








OPEN ACCESS



Association between casino resort employee department and responsible gambling program perceptions: a three-year follow-up study

Brett Abarbanel , Tiange Xu , Shane Kraus, Heather Gray , Eric Louderback ,
Debi LaPlante  and Bo Bernhard

ABSTRACT

This study presents results from a third wave of data collection of a longitudinal project investigating implementation of an RG program, GameSense, at MGM Resorts International (MGM), and how casino employees perceive responsible gambling (RG) efforts. Survey data at three time periods – Year 1 (baseline, N = 2,192), Year 2 (one-year follow-up, N = 852) and Year 3 (two-year follow-up, N = 1,114) – measured MGM employees' (1) perceptions of RG program effectiveness, (2) gambling misconceptions, and (3) perceived company support. We conducted a one-way MANCOVA on Year 3 data, with gambling industry tenure as the covariate, and a two-way MANCOVA to examine the interaction and main effects of department of employment and time period. In Year 3, Front of House Casino employees were more likely than their colleagues to perceive RG programs as effective, suggesting they can play a valuable role in refining internal program content and delivery. In investigating year-over-year changes, both perceived program effectiveness and perceived company support were lower in Year 3 than in Years 1 and 2. GameSense is designed to be part of company culture, and fluctuations in year-over-year findings suggest RG cultural change should be viewed as a long-term goal, not necessarily achieved immediately after initial program launch.

ARTICLE HISTORY

Received 19 March 2021

Accepted 11 November 2021

KEYWORDS

Casino; gambling; gaming; responsible gambling; gambling industry employees

Introduction

Responsible gambling (RG) programs include a variety of tools aimed at helping adults gamble within affordable limits, such as education programs, warning messages, player behavior tracking, and self-exclusion systems (Ladouceur et al., 2017; Wood & Griffiths, 2014; Wood et al., 2017). Employees often are the front-line of casino RG programs, actively communicating with guests and frequently serving as a first point of contact for help-seeking individuals (Productivity Commission, 2010; Riley et al., 2018). New trends in RG programs – including GameSense, the RG program examined in this study – use an approach that empowers employees to offer assistance if they observe signs of distress (Beckett, Keen, Swanton et al., 2020; Shaffer et al., 2019). Quilty et al. (2015), for example, reported that approximately 90% of casino employees in their study received encouragement from supervisors to look for signs of problem gambling.

CONTACT Brett Abarbanel  brett.abarbanel@unlv.edu  Box 456037, 4505 S. Maryland Pkwy, Las Vegas, NV 89154-6037

© 2021 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.

This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way.

Although they play key roles in RG programs, employees still report mixed views on RG program effectiveness. For example, Hing and Nuske (2012) found that employees often indicate that they experience role conflict in RG programs. Employees reported that such conflict occurs in instances where interests are at odds: when employees wanted to be of assistance, but felt this to be contrary to the company's financial objectives, or when managers expected employees to intervene with gamblers showing signs of problems, but they feared a negative response should they intervene (Hing & Nuske, 2012). However, such views on RG may be mitigated by individual factors. More recent work by (Abarbanel et al., 2019) found that employees' tenure in the gambling industry was a covarying factor in how employees viewed RG programs. Similarly, Gray et al. (2020) also reported that employees with more involvement in gambling themselves were less likely to respond positively to an RG program.

In addition, some employees have been found to hold misconceptions about gambling (Abarbanel et al., 2019; Gray et al., 2015), impacting the role they play in RG information dissemination. Such misconceptions are also a potential risk factor among employees, for whom casino employment is considered both a protective factor and a risk factor for problem gambling (Guttentag et al., 2012). An effective RG program will thus increase awareness of problem gambling and correct gambling misconceptions among employees in addition to guests, serving as a preventative measure against the development of harmful gambling habits for at-risk groups (Guttentag et al., 2012; Hing & Gainsbury, 2013; Shaffer & Hall, 2002). Effective RG programs should also include availability of company support for employee help-seeking behaviors (Giroux et al., 2008; Hing & Gainsbury, 2011; Quilty et al., 2015). As (Abarbanel et al., 2020) noted, any lack of trust in an employer's provision of support to help-seeking employees could undermine perceptions of the RG program and negatively impact how employees use that RG program to provide assistance to help-seeking customers.

Understanding how employees view company RG programs can help identify potential limitations within the program and provide insight into improving program delivery (Beckett, Keen, Angus et al., 2020; Beckett, Keen, Swanton et al., 2020). In support of this notion, the present study is the second extension of research investigating how casino employees in different departments perceive the effectiveness of responsible gambling programs. Specifically, we assess not only how employees in different employment positions view RG program contents, but also how the ongoing presence of a new program potentially impacted those views, by measuring employee responses to (1) perceptions of RG program effectiveness, (2) gambling misconceptions, and (3) perceived company support.

Abarbanel et al. (2019, 'Year 1') was the first study, based on data collected immediately prior to the implementation of a new, branded responsible gambling (RG) program, GameSense, at MGM Resorts International (MGM) in Fall 2017. The first extension of that study was (Abarbanel et al., 2020, 'Year 2'), which used data collected approximately one year after GameSense was put into place at MGM's North America properties. The paper here provides results from a third wave of data collection ('Year 3') among employees of MGM's North American properties, between January 2020 – February 2020, approximately two years after GameSense was implemented. Thus, Year 1 represents the baseline data collection prior to the new program, and Year 2 and Year 3 represent two periods following the new program's implementation (one and two years after, respectively).

MGM's prior RG program was compliance-based and included an initial employee training on problem gambling behavior and ways to provide information about problem gambling. The GameSense program at MGM, meanwhile, includes several practical applications of RG and CSR concepts, with a stronger focus on enhancing employees' customer outreach and encouraging healthier gambling beliefs and behaviors. It is designed to be ingrained in company culture and be part of the organization beyond initial and refresher training periods. Employees are continuously exposed to GameSense content, such as information in internal employee newsletters, collateral materials around the workplace, and GameSense-related promotions with customers. Such a program has a goal of cultural change in the MGM organization. Organizational cultural change is not immediate (Groysberg et al., 2018; Philander, 2020b), and is not necessarily captured by a single follow-up study. Thus, the third wave of data collection assessed here contributes toward understanding how perceptions of this program change over time.

In the two studies on which this study builds, we observed that participants in departments with less direct contact with gamblers (i.e. Food, Beverage, and Retail and Back of House employees) were more likely to perceive RG programs to be more effective than employees in departments with more direct contact with gamblers (i.e. Security and Surveillance and Front of House employees) (Abarbanel et al., 2019; Abarbanel et al., 2020). In Year 1, we also observed that employees who worked in the Food, Beverage, and Retail departments were more likely to hold misconceptions about gambling than employees who worked in the Back of House operations; however, there was no difference between department groups with regard to perceived company support (Abarbanel et al., 2019).

In Year 2, we found that employees who have high contact with gamblers viewed RG programs as less effective than employees who have low contact with gamblers, while there was no contact-level difference for gambling misconceptions nor for perceived company support (Abarbanel et al., 2020). In Year 2, we also examined year-over-year differences between the three factors and the interaction effects between time period and employee department level of contact; neither the interaction effect nor main effects for time period were significant, indicating no year-over-year differences between Year 1 and Year 2 (Abarbanel et al., 2020).

