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# The Importance of Finance and Accounting Competencies: The Gaming Industry's Perspective

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## **The Importance of Finance and Accounting Competencies: The Gaming Industry's Perspective**

### **Introduction**

Eadington (1995), an eminent scholar as well as a legend in the field of gaming research, stated “there is not another industry in the world that has experienced a transformation like that of the casino industry over the past 40 years” (p. 58). In 2012, the commercial casino industry in the United States (U.S.) reached its highest level of gross gaming revenues since before the first full year of the recession occurring in 2008 (Lehman, 2013). Commercial casinos produced \$37.34 billion in gross gaming revenue in 2012, the second highest revenue in the history of U.S. commercial casinos, behind 2007 by only \$.18 billion (Lehman, 2013). In international markets, an exponential gaming boom is happening in Macau and Singapore. In 2012, Macau generated higher commercial casino gaming revenues than the entire U.S. (Gaming Inspection and Coordination Bureau, 2013; Stutz, 2013). Latin America expects an 8-9% growth in gaming each year from 2013 through 2015 and Europe expects a 3-5% growth in gaming for the same period (PwC, 2011). In addition to an increase in brick and mortar casinos, there is also an increase in the online market. There were nearly 3,000 Internet gaming sites throughout 85 countries which generated an estimated \$30 billion in gross online gaming win in 2012 for a variety of casino games, not just poker (H2 Gambling Capital, 2013; Schwartz, 2006; Stewart & Ropes & Gray, LLP, 2011). In 2013, Nevada, New Jersey, and Delaware legalized intrastate online poker and in 2014 Nevada and Delaware legalized interstate gaming between the two states (Tetreault & Stutz, 2014).

The massive increase in gaming in both revenue and number of properties comes as more jurisdictions, domestically and internationally, legalize gaming as a way to increase tax revenue to their community. This increased growth in gaming revenues may also be coming from the level of acceptability of gaming. A majority (85%) of Americans consider casino gaming acceptable for themselves and others, according to a 2013 public opinion poll by VP Communications, Inc. and Peter D. Hart (American Gaming Association, 2013). This is the highest level in the past decade. In addition, there has been a transformation from just gambling to entertainment. Most new properties are not just casinos, but integrated resorts that offer rooms, dining, conventions, shopping, live entertainment, and other amenities (Silva, 2013). Las Vegas Sands plans to build a massive integrated resort, EuroVegas, worth \$22.1 billion, in Madrid, Spain, which will consist of six casinos, 36,000 hotel rooms, three golf courses, 17 entertainment theaters, a convention center, and an undisclosed number of

food and beverage outlets (Tullis, 2013). This new resort will bring an estimated 261,000 jobs and will help decrease Spain's 26.2% unemployment.

Every industry faces competition. However, due to geographical market limits of gaming not being allowed in every jurisdiction like a hotel or restaurant, the gaming industry is more competitive than the hotel industry (Silva, 2013). Owing to regulatory and licensing issues, casino owners and operators must interact with numerous parties ranging from investment banks to licensing agencies (PwC, 2011). In the Internet market, the regulatory complexities are even harsher (PwC, 2011). Cummings (1996) indicated that casino executives face numerous challenges such as regulations, competition, financing, customer development, and public relations and that the casino executive needs to be an expert in more fields than most executives in other industries including other hospitality firms. Bernhard and Ahlgren (2011) also suggested that given the evolving gaming industry, the focus of executive decisions on the global gaming industry shifts from less complicated decisions including casino floor structure to more complicated decisions including the structure and allocation of development capital.

Performing finance and accounting procedures is one of the most challenging areas in casinos since keeping track of financial transactions is complicated (Gambling-industry.net, 2010). Unlike the hotel and restaurant businesses where revenues and expenses can be more easily tracked, the casino business involves more liquid assets in which not every single transaction may be accounted for (Gambling-industry.net, 2010). For instance, table games transactions are conducted without written records of every hand played and money is converted into chips, which can be more difficult to track than cash (Gambling-industry.net, 2010). Due to the massive amount of liquid assets the casino industry has compared to any other industry, there are extensive regulations that casino managers must adhere to, many if not most that relate to accounting and finance functions (Light & Rutledge, 2010). Consequently, the complex nature of the gaming industry has major impacts on the scope of core competencies of casino managers. This complex environment also leads to a disparity in compensation between hotel general managers and casino general managers with casino managers making double what hotel general managers earn (Kefgen, 2004). This difference in pay may be an indication that the skills necessary to be a successful casino general manager may be different than those required for a hotel general manager.

