

Episodic Chasing and Price of Scratch-off Lottery Tickets

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Abstract

The present study examined the relationship between instant (scratch-off) lottery ticket price and “chasing losses” within a single gambling episode. Across several months, each time an instant lottery ticket was purchased ($N = 1081$), convenience store clerks recorded the gamblers’ genders, the price of the tickets purchased, and whether the customer purchased another ticket before leaving the premises. Logistic regression analysis showed a significant association between ticket price and repurchasing (odds ratio = .842, $p < .0001$), suggesting within-session chasing is common with lower priced instant lottery tickets, and lower costs are not necessarily indicative of less risk.

Keywords: Chasing, instant lottery, risk, scratch-off

Résumé

La présente étude portait sur la relation entre le prix des billets de loterie instantanée (à gratter) et la « récupération des pertes » dans un seul épisode de jeu. Pendant plusieurs mois, chaque fois qu’un billet de loterie instantanée était acheté ($N = 1081$), les commis de dépanneur consignaient le sexe des joueurs et le prix des billets de loterie instantanée, et indiquaient si le consommateur avait acheté un autre billet avant de quitter les lieux. L’analyse de régression logistique a montré une corrélation importante entre le prix des billets et le rachat (rapport de cotes = 0,842, $p < 0,0001$), ce qui suggère que la récupération au cours d’un même épisode de jeu est courante pour les billets de loterie instantanée à plus bas prix et que de plus faibles coûts ne réduisent pas nécessairement les risques.

Introduction

“Chasing losses,” or attempting to recover losses by further gambling (Lesieur, 1984; O’Connor & Dickerson, 2003; Toneatto, Blitz-Miller, Calderwood, Dragonetti, &

Tsanos, 1997), is a key indicator of a gambling disorder as approximately 60% of all gamblers who fulfill at least one DSM-IV criteria (American Psychiatric Association, 1994, p. 616) endorse this item (Toce-Gerstein, Gerstein, & Volberg, 2003). Though frequently assessed across gambling sessions, research has identified episodic or within-session chasing as gambling persistence in the face of losing (Dickerson, Hinchey, & Fabre, 1987; O'Connor & Dickerson, 2003), or adherence to a behavioral strategy resulting in elevated monetary risk (Breen & Zuckerman, 1999; Linnet, Røjskjær, Hygaard, & Maher, 2006).

Though chasing represents a common behavioral feature of gambling disorder, little research on this phenomenon has been conducted with lotteries, the most popular form of gambling (American Gaming Association, 2013; LaPlante, Gray, Bosworth, & Shaffer, 2010). Despite general perceptions that lotteries are a low-risk, socially acceptable form of gambling (Ariyabuddhiphongs, 2011; Casey, 2006; Rogers, 1998), instant lottery (scratch-off tickets) may in fact be particularly problematic, as this type of gambling provides immediate win/loss feedback and is widely available at low cost (Kundu et al., 2007; MacLaren, Harrigan, & Dixon, 2015; Short, Penney, Mazmanian, & Jamieson, 2015). Furthermore, unlike draw-based lotteries (e.g., weekly lotteries), instant lottery allows for both within- and between-session chasing, and thus low ticket prices may actually not necessarily be indicative of lower risk. Given the resulting need for further research into this specific area, the present study was established to examine the association between episodic chasing and price in instant lottery gambling.

Method

Participants consisted of 1081 customers (905 male, 176 female) of a suburban convenience store in the Midwestern United States. The convenience store displayed and sold instant (scratch-off) lottery tickets, with prices ranging from \$1 to \$30 USD, including basic “match and win prize shown” tickets purchased, as well as more interactive scratch games such as bingo or crossword tickets. Jackpot prizes ranged from \$1000 USD to sums of money paid for life. Customers’ ages were all verified by convenience store staff as above 21 years. Data were collected across several months on an ongoing basis. The study was approved by the Human Subjects Committee at Southern Illinois University.