GameSense, as a new RG education and training program, might change employee perspectives on RG and a program's effectiveness by equipping them with the RG tools necessary to provide help.¹ One of the GameSense goals is to improve understanding of gambling odds and reduce misconceptions that are associated with gambling (e.g. by explaining randomness and independence of events). The MGM GameSense program is also aimed at improving employees' understanding of the company-provided resources and support that are available to them. In that vein, the current study examines three factors: 1) employees' perspectives on the program's effectiveness, 2) gambling misconceptions, and 3) perceptions of company support, within the Year 3 data period and across Years 1, 2, and 3, to address the following research questions. For each of the three factors, and controlling for years in the gambling industry:

RQ1. In Year 3, is there a difference in factor means between employees in different departments?

RQ2. Is there a difference in factor means between the Year 1, Year 2, and Year 3 periods for employees, regardless of employee grouping?

RQ3. Is there a difference in factor means between the Year 1, Year 2, and Year 3 periods for employees in high-contact vs. low-contact positions? (i.e. Does the pattern of differences between department affiliations change over time?)

Hypotheses

Based on results from prior Years and related extant literature, we hypothesize the following for each of the research questions:

Research question/hypothesis 1

H1a. In Year 3, perceptions of the corporate RG program will differ based on department affiliation.

H1b. In Year 3, consistent with the null effect in (Abarbanel et al., 2020), gambling misconceptions will not be a statistically significant differentiator for department affiliation.

H1c. In Year 3, consistent with the null effect in (Abarbanel et al., 2019) and (Abarbanel et al., 2020), perceived company support will not be a statistically significant differentiator for department affiliation.

Research question/hypothesis 2

Regardless of employee grouping:

H2a. Employees in the Year 1 and Year 2 periods, respectively, will perceive the corporate responsible gambling program as less effective than will employees in the Year 3 period.

H2b. Employees in the Year 1 and Year 2 periods, respectively, will hold more gambling misconceptions than will employees in the Year 3 period.

H2c. In Year 3, consistent with the null effect in (Abarbanel et al., 2019) and (Abarbanel et al., 2020), perceived company support will not be a statistically significant differentiator for department affiliation.

Research question/hypothesis 3

H3a. There will be a significantly larger high-vs. low-contact department effect between the Year 3 period and the Year 2 and Year 1 period, respectively, for perception of corporate responsible gambling program effectiveness.

H3b. There will be a significantly larger high-vs. low-contact department effect between the Year 3 period and the Year 2 and Year 1 period, respectively, for gambling misconceptions.

H3c. Consistent with the null effect in (Abarbanel et al., 2019) and (Abarbanel et al., 2020), there will not be a statistically significant department contact level x time period interaction effect with regard to perceived company support.

Materials and methods

This study was pre-registered online with the Center for Open Science after data collection, but prior to viewing or analyzing any data. Pre-registration documentation can be found at <https://osf.io/9pdg5/>, including full details on the methods and analysis. The full survey can be found at <https://osf.io/n3bc7/>.

Setting

The full dataset for this study comprised three merged datasets from online survey data, from Year 1 (baseline prior to GameSense implementation), Year 2, and Year 3 (both post-GameSense implementation) data collection periods.

Data collection was designed to capture the maximum possible sample from the MGM employee population, which connects with the MGM system in a variety of ways. Thus, the Year 3 survey was distributed via two channels to reach employees at different property touchpoints. First, an e-mail with a direct URL to the survey was sent to all MGM employees who held a company e-mail address. We emailed one follow-up invitation approximately 3 weeks after the initial invitation. Second, we collected data in-person at MGM properties, where iPads with the online survey loaded were made available at the respective properties' 'HR Concierge' desk. The HR Concierge desk is a location in the properties' back of house that is used for facilitating internal employee HR services onsite (as opposed to at the corporate offices). For example, an employee might visit the HR Concierge desk to get assistance with accessing their employee account. Employees were notified that they could request the iPad at the desk and complete the survey away from the desk staff.²

Ethics approval for this study was received from the University of Nevada, Las Vegas, Institutional Review Board.

Participants

We contacted approximately 28,000 employees via e-mail distribution and in-person participation. In the Year 3 dataset, 1,114 MGM Resorts employees responded to the survey, representing a ~ 4% response rate. The Year 3 sample was 47.9% male and 41.2% female. An additional 1.1% selected 'prefer to self-identify' and 9.7% selected 'prefer not to answer'. By comparison, a 2021 report indicated that approximately 49.8% of MGM employees are women (MGM Resorts, 2021). The respondents had worked in the gambling industry for a mean of 14.15 years ($SD = 10.77$).

Period of data collection (Year) as independent samples

The three periods of data collection (Year) were examined using independent tests for analysis. While we would prefer a repeated measures design for this study, this was not possible due to privacy and confidentiality protections for research participants. While the same population was sampled in each year (employees North American MGM properties), responses were not individually identifiable. For example, surveys completed on employee computers often returned identical IP addresses. In addition, hospitality businesses typically have high turnover patterns (Chen & Wu, 2017), therefore, conducting a prospective longitudinal cohort study would be less advantageous due to significant dropout rates. Thus, the current study employed a between subjects design for Years 1, 2, and 3. We additionally note that using independent tests for analysis provides a more conservative approach to analysis, reducing potential statistical bias and risk exposure in our results.

Measures

Outcome variables

We measured responsible gambling attitudes and views using factors established in (Abarbanel et al., 2019):

- (1) The *perceived program effectiveness* component comprised the mean of 5 items (e.g. 'MGM's responsible gambling course was useful in teaching me about problem gambling'). Cronbach's alpha: Year 1 = 0.85; Year 2 = 0.87; Year 3 = 0.85.
- (2) The *gambling misconceptions* component comprised the mean of 5 items (e.g. 'There are certain things I do when I am betting which increase the chances that I will win.'). Cronbach's alpha: Year 1 = 0.82; Year 2 = 0.79; Year 3 = 0.70.³
- (3) The *perceived company support* component comprised the mean of 4 items (e.g. 'I feel MGM would support me in seeking help for problem gambling if I needed it.'). Cronbach's alpha: Year 1 = 0.81; Year 2 = 0.78; Year 3 = 0.78.

Predictor variables

Department affiliation. In Year 1 and Year 2, employees selected from one of four department categories.

- (1) Food, Beverage and Retail (i.e. Banquets, Beverage, Stewarding, Culinary, Food Court),
- (2) Front of House Operations (i.e. Slot Ops, Slot Techs, Player Services, EVS, Facilities, Count Team, Player Development, Sports/Race Book, Valet),
- (3) Security and Surveillance, or
- (4) Back of House Operations (i.e. HR, Marketing, Finance, Revenue Audit, IT, Payroll, Purchasing, Warehouse, Programs).

Year 3 survey collected data in a more granular manner, by breaking down Front of House operations into two categories: *Casino* (e.g. Slot Ops, Slot Techs, Table Games, Player Services, Count Team, Player Development, Race/Sports Book) and *Non-Casino* (e.g. EVS, Facilities, Valet, Front Desk, Concierge).

During preliminary analyses for Year 2, we discovered that two department affiliation categories had a particularly low response rate. Abarbanel et al. (2020) thus collapsed the four groups into two: high-contact with gamblers (Security and Surveillance and Front of House employees), and low-contact with gamblers (Food, Beverage, & Retail and Back of House employees). This cell count issue was not present in Year 3 data; RQ1 addresses the department affiliation differences based on the five-group comparison. RQ2 and RQ3 use data from all three years and look at group differences based on the reduced two-group comparison.

Control variable

Employees indicated the number of years they had worked in the gambling industry, used as a covariate in the multivariate analyses as in previous studies in this series.