Only a few studies have examined the finance and accounting competencies needed for successful careers. Furthermore, most research from the hospitality industry has focused on either the overall industry (Gursoy & Swanger, 2004) or the hotel subsector itself (Kay & Russette, 2000; Tesone & Ricci, 2006) with a few focusing on other sectors including food services (Horng & Lu, 2006).

More importantly, no study on finance and accounting competencies has ever been conducted in the gaming industry specifically. In addition, no known studies have been conducted after the Great Recession of 2007 to 2009.

Prompted by a lack of research on gaming specific finance and accounting competencies and given the gaming industry's exponential growth and potential expansion, the current study intends to identify which specific finance and accounting competencies are important from the gaming industry professional's perspective. This research addresses the following questions:

1. What specific finance and accounting competencies do gaming industry professionals consider as being the most and least significant for a successful career in gaming?
2. Do significant variations exist in the perceived importance of specific finance and accounting competencies among gaming industry professionals of different departments/divisions?
3. Do significant variations exist in the perceived importance of specific finance and accounting competencies among gaming industry professionals with varying years of industry experience?
4. Do significant variations exist in the perceived importance of specific finance and accounting competencies among gaming industry professionals of varying demographic attributes including gender, education, and annual salary?

## **Literature Review**

The literature acknowledges that finance, accounting, and related knowledge, skills, and abilities are perceived as critical by hospitality professionals (Nelson & Dopson, 2001). Chung (2000) suggested a positive relationship between financial and accounting knowledge and career success in the lodging industry. The author noted that finance and accounting courses are essential since such courses significantly influence career success and contribute the most to "cultivate the 'management analysis techniques' factor dimension of competency, which is the second most influential contributor to career success" (p. 485). These findings correspond with Kay and Moncarz's results (2004) on hotel competencies. The authors found that, in the lodging industry, out of the four knowledge, skills, and abilities (KSA) of financial management, human resources, marketing, and information technology, financial management was the only KSA that had a significantly positive relationship with increased compensation. The regression analysis presented that for each one-point increase in financial management knowledge, managers can potentially earn \$19,500 more annually. Moreover, financial management appeared to be a key to promotion to top-level lodging positions. The authors proposed that KSAs in such areas as human resources and

information technology may represent basic skills for all managers and are perhaps most beneficial at lower levels of management. On the other hand, knowledge in financial management can drive professional success to a greater degree as managers advance to higher ranks of responsibility. Kay and Moncarz (2007) further examined this topic and suggested that financial management knowledge was a strong indicator of top-level success in the lodging industry. The authors confirmed that increased financial management knowledge can enhance a managers' potential for promotion and ultimate professional success.

Past research supports the importance of finance and accounting competencies in the foodservice and club management industries as well. Enz (2004) noted that managing increasing costs was a key accounting concern for restaurant managers as well as owner-operators and that the areas of cash-flow management and financing were critical accounting concerns for owner-operators. Rivera, DiPietro, Murphy, and Muller (2008) found that managers of multiple properties in the restaurant industry perceived a need for additional training in the areas of finance and controls in order to be promoted. In the club management industry, Perdue, Ninemeier, and Woods (2000) indicated that finance and accounting skills were perceived as the most important and most frequently used by club managers. A more recent study by Hein and Riegel (2011) examined the overall hospitality industry and included professionals from sectors such as hotels, resorts, food & beverage, convention and meeting planning, tourism & entertainment, and club management. The authors confirmed that industry professionals perceive finance and accounting knowledge as significant for graduates' success.

Gursoy and Swanger (2004) and Gursoy, Rahman, and Swanger (2012) incorporated a longitudinal approach to investigate the importance of subject areas by hospitality professionals over a five-year period. The findings revealed that the ranking of asset/revenue management jumped from 14<sup>th</sup> to 6<sup>th</sup>, and finance went up from 18<sup>th</sup> to 13<sup>th</sup> out of 33 subject matters. The authors indicated that the decrease in revenue from the economic downturn in the lodging industry caused the increased importance. The gaming industry has also seen a change in finance skills due to the recession. From about the 1950s until the 1980s, Nevada's casino managers ran multibillion-dollar businesses without a budget, which is one of the core components in finance and accounting skills (Preston, 2013). Since the financial crisis, however, the budgeting process has become a survival mechanism as casino managers had to reduce costs due to the decreased revenues (Preston, 2013).

