O'Brien, T. (2011). These concepts drive visitation and revenue in fun, entertaining fashion. *Slotmanager*, July/August 2011, 14.
- SlotManager. (2010). Forum: Which marketing strategies or promotions have worked best in bringing slots players into your casino during these tough times?. *Slotmanager*, March/April 2010, 34.
- Smith, S., & Schultz, D. E. (2004). *How to sell more stuff!: Promotional marketing that really works* Kaplan Publishing.
- Suh, E. (2012). Estimating the impact of free-play coupon value on players' slot gaming volumes. *Cornell Hospitality Quarterly*, 53(2), 134-143.
- Suh, E., Dang, T. T., & Alhaery, M. (2014). Examining the effects of various promotion types on slot gaming volumes. *International Journal of Hospitality Management*, 37(0), 68-79.
- Suh, E., & Lucas, A. F. (2011). Estimating the impact of showroom entertainment on the gaming volumes of las vegas hotel-casinos. *International Journal of Hospitality Management*, 30(1), 103-111.
- Suh, E., & Tsai, H. (2013). Examining the relationship between poker and the gaming volumes of las vegas hotel casinos. *Journal of Business Research*, 66(9), 1651-1658.

- Tanford, S., & Lucas, A. F. (2011). The indirect impact of casual dining on low-end gaming in destination and local casinos. *International Journal of Hospitality Management*, 30(3), 486-494.
- Taylor, C. R., & Kopp, S. W. (1991). Games, contests, and sweepstakes run afoul: A state of legal disorder. *Journal of Public Policy & Marketing*, 10(1), 199-213.
- Theodore, S., Farley, R. M., Sundram, R., & Kocharyan, A. (2014). *Slot industry survey*. (Equity Report). UBS Securities Australia Ltd.
- Viejas Enterprises. (2014). May dream machine. Retrieved May 06, 2014, Retrieved from http://viejas.com/promotions/may-dream-machine_2014-BMW-428i-Convertible
- Wakefield, K. L., & Barnes, J. H. (1996). Retailing hedonic consumption: A model of sales promotion of a leisure service. *Journal of Retailing*, 72(4), 409-427.
- Walters, R. G., & Rinne, H. J. (1986). An empirical-investigation into the impact of price promotions on retail store performance. *Journal of Retailing*, 62(3), 237-266.
- Ward, J. C., & Hill, R. P. (1991). Designing effective promotional games: Opportunities and problems. *Journal of Advertising*, 20(3), 69-81.
- Wu, G., & Gonzalez, R. (1999). Nonlinear decision weights in choice under uncertainty. *Management Science*, 45(1), 74-85.

- Yan, D., & Muthukrishnan, A. V. (2014). Killing hope with good intentions: The effects of consolation prizes on preference for lottery promotions. *Journal of Marketing Research*, 51(2), 198-204.
- Yao, Q., Chen, R., & Zhao, P. (2013). Precise versus imprecise promotional rewards at small probabilities:: Moderating from purchase value and promotion budget. *European Journal of Marketing*, 47(5/6), 1006-1021.
- Zarnett, A., & Rajagopalan, S. (2013). *Z-MAN's gaming almanac 2013*. (Markets Research).Deutsche Bank Securities Inc.
- Zender, B. (2014, Critical functions all casino executives should consider to be successful. *Casino Enterprise Management*, March 2014
- Zichermann, G., & Linder, J. (2010). *Game-based marketing: Inspire customer loyalty through rewards, challenges, and contests* John Wiley & Sons.