Data analysis

We imported and analyzed our data using MPlus Version 7.4 (CFA) and SPSS 26 (all other analyses). Assumptions testing was conducted for all measured variables, including skewness and kurtosis (± 2), univariate outliers ($Z > \pm 3$), and multivariate outliers (Mahalanobis distance). The Year 3 data subset displayed no univariate outliers and 9 multivariate outliers; outliers were removed from analysis. Levels of skewness or kurtosis that required correction were not observed for any variables. Missing values were excluded on a listwise basis.

RQ1 – Year 3 Extension Component of Study

First, a Confirmatory Factor Analysis (CFA) using diagonally-weighted least-squares (DWLS) estimation with robust variances (Flora & Curran, 2004) was applied to the 14 underlying scale measures in the Year 3 data, with the three constructs as defined by prior years' data. CFA results were assessed using chi-square ($p > 0.05$), CFI/TLI (≥ 0.90), SRMR (< 0.08), and RMSEA (< 0.08) goodness-of-fit statistics.

Next, we applied a one-way between-subjects design multivariate analysis of covariance (MANCOVA) to the Year 3 data. The independent variable was employee department affiliation (five groups), with the three responsible gambling attitudes and views factors as the dependent variables, and number of years worked in the gambling industry

as the covariate. The multivariate omnibus test was significant, so follow-up univariate analyses with Sidak correction were used to determine which component measures individually contribute to group differences.

Box's M test of equality of covariance matrices was not violated ($p > 0.001$), so Wilks' Lambda criterion was used to evaluate multivariate significance. The results of overall evaluations of assumptions, including the additional MANCOVA assumption of homogeneity of regression coefficients, were satisfactory to continue with the planned statistical analysis procedures.

RQ2 & RQ3 – Year-over-Year Follow-up Component of Study

In the exploration of year-over-year changes in RG attitudes and views (RQ2 and RQ3), we conducted one two-way MANCOVA, with department affiliation level of contact (high-/low-contact) and data collection period (Year 1/ Year 2/ Year 3) as the independent variables, the three responsible gambling attitudes and views factors as the dependent variables, and number of years worked in the gambling industry as the covariate. The multivariate interaction was not significant ($p > 0.05$), so the multivariate main effects of time period were further investigated to determine if the time period had a significant effect on the three responsible gambling attitudes and views factors, regardless of employee grouping (RQ2).

Box's M Test of equality of covariance matrices was violated ($p < 0.001$), so Pillai's Trace criterion was used to evaluate multivariate significance. The results of overall evaluations of assumptions were satisfactory to continue with the planned statistical analysis procedures.

Results

RQ1 – Year 3 extension component of study

We conducted a CFA to confirm the proposed three factor solution with Year 3 data. Consistent with prior work (Abarbanel et al., 2019; Abarbanel et al., 2020), we found an acceptable fit for CFI/TLI (0.931/0.916, respectively) and SRMR (0.017) goodness-of-fit statistics, with weak fit indicated by RMSEA (>0.08) and chi-square ($\chi^2 = 39,995.01$, $p > 0.05$).⁴ The acceptable fit on multiple assessed statistics led us to use the existing factor structure for Year 3 analysis.

Next, Spearman correlation coefficients for the bivariate pairs of Year 3 outcome variables were significant, indicating a non-zero correlation between the variables (see Table 1).

Table 1. Spearman correlations among factor scores for Year 3.

	Perceived Program Effectiveness	Gambling Misconceptions	Perceived Company Support
Perceived Program Effectiveness	–		
Gambling Misconceptions	0.22**	–	
Perceived Company Support	0.58**	0.29**	–

** indicates significance at $p < 0.01$

Table 2. Observed and adjusted means & standard deviations for component scores by department affiliation.

	Observed		Adjusted	
	M	SD	M	SE
<i>Perceived Program Effectiveness</i>				
Front of House Operations, Casino	4.08 ^{a,b}	0.80	4.07	0.04
Front of House Operations, Non-Casino	3.69 ^a	1.01	3.69	0.10
Back of House Operations	3.77	0.78	3.78	0.14
Security and Surveillance	3.71 ^b	0.83	3.73	0.05
Food, Beverage, & Retail	3.99	0.74	4.00	0.10
<i>Gambling Misconceptions</i>				
Front of House Operations, Casino	4.02 ^c	0.87	4.02	0.04
Front of House Operations, Non-Casino	3.87	0.72	3.87	0.10
Back of House Operations	3.51 ^{c,d}	0.89	3.51	0.14
Security and Surveillance	4.05 ^d	0.76	4.06	0.05
Food, Beverage, & Retail	3.96	0.82	3.96	0.10

Means with the same superscript are significantly different from one another. Values for Gambling Misconceptions are reverse-coded for uniformity in reporting; lower values indicate a less appealing outcome with regard to understanding of gambling concepts.

Department affiliation had a statistically significant effect on the adjusted mean of the linear combination of the dependent variables (Perceived Program Effectiveness, Gambling Misconceptions, and Perceived Company Support), ($F(12, 2074.56) = 4.96$, $p < 0.001$; $\eta_p^2 = 0.03$), indicating a small effect size.

Next, there was a statistically significant difference among the five department affiliation groups for each factor: Perceived Program Effectiveness ($F(4, 786) = 7.905$, $p < 0.001$, $\eta_p^2 = 0.04$), Perceived Company Support ($F(4, 786) = 2.597$, $p = 0.035$, $\eta_p^2 = 0.01$), and Gambling Misconceptions scores ($F(4, 786) = 3.898$, $p = 0.004$, $\eta_p^2 = 0.02$), after adjusting for the number of years working in the gambling industry. All effect sizes were small in magnitude.

Exploring these differences further in pairwise comparisons, MGM employees who worked in Casino Front of House positions found the RG program to be more effective, compared to employees in Non-Casino Front of House and Security and Surveillance (all $ps < 0.01$), respectively. Employees who work in Back of House positions, meanwhile, were more likely to hold misconceptions about gambling, when compared to Casino Front of House and Security and Surveillance employees (all $ps < 0.01$), respectively. There were no paired group differences for Perceived Company Support. These results support the significant difference predicted by H1a and the null effect predicted by H1c, but the significant differences found in gambling misconceptions do not support the null effect predicted by H1b.

Table 2 presents observed and adjusted means for Perceived Program Effectiveness and Gambling Misconceptions for the five groups.

RQ2 & RQ3 – Year-over-year follow-up component of study

Because the analytical process examines the interaction effects prior to main effects, we present results for Research Question 3 and Hypotheses 3a, 3b, and 3c first, followed by results for Research Question 2 and Hypotheses 2a, 2b, and 2c.

Table 3. Observed and adjusted means & standard deviations for component scores by year of data collection.

	Observed		Adjusted	
	M	SD	M	SE
<i>Perceived Program Effectiveness</i>				
Year 1 (Pre-GameSense Implementation) ^a	4.07	0.86	4.04	0.03
Year 2 (Post-GameSense Implementation) ^b	4.10	0.87	4.12	0.04
Year 3 (Post-GameSense Implementation) ^{a,b}	3.92	0.86	3.90	0.03
<i>Perceived Company Support</i>				
Year 1 (Pre-GameSense Implementation) ^c	4.44	0.70	4.43	0.03
Year 2 (Post-GameSense Implementation) ^d	4.43	0.69	4.43	0.03
Year 3 (Post-GameSense Implementation) ^{c,d}	4.29	0.78	4.30	0.03

Means with the same superscript are significantly different from one another.

The multivariate interaction effect of department affiliation and data collection period (Year 1, Year 2, and Year 3) was not significant for the linear combination of the dependent variables ($p = 0.37$). Thus, Hypotheses H3a, H3b, and H3c were not supported.