Damitio and Schmidgall (1990, 1991) examined only accounting skills in the lodging industry. Their first study (1990) examined the difference in perceived importance of 18 managerial accounting skills between lodging managers and controllers. Operating budgets, analysis of variance, and the

income statement were rated as the top three skills by both groups. The study found that years of experience and education did not have a significant effect on the perceived importance of managerial accounting skills between managers and controllers. The authors (1991) further rated the importance of 31 accounting skills for successful lodging managers at the beginning of their employment and after three years of employment. Further, the study compared the opinions of executives, educators, and students. All agreed on the top 15 accounting skills. Interpretation of department operating statements was the top accounting skill amongst the respondents for lodging managers to have after three years of industry experience.

During 2008, Hein and Riegel (2011) explored the perceptions of the importance of 10 financial management areas and 8 accounting practices in mainly two segments of the hospitality industry, Hotels & Resorts and Food & Beverage. The authors indicated that although both finance and accounting skills were considered as vital, hospitality industry professionals prefer financial management knowledge to accounting skills for the long-term success of hospitality graduates. Furthermore, the study investigated which content areas were perceived to be the most and least significant for a graduate's success in the hospitality industry in the long-term. Regarding financial management, building operating budgets obtained the highest mean response indicating that hospitality professionals consider this practice to be the most critical whereas the content area of conducting ratio analysis of financial statement obtained the lowest mean. With regard to accounting practices, establishing cash and internal controls received the highest mean while accounting for varying depreciation received the lowest mean. With respect to the perceptions among different subgroups based on the professionals' position, years of industry experience, education, and industry segments, the study indicated that differences exist in various subgroups despite few important differences. For instance, when position was categorized as senior management, operations management, and support services, there was only one significant difference among the three groups. Accounting for receivables and payables was perceived as significantly important by senior management, but not by operations management and support services personnel.

No significant differences were shown in any of the financial management or accounting practices in the four different years of industry experience groups (Hein & Riegel, 2011). Only one significant difference existed among any of the three educational levels. While there was no significant difference between those with a bachelor's degree and a master's degree or higher, accounting for receivables and payables was perceived as significantly more important to those with an associate's degree or lower. In examining the difference of perceived importance of financial and accounting knowledge between the Hotels & Resorts and Food & Beverage segments, only two content areas had significantly different

mean responses. Computing cost of sales in relation to inventory methods and accounting for receivables and payables were considered significantly more important in the Food & Beverage sample than in the Hotel & Resorts segment.

Even though no known finance and accounting competency studies have been conducted on the gaming industry, the nature of the business and the large amounts of cash generated and needing to be accounted for indicates that there is a need for these skills in the gaming industry. Light and Rutledge (2010) stated that since not every transaction in a casino is recorded, the accounting is more difficult than in most business. This accounting though does not just happen at the controller level, all gaming employees must adhere to the more difficult accounting standards to protect the flow of revenue from all gaming activities per gaming regulations (Light & Rutledge, 2010). In addition to the gaming activities having higher accounting regulations than most businesses, any other transactions that involve gaming have a higher level of accounting standards. For example, if a casino gives free or discounted rooms or food and beverage due to gaming play, those transactions must adhere to the higher gaming regulations and more difficult accounting.

In addition to the regulations and increased accounting functions in the gaming industry, a 2013 study evaluated the most important course content necessary for a master's degree in gaming to be useful for a successful career in gaming (Repetti & Jung, 2013). Results of that study indicated that the most important course content was financial analysis. On a scale of 1-5 with 5 being extremely important, financial analysis was rated 4.37. Casino accounting was also listed as important with a mean value of 4.10. At the undergraduate level, degrees in casino operations typically have additional accounting and finance courses where other degrees have more operations courses. For instance, UNLV's Bachelor of Science in Gaming Management has additional required courses in casino accounting and casino math and statistics above and beyond the hospitality degree accounting and finance classes.