Each time a customer purchased an instant lottery ticket in the store, the clerk handling the transaction covertly recorded the buyer’s gender and the price of the highest value ticket initially purchased after the customer exited the store. As a measure of episodic chasing, clerks recorded repurchasing behaviour, defined as allocating further funds to purchase additional instant lottery tickets in a separate transaction before leaving the premises (the store and immediate parking lot). That is, chasing was scored for a second instant lottery transaction regardless of whether participants (1) scratched off the initially purchased tickets, (2) scanned the barcode with the automatic scanner or asked a clerk to scan them to determine winnings, or (3) purchased additional tickets without contacting the outcome. Data collection was

closely monitored by a trained graduate student employed part-time at the convenience store who, when the study began, briefly trained all clerks to record data via instructions, role plays, and brief accuracy feedback. Data collection response effort was minimized via provision of data sheets with check boxes for each variable. To examine bivariate relationships among these variables we subjected gender and price categorical data to chi-square analyses. Next, we used logistic regression to determine the association between ticket price and chasing while adjusting for gender. Because we needed to represent the full continuum of costs, we entered price as a continuous variable rather than a categorical/ordinal variable. All analyses were conducted using IBM SPSS Statistics 21.

Results and Discussion

Table 1 displays categorical data and results of bivariate analyses. The number of observations recorded for each price category descended as price increased. The most common price of tickets purchased was \$1 USD (43.1%), and 81.5% of transactions included a maximum price of \$3 USD. Similarly, the proportion of participants who chased losses generally declined as prices increased. Greater than 80% of participants chased at lower ticket prices (\$1–3 USD) and fewer than 30% of participants chased after purchasing tickets costing \$10 USD or more, thus generating a significant difference across price categories ($\chi^2 = 195.649$, $p < .0001$). Chasing did not differ ($\chi^2 = .005$, $p = .945$) among males (76.46%) and females (76.70%). Results of the logistic regression analysis appear in Table 2. Gender did not contribute significantly to the model (odds ratio [OR] = 1.030, $p = .886$). Adjusted for gender, price of instant lottery tickets significantly predicted chasing losses (OR = .842, $p < .0001$), suggesting that for every dollar increase in price, odds of chasing decreased by approximately 16%.

Table 1
Frequency of episodic chasing across instant lottery price levels

	<i>n</i>	Chasing			χ^2	<i>p</i>
		Yes	No	%		
Price (USD)						
1	466	397	69	85.19	195.649	<.0001
2	269	225	44	83.64		
3	146	122	24	83.56		
5	70	44	26	62.86		
7	57	19	38	33.33		
10	31	9	22	29.03		
20	24	6	18	25.00		
30	18	5	13	27.78		
Gender						
Male	905	692	213	76.46	0.005	0.945
Female	176	135	41	76.70		

Table 2

Episodic chasing logistic regression model: Odds ratios and confidence intervals (CI)

Predictor	<i>p</i>	Odds Ratio	95% C.I.
Price	<.0001	.842	.808 - .877
Gender (M vs. F)	.886	1.030	.688 - 1.543

In sum, the current study demonstrated a significant relationship between episodic chasing and price of instant lottery tickets. Despite public perceptions that lottery gambling is acceptable and low-risk (Rogers, 1998), results suggest that monetary risk is frequently greater than the face value of lottery tickets and instant lottery gamblers commonly emit at least one behaviour indicative of disordered gambling (O’Conner & Dickerson, 2003), thus supporting recommendation of caution in regard to instant lottery gambling (Kundu et al., 2007; Short et al., 2015). Furthermore, though chasing was similar across genders, a majority (approximately 84%) of observations were of male gamblers, supporting previous observations of gender patterns in lottery gambling in the US (Kundu et al., 2007; Welte, Barnes, Wieczorek, Tidwell, & Parker, 2002), and suggesting a need for further study of gender differences in lottery gambling. The present results are limited in generality in that all data were collected from one convenience store and only limited demographic information was collected. What is more, the behaviour of customers buying instant lottery repeatedly over the period of data collection could in fact be over-represented, and all observations may not have actually been independent, no reliability checks verified the accuracy of observations, and several of the observations may indeed have been missed due to conflicting duties of data collectors. For all these reasons, the results must be interpreted with caution. Nevertheless, the present results do add to the literature by demonstrating a high rate of episodic chasing in a live sample of instant lottery gamblers. Future research may wish to examine in greater detail the relative effects of large gambles and repeated smaller gambles with chasing behaviour, and to investigate further the implications of chasing within a gambling episode.

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