Because the interaction effect was not significant, multivariate main effects for data collection period were investigated to determine if time period still had a significant effect on the three factors, regardless of employee grouping (Hypotheses H2a, H2b, and H2c). There was a statistically significant difference among the three data collection periods for Perceived Program Effectiveness ($F(2, 2042) = 11.002, p < 0.001, \eta_p^2 = 0.01$) and Perceived Company Support ($F(2, 2042) = 7.804, p < 0.001, \eta_p^2 = 0.01$) after controlling for the number of years working in the gambling industry. For both factors, it is of note that the effect size was particularly small, indicating a weak relationship between the variables. Gambling Misconceptions was not a differentiator between the three data collection periods ($p > 0.05$).

Examining these significant effects further in pairwise comparisons, respondents in Year 3 were less likely to find the RG program to be effective, compared to employees in Year 1 and Year 2 (all $ps < 0.01$). Similarly, respondents in Year 3 had lower means of Perceived Company Support than respondent employees in Year 1 and Year 2 (all $ps < 0.01$). Thus, Hypotheses H2a, H2b, and H2c were not supported.

Table 3 presents observed and adjusted means for Perceived Program Effectiveness and Perceived Company Support for the three data collection periods.

Table 4 presents a summary of research questions, related hypotheses, and whether or not they are supported.

Discussion

This study is the third wave of an investigation into how employees in different company departments (i.e. Front of House, Casino; Front of House, Non-Casino; Back of House; Security & Surveillance; and Food, Beverage, & Retail) perceive company RG programs, before and after implementation of a new program, GameSense. The study also investigated differences in gambling misconceptions, and how employees perceive their company to help them in times of need. We recruited a sample of casino employees ($N = 1,114$) from North American MGM casino resort properties and observed that,

Table 4. Summary of hypotheses and results.

Research Question	Hypotheses	Supported? (Y/N)
<i>RQ1</i> In Year 3, is there a difference in factor means between employees in different departments?	<i>H1a</i> In Year 3, perceptions of the corporate RG program will differ based on department affiliation.	Y
	<i>H1b</i> In Year 3, consistent with the null effect in (Abarbanel et al., 2020), gambling misconceptions will not be a statistically significant differentiator for department affiliation.	N
	<i>H1c</i> In Year 3, consistent with the null effect in (Abarbanel et al., 2019) and (Abarbanel et al., 2020), perceived company support will not be a statistically significant differentiator for department affiliation.	Y
<i>RQ2</i> Is there a difference in factor means between the Year 1, Year 2, and Year 3 periods for employees, regardless of employee grouping?	<i>H2a</i> Employees in the Year 1 and Year 2 periods, respectively, will perceive the corporate responsible gambling program as less effective than will employees in the Year 3 period.	N
	<i>H2b</i> Employees in the Year 1 and Year 2 periods, respectively, will hold more gambling misconceptions than will employees in the Year 3 period.	N
	<i>H2c</i> In Year 3, consistent with the null effect in (Abarbanel et al., 2019) and (Abarbanel et al., 2020), perceived company support will not be a statistically significant differentiator for department affiliation.	N
<i>RQ3</i> Is there a difference in factor means between the Year 1, Year 2, and Year 3 periods for employees in high-contact vs. low-contact positions? (i.e. Does the pattern of differences between department affiliations change over time?)	<i>H3a</i> There will be a significantly larger high-vs. low-contact department effect between the Year 3 period and the Year 2 and Year 1 period, respectively, for perception of corporate responsible gambling program effectiveness.	N
	<i>H3b</i> There will be a significantly larger high-vs. low-contact department effect between the Year 3 period and the Year 2 and Year 1 period, respectively, for gambling misconceptions.	N
	<i>H3c</i> Consistent with the null effect in (Abarbanel et al., 2019) and (Abarbanel et al., 2020), there will not be a statistically significant department contact level x time period interaction effect with regard to perceived company support.	N

like the Year 1 ($N = 2,291$) and Year 2 ($N = 852$) results, department of employment was related to perceived program effectiveness. In addition, gambling misconceptions varied between departmental groups, a finding established with Year 1 results, but not with Year 2.

How these group differences presented in Year 3, however, differed from prior data collection periods. Specifically, Year 3 employee respondents in the Front of House, Casino departments were more likely to perceive RG programs as effective than their

colleagues in both Front of House, Non-Casino, and Security and Surveillance department categories. In Years 1 and 2, meanwhile, employees in departments with more direct contact with gamblers (i.e. Front of House and Security & Surveillance) were less likely to view RG programs as effective. These results are partially replicated for Security & Surveillance employee views. The Year 3 breakdown of the Front of House employees into Casino and Non-Casino groups, however, meant that we were able to better understand how employees' work experiences may impact how they view RG programming. This breakdown also suggests that there were intra-group differences present in the Front of House department category in the first two years of data collection, that were not captured by that single group.

In prior works, we argued that those who spend more work hours with active gamblers may have experience with more difficult face-to-face interactions and thus may be less likely to view RG programs as effective. For example, Front of House employees might deal with customers who are feeling distressed, while Food, Beverage, & Retail employees typically see customers when they are away from the casino floor. Results from this study, however, suggest that our original characterization may not be accurate.

Our study findings also extend our prior results in understanding gambling misconceptions and add additional complexity to extant research knowledge on the subject. Year 3 employee respondents in Back of House departments were more likely than their colleagues in both Front of House, Casino, and Security and Surveillance departments, to hold misconceptions about gambling. In Year 1 data, however, the group difference was present between Food, Beverage, & Retail and Back of House employees, with Back of House employees as the group *less* likely to hold misconceptions. In Year 2 data, there was no significant difference in gambling misconceptions between department groups with high- vs. low-levels of contact with gamblers.

Based on our findings, we suggest recommendations similar in structure to prior studies, but with changes in target audiences and content delivery. For example, position-based training remains a recommendation, supported by continued differences in perceptions between departmental groups (see, e.g. Abarbanel et al., 2019; Abarbanel et al. 2020; Gray et al., 2015). Training and education on specific program functions may be different from previous recommendations, however. Training for Security and Surveillance employees should emphasize how the program is implemented and the value of its content, for example, while Back of House employees appear to need reinforced focus on gambling myths and ways to dispel gambling misconceptions. Where possible, trainers should administer a brief pre-training assessment to learn which employees need different levels of instruction.

In addition, the significantly more favorable perceptions displayed by Front of House, Casino, employees in this Year 3 study suggest that these employees are ideal for incorporating success stories into regular training sessions and featured in internal corporate communications. Integrating their favorable encounters into training sessions may help employees not only learn what they are permitted (or even encouraged) to say and how to act with customers who need assistance, but also to hear about real-life experiences from their peers. These employees could also contribute to the creation of easily digestible messaging on program goals and could add qualitative flavor to messaging that currently uses quantitative metrics on effectiveness (e.g. the number of people referred to help, or the number of RG-related interactions with guests).

In investigating year over year changes, we observed that, regardless of department affiliation, the overall means of both Perceived Program Effectiveness and Perceived Company Support were lower in Year 3 when compared to Year 1 and Year 2 data. Noting a decrease in both perceptions, without a significant year-over-year change in gambling misconceptions, suggests a potential correlation between Perceived Program Effectiveness and Perceived Company Support. As was necessary for analysis and as seen in [Table 1](#), there is a significant correlation between the two factors. With this in mind, we note that there was a significant external factor that might have impacted employee morale in between Year 2 and Year 3 data collection. During this time period, MGM launched a cost-cutting initiative called MGM 2020, which included an announcement that the company would cut approximately 3% of their workforce by the end of 2019 (O'Connor, 2019). The job cuts largely affected management positions, but there were also cuts throughout the rest of the company (Stutz, 2019). Our data collection period occurred a few weeks after the MGM 2020 initiative was finalized, and any potential impact on employee morale may still have been fresh in the minds of the employees completing survey questions on company efforts that involve supporting customers and employees.