In 2012, U.S. commercial casinos industry employed more than 332,000 employees (American Gaming Association, 2013). In 2012, in the gambling, recreation, and other amusement segments within the leisure and hospitality industry, women consisted of nearly half (47.1%) of total employment (Bureau of Labor Statistics (2013). However, Costen, Hardigree, & Testagrossa (2003) found that women comprised merely 24.8% of casino management positions and 18.8% of upper management positions such as vice president, general manager and president. In the early 1990's, it was anticipated to take another 475 years for women to be equally represented in senior-level positions (Segal & Zellner, 1992). Given that female managers are likely to be at low or mid-level positions, whereas male managers are likely to dominate senior-level positions, it is expected that

male and female managers in the gaming industry will differ with respect to their perceptions of the importance of finance and accounting skills.

In short, women in the gaming industry have not advanced to senior-level leadership positions during the past several decades. The literature investigated different reasons ranging from discrimination to organizational structures (Fondas, 1997; Jacobs, 1995). One of the external causes is that most businesses today, particularly the gaming industry, are dominated by male management (Schaap, Stedham, & Yamamura, 2008). One of the internal causes is that women often perceive aspects of their careers differently than men. Unlike male managers, who tend to focus on extrinsic rewards such as monetary reward and leisure, women are likely to emphasize intrinsic rewards such as taking enjoyment, making friends, working with people, and helping others (Konrad, Ritchie, Lieb, & Corrigall, 2000; Schaap et al., 2008).

## **Methodology**

### *Questionnaire Development*

A quantitative survey was developed using the studies by Damitio and Schmidgall (1991) and Hein and Reigel (2011) as a guide. The accounting and finance skills from these surveys were evaluated and pilot tested with gaming industry professionals to choose those skills that were most relevant to operations in the gaming industry. A total of 15 skills were chosen to include. The survey asked respondents to evaluate the importance of these accounting and finance skills on a Likert scale of 1-5 (1 = Not at all important, 2 = Somewhat unimportant, 3 = Moderately important, 4 = Very important, 5 = Extremely important). Damitio and Schmidgall (1991) and Hein and Reigel (2011) also used a five point Likert scale with slightly different wording for each.

### *Data Collection*

The survey was developed as an online survey and was distributed using judgment sampling and snowball techniques. Emails requests were sent to specific individuals who had expressed interest in participating during the pilot study and professional contacts of the researchers. Judgment sampling was also used to select groups on Facebook, Twitter, and LinkedIn in which to post a link and call for participants for the survey. A snowball technique was also used by asking all participants to forward the survey to those they thought would be interested in participating.

### *Data Analysis*

All data was analyzed using a two-step process. First, descriptive statistics were run to determine demographic information of participants and an



overall mean scores for the importance of each accounting and finance skill was computed. A series of independent sample t-tests and one-way analysis of variance (ANOVA) comparisons were performed to see if there were any significant differences in the importance of each skill among various demographics groups. All t-test and ANOVA comparisons were conducted using an alpha level of .05.

## **Results**

The survey was active for a five-week period in June and July, 2013. During this period 275 respondents started the survey and 214 completed it. There were 13 surveys deleted because the participants had no work experience in the gaming industry. The 201 completed surveys from those with gaming experience equated to a 73.1% completion rate. A response rate could not be computed because the number of people who saw the link to the survey is unknown and only the number of people who started the survey could be obtained.

### *Demographics*

Of the 201 respondents, 67.7% were male and 32.3% were female. The youngest participant was 18 and the oldest was 81, with a mean age of 45 years. The most common age range was 45-54 with 29.4% of respondents in this range. Over 72% of the respondents were between 35 and 64. Almost 70.0% of the respondents obtained a 4 year degree or higher with 30.9% holding a master's degree or higher. The most common salary range was \$50,001 - \$75,000 with almost 20.0% making this much in their current position. The next most common salary range, which accounted for 17.9%, was those making over \$200,000.

Respondents were also asked how many years of work experience they had in the gaming industry, in which department they currently worked, and in what geographic region their job functions occurred. Respondents gaming work experience ranged from less than a year to 47 years, with a mean of 16.2 years. Respondents were from a variety of departments, both operational and general and administrative. The majority of the respondents were from the general and administrative departments, but 54, 26.9%, were from operations. The most common department was executive with 20.4% of the participants. Departments that are typically heavy in accounting and finance functions, such as accounting, finance, and audit, only accounted for 14.9% of respondents. Participants were from all 48 U.S. states with legalized gaming and many international locations including, but not limited to, Australia, Canada, Caribbean, Korea, Macau, Europe, Russia, and Singapore. Table 1 shows the full descriptive profile of the respondents.

Table 1  
*Demographics*

	N	% of total
<b>Gender</b>		
Male	136	67.7
Female	65	32.3
Total	201	100.0
<b>Age</b>		
Under 25	7	3.5
25-34	37	18.4
35-44	54	26.9
45-54	59	29.4
55-64	32	15.9
65 and Over	12	6.0
Total	201	100.0
<b>Education</b>		
High school & below	9	4.5
Some college	28	13.9
2 year degree	24	11.9
4 year degree	78	38.8
Master's	56	27.9
Professional (JD, PhD)	6	3.0
Total	201	100.0
<b>Salary</b>		
\$0 - \$25,000	10	5.0
\$25,001 - \$50,000	23	11.4
\$50,001 - \$75,000	40	19.9
\$75,001 - \$100,000	34	16.9
\$100,001 - \$125,000	22	10.9
\$125,001 - \$150,000	14	7.0
\$150,001 - \$175,000	9	4.5
\$175,001 - \$200,000	9	4.5
Over \$200,000	36	17.9
Refused to answer	4	2.0

Total	201	100.0
Years of Gaming Experience		
0 – 5	40	19.9
6 – 10	32	15.9
11 – 15	33	16.4
16 – 20	39	19.4
21 – 25	25	12.4
Over 25	32	15.9
Total	201	100.0
Department		
Table games	29	14.4
Slots	11	5.5
Other gaming	1	.5
Internet gaming	3	1.5
Hotel	6	3.0
Food & beverage	4	2.0
Accounting/Finance	22	10.9
Audit	8	4.0
Human resources	9	4.5
Information technology	8	4.0
Surveillance	6	3.0
Sales & marketing	23	11.4
Executive	41	20.4
Regulators	13	6.5
Other	17	8.5
Total	201	100.0

#### *Accounting and Finance Skills*

Participants were asked to evaluate 15 accounting and finance skills on a Likert scale of 1-5 (1 = Not at all important, 2 = Somewhat unimportant, 3 = Moderately important, 4 = Very important, 5 = Extremely important). Preparing operating budgets had the largest mean score of 4.35, followed closely by analyzing revenue and expenses for problem solving with 4.34. Four additional skills (analyzing and interpreting the income statement, preparing capital budgets, establishing internal controls, and conducting breakeven analysis) had a mean score of over 4, which indicates they were perceived as very important. Preparing

and posting journal entries had the lowest mean score of 3.01, which is still considered moderately important. Table 2 shows the mean responses for all accounting and finance skills surveyed, listed in rank order.

Table 2  
*Accounting and Finance Skills Mean Responses*

	N	Mean	Std. Deviation
Preparing operating budgets	201	4.35	.871
Analyzing revenues and expenses for problem solving	201	4.34	.962
Analyzing and interpreting the income statement	201	4.09	.925
Preparing capital budgets	201	4.09	.965
Establishing internal controls	201	4.08	.997
Conducting breakeven analysis	201	4.05	.942
Understanding different pricing policies	201	3.96	1.011
Analyzing and interpreting the balance sheet	201	3.95	.971
Analyzing and interpreting the statement of cash flows	201	3.95	1.028
Preparing cash budgets	201	3.90	1.068
Conducting ratio analysis	201	3.86	1.041
Building financial statements	201	3.59	1.069
Accounting for receivables	201	3.42	1.160
Calculating and preparing taxes, including gaming	201	3.26	1.283
Preparing and posting journal entries	201	3.01	1.235

*Note:* Likert scale: 1 = Not at all important, 2 = Somewhat unimportant, 3 = Moderately important, 4 = Very important, 5 = Extremely important

Further analysis was conducted to see if there were significant differences in the mean scores of the skills between differing respondent groups. Demographic sub-groups based on gender, education, salary, years of gaming experience, and department were analyzed. Independent sample t-tests were conducted to examine if there was a difference in skill importance based on gender. Table 3 shows the results of the independent t-tests. There were only two skills that had significant differences between males and females. Calculating and preparing taxes, including gaming taxes, was perceived as significantly more important to females (mean = 3.58, *sd* = 1.457) than to males (mean = 3.11, *sd* = 1.165). Females (mean = 3.40, *sd* = 1.309) also perceived preparing and posting journal entries as more important than males (mean = 2.83, *sd* = 1.158).