Abarbanel et al. (2019) suggested that the high reported mean on perceived company support in Year 1 data may be due to company culture, rather than the RG program. Prior research has found that the negative effects felt during a post-downsizing period can reduce organizational performance (Cheng-Fei Tsai et al., 2013; Tsai & Yen, 2020). Employees facing job insecurity due to downsizing may experience negative feelings in their work life, such as loss of morale and motivation (Dekker & Schaufeli, 1995; Mishra & Spreitzer, 1998). It is possible that corporate actions like MGM 2020 had a universal effect on employee perceptions of the company, and employees did not separate the positive goals of an RG program from the negative impacts of a large corporate cost-cutting effort.

The Year 3 decrease in means for Perceived Program Effectiveness may not be related to these external factors. This decrease may be due to the novelty effect; that is, the more employees are exposed to the program, the more it becomes part of their work life. Thus, we may expect to see fluctuations in means (or no change at all), as the program becomes a normalized part of their work existence. Huang and To Wai (2018) found that Macau-based employees considered RG to be one of the least important forms of CSR for a casino, and these findings may reflect development of a similar sentiment. A longitudinal look at how these views change over time will provide additional insight to both operators and regulators regarding the general timeframe for a new program to effect change. As Abarbanel et al. (2020) note, it is critical that programs are given an adequate evaluation period to determine long term customer and employee responses, lest the program simply exist as a public relations effort and not a genuine consumer protection program.

It also may be the case that the decrease seen in the Year 3 data is truly reflective of decreased employee optimism in the program's ability to get customers to engage responsible gambling practices. Employees' less favorable views of perceived effectiveness do not mean that the program itself is not effective, but they may negatively impact how employees present the program and its contents to customers (Song et al., 2015). Thus, if this Year 3 decrease is indeed the case, MGM employees should emphasize the program's concrete benefits for patrons, including showing employees specific examples of how customers have been helped in the past. Here, we repeat

a recommendation from Abarbanel et al. (2020), in which we suggest that MGM's extensive internal communication network be utilized to distribute information about RG and the GameSense program. With properties across North America, MGM can design both company-wide and property-level communications, so employees can learn from their peers with both local and cross-regional experiences. We also repeat the recommendation that MGM should include their employees in community outreach for RG programs, a practice they engage for other their CSR programs (Abarbanel et al., 2020).

Considering all reported results, we reiterate our note from the Methods that this is not a repeated measures design, and each Year was treated as an independent sample. It is thus possible that these comparisons – both Year 3 group differences and direct year-over-year comparisons – may not be reflective of real differences. We also note that these results are not necessarily causal nor conclusive, and these contradictory findings warrant further investigation to confirm if this will be a longitudinal effect.

In assessing this longitudinal effect, we acknowledge that GameSense is implemented as an educational program with more extensive organizational reach than a compliance-based program that provides, typically, once-per-year brief training and refresher courses. Program assessments, like this research, are also relevant to understanding how organizational change culture may play a role in how well an RG program's goals permeate throughout the entire organization.

As Philander (2020a) identifies, there has been an industry-wide struggle to effectuate change management in RG among colleagues at similar employment levels, without clear direction from leadership. Beyond this, Philander (2020b) recognizes that there may be important differences in perceptions and needs within the organization. These differences may be due to the occupational duties of the level of employment (e.g. management vs. front line employees), as well as differences in their role in the organization (e.g. marketing vs. IT), which may or may not have RG as a primary driver in their job duties. Under the GameSense program at MGM, for example, employees who typically have the most exposure to active gamblers receive more extensive training. Through this extensive training, they also spend the most time with those promoting the organization's cultural change associated with its approach to RG. Meanwhile, those who work on the frontline, peripherally to the casino, may have a limited understanding of organizational goals around responsible gambling, or how their role contributes to those goals (Shaffer et al., 2019). As a result, their views on RG program effectiveness may be skewed by this lack of exposure and/or incentive.

The research here suggests that employees who deal with gamblers while they are actively gambling were more likely to perceive RG programs as effective, suggesting that input from these employees may be key to understanding and communicating positive views on RG and RG interactions among their non-casino employee counterparts. This employee input will be particularly valuable in a hospitality and casino industry that is re-opening to the public, and as a result, returning to pre-COVID-19 employment levels. Many employers are struggling to fill positions (see, e.g. Afonso, 2021; Schulz, 2021), and new employees may not have the same experience and/or exposure to RG programs as in previous years. We recommend that casino organizations embrace some of the best practices in cultural change, such as selecting leaders who align with an RG-oriented culture, and improving the communication cycle across organizational levels and departments to establish the new norms of an RG culture (Groysberg et al., 2018).

Key in this broader discussion, meanwhile, is that change management takes time. That is, program evaluation over one or two years may not accurately capture long term organizational culture change, in which the organizational mind-set on RG shifts from a compliance-based effort that is foisted upon the organization and its employees, to a safety-oriented culture in which RG is a natural element of the organization. Considering this, we note that the addition of this third wave of data collection demonstrates subtle changes in perceived effectiveness over time. It is possible that this is a representation of the organic growth of an RG program that is built to be ingrained in the company culture that employees experience.

This suggests that continuing such analysis year-over-year may be capturing noise in the long-term change of employee views on this RG program. Given ongoing staff turnover, particularly in the wake of the effects of COVID-19 on hospitality and casino staffing, continued annual assessment may not be capturing meaningful evaluation. Thus, we consider this third wave of data collection to be the final of the foundational studies in our ongoing project. We propose that the next wave of analysis be conducted several years from now, rather than on an annual basis, to see how both year-over-year and longitudinal effects are manifested.

Limitations and future research

This study assessed responses on RG program views from one casino company, MGM Resorts International; views on RG may differ between companies that embrace different approaches to RG. In addition, the employees whose views are included in analyses here are from North America casino properties. Thus, results may not be generalizable to employee views in companies outside these jurisdictions. Within the MGM portfolio, too, there may be diversity of RG beliefs and opinions between different properties and jurisdictions, as we explored in (Gray et al., 2020) and (Louderback et al., 2021). Replication of this study at other casino companies, in a variety of regulatory settings, would be valuable to assess results within the scope of different company cultures and societal views.

In addition, this study's inquiry was specific to a single RG program, GameSense. This limitation means that the results might not apply to other RG program implementations, but the authors note that GameSense's content and vision is based on practical application of several theories in extant academic literature, such as employee empowerment, customer education, and behavioral tools (see, e.g. Shaffer et al., 2015; Song et al., 2015). This study also focused specifically on employees and their role in RG programs. It is important to note that RG efforts at a casino organization are more holistic in content and delivery. Efforts like responsible advertising practices and mindfulness in product design and selection for a casino floor also contribute to a program's effectiveness (Ladouceur et al., 2017; McAuliffe et al., 2021). Future research should consider how these factors contribute toward RG and how casino employees' roles fit within a greater RG program, to ensure responsibility is enacted across the organization instead of left on employees to carry the weight.

This study assessed perceived program effectiveness and perceived company support as stand-alone measures. We did not identify the specific program elements driving employees' perceived program effectiveness nor perceived company support, and we acknowledge several potential confounding variables that were present during the time period between Year 2 and Year 3 data collection. Further, it is possible that the quality or type of RG

interaction that employees have with customers (or even fellow employees) impacts how they perceive the program, rather than the program content specifics or the company's program promotion. We did not capture the origins of such perceptions within the current study. Additional research would assist in distinguishing which aspects of these perceptions are relevant to an RG program, and which external factors may be driving particularly favorable or unfavorable responses.