Table 3  
*Financial and Accounting Skills Means and Independent Sample t-Test for Gender*

Skill	Gender	N	Std.		t	df	Sig.
			Mean	Deviation			
Preparing operating budgets <sup>a</sup>	Male	136	4.36	.776	.283	199	.778
	Female	65	4.32	1.047			
Analyzing revenues and expenses for problem solving <sup>a</sup>	Male	136	4.42	.874	1.732	199	.085
	Female	65	4.17	1.112			
Analyzing and interpreting the income statement	Male	136	4.14	.845	.920	103.077	.359
	Female	65	4.00	1.075			
Preparing capital budgets	Male	136	4.07	.849	-.303	96.800	.762
	Female	65	4.12	1.179			
Establishing internal controls <sup>a</sup>	Male	136	4.01	1.015	-1.491	199	.138
	Female	65	4.23	.948			
Conducting breakeven analysis	Male	136	4.06	.867	.182	104.119	.856
	Female	65	4.03	1.089			
Understanding different pricing policies	Male	136	3.96	.898	.146	98.118	.885
	Female	65	3.94	1.223			
Analyzing and interpreting the balance sheet <sup>a</sup>	Male	136	3.90	.937	-1.019	199	.310
	Female	65	4.05	1.037			
Analyzing and interpreting the statement of cash flows	Male	136	3.92	.951	-.575	105.166	.567
	Female	65	4.02	1.179			
Preparing cash budgets <sup>a</sup>	Male	136	3.86	.960	-.771	199	.441
	Female	65	3.98	1.269			
Conducting ratio analysis <sup>a</sup>	Male	136	3.81	1.000	-.923	199	.357
	Female	65	3.95	1.124			
Building financial statements	Male	136	3.56	.972	-.494	101.956	.622
	Female	65	3.65	1.255			
Accounting for receivables <sup>a</sup>	Male	136	3.35	1.092	-1.150	199	.252
	Female	65	3.55	1.287			
Calculating and preparing	Male	136	3.11	1.165	-2.297	104.514	.024*

taxes, including gaming	Female	65	3.58	1.457			
Preparing and posting journal entries <sup>a</sup>	Male	136	2.83	1.158	-3.123	199	.002*
	Female	65	3.40	1.309			

\* $p < .05$

Note: Equal variances assumed for all skills with superscript a. All others equal variances not assumed.

All other groupings required one-way ANOVA analyses to determine if there were significant differences in the groupings. For the education sub-group, two skills were found to have significant differences, preparing and posting journal entries,  $F(5,195) = 2.878$ ,  $p = .016$ , and accounting for receivables,  $F(5,195) = 4.073$ ,  $p = .002$ . Concerning the skill of preparing and posting journal entries, only two education groups differed. Those with some college believed this skill was more important than those who had a 4 year degree. When analyzing the significant difference for accounting for receivables, respondents with some college believed this was more important than those with a 4 year degree and those with a master's degree. Table 4 presents all significant difference found in the one-way ANOVA analyses.

When evaluating salary sub-groups, two skills were found to have significant differences, preparing and posting journal entries,  $F(8,188) = 2.804$ ,  $p = .006$ , and preparing and calculating taxes, including gaming taxes,  $F(8,188) = 2.347$ ,  $p = .020$ . Respondents making between \$50,001 and \$75,000 believed that preparing and posting journal entries was more important than those making over \$200,000. Respondents making between \$25,001 and \$50,000 believed that preparing and calculating taxes was more important than those making over \$200,000.

For the years of gaming experience and department groupings there were no accounting and finance skills that had significant differences between the sub-groups. A slight modification was made to the department grouping for the ANOVA to be run. The other gaming and internet gaming were combined into one group and classified as other gaming.

Table 4  
*Summary of Significant Differences in Skill Mean Response by Demographic Groupings*

Skill	Demographic Groupings	N	Mean	Std. Deviation	One-way ANOVA sig.
Preparing and posting	Some college <sup>a</sup>	28	3.61	.994	.016

journal entries	4 year degree <sup>a</sup>	78	2.79	1.210	
Accounting for receivables	Some college <sup>b, c</sup>	28	4.07	.900	.002
	4 year degree <sup>b</sup>	78	3.13	1.188	
	Master's <sup>c</sup>	56	3.30	1.127	
Preparing and posting journal entries	\$50,001-\$75,000 <sup>d</sup>	40	3.38	1.125	.006
	Over \$200,000 <sup>d</sup>	36	2.50	1.254	
Preparing and calculating taxes, including gaming	\$25,001-\$50,000 <sup>e</sup>	23	3.87	1.325	.020
	Over \$200,000 <sup>e</sup>	36	2.67	1.195	

Note: Matching letters specify groups with significant differences

## Discussion

Results of this study show the high importance that gaming industry professionals put on accounting and finance skills, although finance skills were generally rated of higher importance based on the mean scores. Cummings (1996) stated that with the gaming industry facing many challenges the casino executive needs to be an expert in more fields than other industry executives. The gaming industry is similar to the hotel industry in that most of the revenue comes from perishable activities. In the hotel industry, rooms are perishable in that if they are not sold one night the operator cannot store them and sell them the next night so they lose out on potential revenue from that one night. This is amplified in the gaming industry because it is not just hotel rooms, but all gaming activity is also perishable. In addition to being perishable, unlike the hotel industry where most hotel rooms are booked in advance, the number of customers gambling and how much they will spend is not known until it happens since there is no pre-booking of gaming trips only the rooms they stay in. Since most revenue in the gaming industry comes from these types of activities, management needs to pay careful attention to finance and accounting skills, especially those concerned with budget and forecasting, to have successful careers in gaming. The number one important skill was preparing operating budgets so it's an indication of how important proper forecasting is to a casino, which supports Preston (2013) and Karoul (2013) who also found that the budgeting process is necessary for every casino.

Results of this study showed that while all analyzed accounting and finance skills were ranked above 3.0, moderately important, and almost half of them were ranked very important, the mean scores were lower than what Hein and Reigel (2011) found. These results though did fall in between the beginning of employment importance level and importance level after 3 years of employment from Damitio and Schmidgall's (1991) study. This study found that preparing operating budgets has the highest importance of all skills, which is also what Hein

and Reigel (2011) and Damitio and Schmidgall (1990) found. This skill was second in the Damitio and Schmidgall (1991) study but it was only second for executives by .01. These findings, while not different than previous studies on the number one finance skill in hospitality, are important for gaming operators because most casino executives believe the casino business is different than any other hospitality industry (Karoul, 2013). Even though the industries are different, the core finance competency is the same so gaming firms may be able to look at employees in other hospitality sectors since they have the same skill set. This is important as the growth of gaming outpaces that of lodging and as gaming companies become integrated resorts where more and more money is being generated in non-gaming activities.

The findings that almost all skills did not have a significant difference in importance based on demographic subgroups shows that many in the gaming industry believe the same accounting and finance skills are necessary for a successful gaming career. Amongst the five sub-groups analyzed only three skills were found to have significant differences amongst the groups. These three skills, accounting for receivables, calculating and preparing taxes, and preparing and posting journal entries had the lowest mean scores overall and are considered more accounting skills than finance skills.

Preparing and posting journal entries had the lowest mean score of 3.01 and a difference of 0.82 between those respondents with some college education and those with a 4 year degree. This finding did not support what Hein and Reigel (2011) or Damitio and Schmidgall (1990) found. Although their studies did find this as the second lowest important skill, their sample of hospitality industry professionals did not find that education was a factor in how important this skill was. This skill also had a significantly different importance level when comparing genders. Females believed this skill was more important than males which could be affected by the fact that a greater percentage of women surveyed are in the departments of accounting/finance and audit than males. These departments typically involve more accounting skills and since preparing journal entries is an accounting skill it seems logical. It should be noted that just because certain groups of employees believed this skill to not be as important as others, it does not mean it is not important to understand journal entries. Understanding journal entries are still necessary to prepare operating budgets, which has the highest mean score of 4.35.