The results regarding departmental differences in gambling misconceptions warrant more granular investigation into what demographic and occupational characteristics of department employees might be associated with specific misconceptions about gambling and probability. In addition, given the replication of the valid covariate of the number of years that employees worked in the gambling industry, future research could also compare program perceptions between new and longer-tenured employees, which in turn may provide insight into framing of both initial and follow-up training needs. In addition, future research that investigates gambling misconceptions should acknowledge the potential shortcomings of established measures, recognizing that respondents thinking of certain skill-based games may generate different 'correct' answers than those thinking of pure games of chance.

While the department affiliation group sizes were adequate for analysis, the low survey response rate in Years 2 and 3 (~3% and 4%, respectively) may impact the generalizability of the results. Furthermore, the self-selective nature of the sample might have been a contributing factor to the attenuated ranges in responses and low effect sizes. These attenuated ranges created a ceiling effect, which might have limited significant findings; data collection with a broader range of responses might contribute to more meaningful results. Finally, these attenuated ranges may be a factor of social desirability bias, particularly for employees who completed the survey at the HR Concierge Desk.

Conclusion

In summary, ongoing longitudinal evaluation is necessary for RG programs to assess whether they provide intended benefits to employees and customers. The current study describes the third wave of data collection among casino resort employees, to understand how they perceive and respond to RG programs and content in their workplace prior to and following implementation of a new RG program, GameSense. The results presented here contribute to the growing literature in casino resort employee perspectives on RG program content and assessment by examining departmental group differences at different time periods. From these results, time is needed to observe meaningful changes and account for noise from potential confounding factors, so that modifications or rebuilding can take place to ensure the program is successfully achieving its goals.

Notes

1. The GameSense program has a strong focus on customer outreach and encourages a positive perspective on healthy gambling behaviors. GameSense has more customer-facing content and education than MGM's previous program and integrates employees into content delivery. All employees receive the GameSense training, and some

employees, designated as GameSense Advisors, receive specialized training so that they can educate patrons about gambling concepts, recognize potential signs of problem gambling, provide one-on-one assistance to patrons in need of help, and help connect patrons with external clinical assistance, if needed. GameSense content and branding is displayed throughout each property's casino floor and the rest of the resort (e.g. in hotel rooms, shops, hallways). Employees at MGM's loyalty program (M life) desks are also instructed to include GameSense in their new member sign-up information packet and discussion with patrons.

2. The iPads were available at these desks for a period of 6 weeks at all MGM properties, which at the time of distribution for Year 3 included: all Las Vegas MGM properties, Gold Strike (Tunica, Mississippi), MGM Detroit (Detroit, Michigan), Beau Rivage (Biloxi, Mississippi), MGM National Harbor (Oxon Hill, Maryland), Borgata (Atlantic City, New Jersey), Empire City Casino (Yonkers, New York), MGM Northfield Park (Northfield, Ohio), and MGM Springfield (Springfield, Massachusetts).
3. We note that the items included in this measure are based on items used in prior research and can thus serve as comparable to extant research. However, we also note that some items may be answered differently if respondents are thinking about different gambling games. For example, a positive response to 'While gambling, you could win more if you used a certain system or strategy,' could be considered correct if the respondent is thinking of certain skill based games, such as poker.
4. The Chi-square statistic is often significant with large samples, and thus we place more emphasis on effect sizes in the present study.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

This work was supported by the MGM Resorts International [AWD-02-00000764]. MGM Resorts International is a large international gambling operator. MGM consulted on the sample recruitment procedure and some of the survey items. The researchers formulated the research questions and designed the analysis plans. The researchers independently conducted all analyses, data interpretation, and manuscript preparation/submission without any input from MGM.

Competing interests

The Division on Addiction currently receives funding from the Addiction Treatment Center of New England via SAMHSA; EPIC RM; The Foundation for Advancing Alcohol Responsibility (FAAR); DraftKings; the Gavin Foundation via the Substance Abuse and Mental Health Services Administration (SAMHSA); GVC Holdings, PLC; The Healing Lodge of the Seven Nations via the Indian Health Service with funds approved by the National Institute of General Medical Sciences, National Institutes of Health; Health Resources in Action via the Massachusetts Department of Public Health Office of Problem Gambling Services; The Integrated Centre on Addiction Prevention and Treatment of the Tung Wah Group of Hospitals, Hong Kong; St. Francis House via the Massachusetts Department of Public Health Bureau of Substance Addiction Services; and the University of Nevada, Las Vegas via MGM Resorts International.

During the past 5 years, the Division on Addiction has also received funding from Aarhus University Hospital with funds approved by The Danish Council for Independent Research; ABMRF – The Foundation for Alcohol Research; Caesars Enterprise Services, LLC; the David H. Bor Library Fund, Cambridge Health Alliance; DraftKings; Fenway Community Health Center,

Inc.; Heineken USA, Inc.; Massachusetts Department of Public Health, Bureau of Substance Addiction Services; Massachusetts Gaming Commission, Commonwealth of Massachusetts; and University of Nevada, Las Vegas via MGM Resorts International.

During the past five years, International Gaming Institute has received research funding from MGM Resorts International, Wynn Resorts Ltd, Las Vegas Sands Corporation, Caesars Entertainment Corporation, Ainsworth Game Technology, U.S.-Japan Business Council, State of Nevada, Knowledge Fund, and State of Nevada Department of Health and Human Services. IGI runs the triennial research-focused International Conference on Gambling and Risk Taking, whose sponsors include industry, academic, and legal/regulatory stakeholders in gambling. A full list of sponsors for the most recent conference can be found at <https://www.unlv.edu/igi/conference/17th/sponsors>.

During the past 5 years, Brett Abarbanel has received funding from the GP Consulting, U. S.-Japan Business Council, Wynn Las Vegas, Victoria Responsible Gambling Foundation, Connecticut Council on Problem Gambling, the States of Nevada and California, Canadian Partnership for Responsible Gambling, iDevelopment and Economic Association, GLG Consulting, Majestic Star Casinos, MGM Resorts International, ProPress Germany, Caesars Entertainment, and Marina Bay Sands. Dr. Abarbanel has received reimbursement for travel from Association Cluster Sport International, Kansspelautoriteit, Gamification Group (Finland), British Columbia Lottery Corporation, International Association of Gaming Advisors, GambleAware, Las Vegas Convention and Visitors Authority, Ultimate Media Ventures, Canadian Partnership for Responsible Gambling, IGT Latin America, University of Salford, and National Collegiate Athletic Association (USA). During the time period, Dr. Abarbanel was a member of the Singapore National Council on Problem Gambling International Advisory Panel, for which she was reimbursed for her time.

During the past 5 years, Tiange Xu has received funding from a Pre-doctoral Student Network Grant issued by the International Center for Responsible Gaming.

During the past 5 years, Shane W. Kraus has received funding from the US Department of Veterans Affairs, International Center for Responsible Gaming, European Science Foundation, National Science Center Poland, Massachusetts Gaming Commission, Center for the Application of Substance Abuse Technologies (University of Nevada, Reno), Taylor and Francis, and Springer Nature.

During the past 5 years, Heather M. Gray has served as a paid program evaluator for Duffy Health Center, served as a paid grant reviewer for the National Center for Responsible Gaming (NCRG; now the ICRG), received travel funds from the Tung Wah Group of Hospitals/The Hong Kong Jockey Club Charities Trust, received honoraria funds for preparation of a book chapter from Universite Laval, received travel funds and honoraria from the NCRG, and received course royalty fees from the Harvard Medical School Department of Continuing Education. Dr. Gray is a non-paid member of the New Hampshire Council for Responsible Gambling.

During the past five years, Eric R. Louderback has received research funding from a grant issued by the National Science Foundation (NSF), a government agency based in the United States. His research has been financially supported by a Dean's Research Fellowship from the University of Miami College of Arts & Sciences, who also provided funds to present at academic conferences. He has received travel support funds from the Hebrew University of Jerusalem to present research findings.

During the past five years, Debi A. LaPlante has received speaker honoraria and travel support from the National Center for Responsible Gaming (NCRG) and the National Collegiate Athletic Association. She has served as a paid grant reviewer for NCRG and received honoraria funds for preparation of a book chapter from Universite Laval. She was a non-paid board member of the New Hampshire Council on Problem Gambling. She currently is a non-paid board member of the New Hampshire Council for Responsible Gambling.

During the past 5 years, Bo Bernhard's work has been funded by the U.S.-Japan Business Council, Wynn Resorts, Atomic 47/ePlata Banking, Las Vegas Sands, the Nevada Department of Health and Human Services Governor's Advisory Panel on Problem Gambling, the State of Nevada Knowledge Fund, and MGM Resorts International. He has received travel and/or honoraria for presenting his research in more than two dozen countries.

Notes on contributors

Brett Abarbanel is Director of Research at University of Nevada, Las Vegas, International Gaming Institute, with an affiliate appointment at University of Sydney, Australia. Her research covers gambling technology and policy, responsible gambling, and esports and video games, for which she is a founding director of the Nevada Esports Alliance.

Tiange Xu is a master's student at the UNLV William F. Harrah College of Hospitality and graduate assistant at the UNLV International Gaming Institute. His research focuses on problem gambling. He is interested in investigating gambling behaviors among Asian gamblers and exploring responsible gambling programs in different countries.

Dr. Shane Kraus is a licensed clinical psychologist and assistant professor of psychology at University of Nevada, Las Vegas. He is also the Editor-in-Chief of the *Journal of Sexual Health and Compulsivity*, and his research focuses on the assessment and treatment of psychopathology, substance misuse, gambling disorder, and compulsive sexual behavior disorder.

Heather Gray is Director of Academic Affairs at the Division on Addiction, Cambridge Health Alliance, a Harvard Medical School teaching hospital. In collaboration with Internet and land-based gambling operators in the US and internationally, she has studied how people gamble and respond to interventions designed to promote responsible gambling.

Eric Louderback is a Research & Evaluation Scientist at the Division on Addiction, Cambridge Health Alliance, a Harvard Medical School teaching hospital. He has expertise in diverse topic areas including the analysis of data from actual internet gamblers, algorithms to predict risky gambling behaviour, and responsible gambling program evaluation.

Debi LaPlante is Director of the Division on Addiction, Cambridge Health Alliance, a Harvard Medical School teaching hospital and an Assistant Professor of Psychiatry at Harvard Medical School. With her colleagues, she developed the Syndrome Model of Addiction and engaged in a seminal 10-year research program on Internet gambling.

Dr. Bo Bernhard is Vice President of Economic Development at the University of Nevada, Las Vegas, and Executive Director of UNLV International Gaming Institute (IGI). He has delivered over 200 keynote addresses in clinical, regulatory, and government settings and his work is published in the field's top journals.

ORCID

Brett Abarbanel  <http://orcid.org/0000-0002-4279-8466>

Tiange Xu  <http://orcid.org/0000-0002-5020-4349>

Heather Gray  <http://orcid.org/0000-0001-8886-5989>

Eric Louderback  <http://orcid.org/0000-0002-9754-9790>

Debi LaPlante  <http://orcid.org/0000-0001-5418-5504>

Data availability statement

We will post the de-identified Year 3 survey data set associated with this submission to The Transparency Project website at www.thetransparencyproject.org.

Open scholarship



This article has earned the Center for Open Science badges for Open Data and Preregistered. The data and materials are openly accessible at <https://osf.io/n3bc7/>, <https://osf.io/9pdg5/>.

References

- Abarbanel, B., Gray, H. M., LaPlante, D. A., & Bernhard, B. J. (2019). Association between employee department and responsible gambling program perceptions. *International Gambling Studies*, 19(3), 471–488. <https://doi.org/doi:10.1080/14459795.2019.1615528>
- Abarbanel, B., Kraus, S. W., Huang, Q., Gray, H. M., Louderback, E. R., LaPlante, D. A., & Bernhard, B. J. (2020). Association between employee department and responsible gambling program perceptions: Extension and follow-up study. *Journal of Hospitality and Tourism Insights*, 4(5), 582–600. <https://doi.org/10.1108/JHTI-07-2020-0116>
- Afonso, A. (2021, May 26). *Connecticut casinos looking to fill hundreds of jobs - offering their own bonuses to attract workers*. Fox61. <https://www.fox61.com/article/news/local/connecticut-casinos-hundreds-jobs-search/520-f833021e-1ea7-43d1-b634-4b7bfd06052e>
- Beckett, M., Keen, B., Angus, D. J., Pickering, D., & Blaszczynski, A. (2020). Responsible gambling staff training in land-based venues: A systematic review. *International Gambling Studies*, 20(2), 331–367. <https://doi.org/doi:10.1080/14459795.2020.1737723>
- Beckett, M., Keen, B., Swanton, T. B., & Blaszczynski, A. (2020). Staff perceptions of responsible gambling training programs: Qualitative findings. *Journal of Gambling Studies*, 36(1), 405–419. <https://doi.org/doi:10.1007/s10899-019-09874-9>
- Chen, T.-J., & Wu, C.-M. (2017). Improving the turnover intention of tourist hotel employees: Transformational leadership, leader-member exchange, and psychological contract breach. *International Journal of Contemporary Hospitality Management*, 29(7), 1914–1936. <https://doi.org/doi:10.1108/IJCHM-09-2015-0490>
- Cheng-Fei Tsai, P., Shih, C.-T., & Jose-Luis Hervas-Oliver, P. (2013). Responsible downsizing strategy as a panacea to firm performance: The role of dynamic capabilities. *International Journal of Manpower*, 34(8), 1015–1028. <https://doi.org/doi:10.1108/IJM-07-2013-0170>
- Dekker, S. W. A., & Schaufeli, W. B. (1995). The effects of job insecurity on psychological health and withdrawal: A longitudinal study. *Australian Psychologist*, 30(1), 57–63. <https://doi.org/doi:10.1080/00050069508259607>
- Louderback, E. R., Gray, H. M., LaPlante, D. A., Abarbanel, B., & Bernhard, B. J. (2021). A comparison of two gamesense implementation approaches: How program awareness and engagement relate to Gambling beliefs and behaviors. *Journal of Gambling Studies*. <https://doi.org/10.1007/s10899-021-10013-6>
- Flora, D. B., & Curran, P. J. (2004). An empirical evaluation of alternative methods of estimation for confirmatory factor analysis with ordinal data. *Psychological Methods*, 9(4), 466–491. <https://doi.org/doi:10.1037/1082-989X.9.4.466>
- Giroux, I., Boutin, C., Ladouceur, R., Lachance, S., & Dufour, M. (2008). Awareness training program on responsible gambling for casino employees. *International Journal of Mental Health & Addiction*, 6(4), 594–601. <https://doi.org/doi:10.1007/s11469-008-9165-1>