There were differences in the gender and salary groupings for the perceived importance of two of the same skills, calculating and preparing taxes and preparing and posting journal entries. One likely reason that the salary groups were different for these two skills could be attributed to the representation by women in each group. Since women are underrepresented in higher positions within gaming (Costen et al., 2003), they most likely make less money which



could be a reason for this difference in these same skills. The percentage of women in each of the top five subgroups, above \$100,000, is less than the percentage of males in the same sub-group. Another potential reason for the difference in salary groups on the importance of preparing journal entries, could have to do with the education differences already discussed. Generally those with more education make higher salaries. For example, in the sample 19.7% of those with a 4 year degree make over \$200,000 and 25.5% of those with a masters make over \$200,000, while only 11.1% of those with only some college make that salary. Those with a 4 year degree who perceive this skill as less important could be the same respondents who make more money and perceive this skill as less valued. It appears that those making a higher salary value finance skills more than accounting skills which seems logical since finance skills are typically needed for high level management decisions such as forecasting.

Hein and Reigel (2011) found those with an associate degree or lower perceived accounting for receivables as more important than those with a bachelor's degree did. This study showed similar results in that those with some college also perceived this skill as more important than those with a 4 year degree. In this study though there was a significant difference between some college and a master's degree where Hein and Reigel (2011) did not find any significant differences when considering those with a master's as compared to those without. In the gaming industry not all jurisdictions allow casino credit so unless the casino is a large property in a region that allows this or has a lot of convention business, receivables are generally very low. That could be the main reason for this difference.

The most interesting finding was that years of experience and department did not have a significant difference on level of importance of the skills analyzed. While this was consistent with Hein and Reigel, (2011) it conflicted with Damitio and Schmidgall (1990) who found that more years of experience leads to a higher perceived importance for capital and cash budgeting. When analyzing differences based on department, it is interesting to note that those working in accounting and finance positions did not rate the level of importance for these skills significantly different than any other department. Damitio and Schmidgall (1990) analyzed positions a little different by evaluating controllers compared to operations managers. They found a significant difference in five skills, four of which were included in this current study. Gaming professionals of all levels of experience appeared to perceive accounting and finance skills in the same way, which makes for smoother operations when all employees have similar beliefs and goals. This could be an indication that those in gaming firms have more common goals between every level and department in the operations as compared to those in hotels only.

While this study was conducted in gaming, it included respondents from all areas of the operations and not just the casino. Many casinos are thought of as integrated resorts since they include not just a casino, but a hotel, food and beverage outlets, retail, entertainment, spas, conventions centers, etc. These results are more extensive than the previous studies, which just looked at one segment of the industry or those positions within certain departments. Kefgen (2004) believes these integrated resorts and not just simply casinos may be a contributing factor for the higher pay for casino general managers as compared to hotel managers.

### **Conclusion, Limitations, and Future Research**

Due to the interdisciplinary characteristics of the hospitality industry, integrating the industry practitioners' perspective into the curricula is paramount. By investigating gaming industry professionals with a variety of backgrounds including gender, age, salary, education, industry experience, department, and region, the current study provides practical and insightful findings regarding which specific finance and accounting competencies are perceived as significant by gaming industry professionals.

By revealing that preparing operating budgets had the highest importance of all skills, this study showed how important budgeting is to the gaming industry, which is in line with what Preston (2013) stated. Considering the capital-intensive nature of the gaming industry, cash flow is crucial for financing day-to-day operations while pursuing further expansion. Effective budgeting procedures will assist casinos with proper revenue management. Also, effective finance and accounting practices will prevent casinos from the potential losses from excessive expenses such as complimentary and free bonus programs.

This paper makes a contribution to the current body of literature and towards current and future gaming professionals as it the first to identify core competencies in finance and accounting skills perceived as important by gaming industry professional. It is also the first known study conducted after the Great Recession, which greatly effected how hospitality professionals manage. The results of this study will assist hospitality educators in 1) implementing the core competencies revealed as significant by the gaming industry, 2) revising their hospitality finance and accounting courses to emphasize the core competencies perceived as the most important by gaming industry professionals and not just hospitality in general, and 3) ensuring that current and future gaming employees possess these competencies with proficiency which may directly impact the success and profitability of the gaming industry.

This research can be utilized as a foundation for conducting similar research. Owing to an ongoing need for research into the competencies needed by

future managers, future studies can conduct a longitudinal approach to investigate the perceived importance of finance and accounting competencies and examine if any perceptions have changed over time. The extended study will assist gaming management in providing insights and adjusting those changes if any. Furthermore, since the current study primarily focuses on the gaming industry professionals' perspective, future studies conducting a comparative study of the gaming industry professionals, gaming educators, and gaming students for potential differences in the perceived importance among groups would be valuable.

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