- Gray, H. M., Juliver, J., & LaPlante, D. A. (2020). Gambling industry employees' experiences with an onsite responsible gambling program. *Journal of Gambling Studies*, 37, 369–386. <https://doi.org/doi:10.1007/s10899-020-09969-8>
- Gray, H. M., Tom, M. A., LaPlante, D. A., & Shaffer, H. J. (2015). Using opinions and knowledge to identify natural groups of gambling employees. *Journal of Gambling Studies*, 31(4), 1753–1766. <https://doi.org/doi:10.1007/s10899-014-9490-1>
- Groysberg, B., Lee, J., Price, J., & Cheng, -J. Y.-J. (2018). The leader's guide to corporate culture: How to manage the eight critical elements of organizational life. *Harvard Business Review*, 96 (1), 44–52. <https://www.hbs.edu/faculty/Pages/item.aspx?num=53726>
- Guttentag, D., Harrigan, K., & Smith, S. (2012). Gambling by Ontario casino employees: Gambling behaviours, problem gambling and impacts of the employment. *International Gambling Studies*, 12(1), 5–22. <https://doi.org/doi:10.1080/14459795.2011.605069>
- Hing, N., & Gainsbury, S. (2011). Risky business: Gambling problems amongst gaming venue employees in Queensland, Australia. *Journal of Gambling Issues*, 25, 4–23. <https://doi.org/doi:10.4309/jgi.2011.25.2>
- Hing, N., & Gainsbury, S. (2013). Workplace risk and protective factors for gambling problems among gambling industry employees. *Journal of Business Research*, 66(9), 1667–1673. <https://doi.org/doi:10.1016/j.jbusres.2012.12.013>
- Hing, N., & Nuske, E. (2012). Responding to problem gamblers in the venue: Role conflict, role ambiguity, and challenges for hospitality staff. *Journal of Human Resources in Hospitality & Tourism*, 11(2), 146–164. <https://doi.org/doi:10.1080/15332845.2012.648896>
- Huang, G., & To Wai, M. (2018). Importance-performance ratings of corporate social responsibility practices by employees in Macao's gaming industry. *International Journal of Contemporary Hospitality Management*, 30(9), 2870–2887. <https://doi.org/doi:10.1108/IJCHM-09-2017-0600>
- Ladouceur, R., Shaffer, P., Blaszczynski, A., & Shaffer, H. J. (2017). Responsible gambling: A synthesis of the empirical evidence. *Addiction Research & Theory*, 25(3), 225–235. <https://doi.org/doi:10.1080/16066359.2016.1245294>
- Louderback, E. R., Gray, H. M., LaPlante, D. A., Abarbanel, B., & Bernhard, B. J. (2021). How program awareness and engagement relate to gambling beliefs and behaviors. *Journal of Gambling Studies*. <https://doi.org/doi:10.1007/s10899-021-10013-6>
- McAuliffe, W. H. B., Edson, T. C., Louderback, E. R., LaRaja, A., LaPlante, D. A., & Rodda, S. N. (2021). Responsible product design to mitigate excessive gambling: A scoping review and z-curve analysis of replicability. *PLOS One*, 16(4), e0249926. <https://doi.org/doi:10.1371/journal.pone.0249926>
- Mishra, A. K., & Spreitzer, G. M. (1998). Explaining how survivors respond to downsizing: The roles of trust, empowerment, justice, and work redesign. *The Academy of Management Review*, 23(3), 567–588. <https://doi.org/doi:10.2307/259295>
- O'Connor, D. (2019, January 3). *MGM Resorts to lay off three percent of workforce to reduce costs, increase earnings*. Casino.org. <https://www.casino.org/news/mgm-resorts-to-layoff-three-percent-of-workforce/>
- Philander, K. (2020a, October 15). *Are you building a responsible gambling-oriented culture?* The Brief Addiction Science Information Source (BASIS). <https://www.basionline.org/2020/10/are-you-building-a-responsible-gambling-oriented-culture.html>
- Philander, K. (2020b, March 10-12). *Future-proofing the industry: Organizational culture and responsible gambling*. Paper presented at the New Horizons in Responsible Gambling Conference, Vancouver, Canada.
- Productivity Commission. (2010). *Gambling: Productivity Commission inquiry report no. 50*. <https://www.pc.gov.au/inquiries/completed/gambling-2010/report/gambling-report-volume1.pdf>
- Quilty, L. C., Robinson, J., & Blaszczynski, A. (2015). Responsible gambling training in Ontario casinos: Employee attitudes and experience. *International Gambling Studies*, 15(3), 361–376. <https://doi.org/doi:10.1080/14459795.2015.1056206>

- M G M Resorts. (2021). *2020 social impact & sustainability report*. <https://www.mgmresorts.com/content/dam/MGM/corporate/csr/annual-report/mgm-resorts-social-impact-and-sustainability-annual-report-2020.pdf>
- Riley, B. J., Orlowski, S., Smith, D., Baigent, M., Battersby, M., & Lawn, S. (2018). Understanding the business versus care paradox in gambling venues: A qualitative study of the perspectives from gamblers, venue staff and counsellors. *Harm Reduction Journal*, *15*(1), 49. <https://doi.org/doi:10.1186/s12954-018-0256-4>
- Schulz, B. (2021, April 23). Casinos hiring for hundreds of jobs to keep up with growing demand. *Las Vegas Review-Journal*, <https://www.reviewjournal.com/business/casinos-gaming/casinos-hiring-for-hundreds-of-jobs-to-keep-up-with-growing-demand-2335288/>
- Shaffer, H. J., Blaszczynski, A., Ladouceur, R., Collins, P., & Fong, D. (2019). *Responsible gambling: Primary stakeholder perspectives*. (H. J. Shaffer, A. Blaszczynski, R. Ladouceur, P. Collins, & D. Fong, Eds.). Oxford University Press.
- Shaffer, H. J., & Hall, M. N. (2002). The natural history of gambling and drinking problems among casino employees. *The Journal Of Social Psychology*, *142*(4), 405–424. <https://doi.org/doi:10.1080/00224540209603909>
- Shaffer, H. J., Ladouceur, R., Blaszczynski, A., & Whyte, K. (2015). Extending the Reno model: Clinical and ethical applications. *American Journal of Orthopsychiatry*, *86*(3), 297–309. <https://doi.org/doi:10.1037/ort0000123>
- Song, H.-J., Lee, H.-M., Lee, C.-K., & Song, S.-J. (2015). The role of CSR and responsible gambling in Casino employees' organizational commitment, job satisfaction, and customer orientation. *Asia Pacific Journal of Tourism Research*, *20*(4), 455–471. <https://doi.org/doi:10.1080/10941665.2013.877049>
- Stutz, H. (2019, May 30). *MGM Resorts eliminates 557 positions in final round of MGM 2020 layoffs*. CDC Gaming Reports Inc. <https://www.cdcgamingreports.com/mgm-resorts-eliminates-557-positions-in-final-round-of-mgm-2020-layoffs/>
- Tsai, C.-F., & Yen, Y.-F. (2020). Moderating effect of employee perception of responsible downsizing on job satisfaction and innovation commitment. *The International Journal of Human Resource Management*, *31*(15), 1913–1937. <https://doi.org/doi:10.1080/09585192.2018.1424014>
- Wood, R. T. A., & Griffiths, M. (2014). Putting responsible gambling, theory and research into practice: Introducing the responsible gambling review. *Responsible Gambling Review*, *1*(1), 1–5. https://irep.ntu.ac.uk/id/eprint/26043/1/221352_2937.pdf
- Wood, R. T. A., Wohl, M. J. A., Tabri, N., & Philander, K. (2017). Measuring responsible gambling amongst players: Development of the positive play scale. *Frontiers in Psychology*, *9*(227), 1–12. <https://doi.org/10.3389/fpsyg.2017.00227>