Examining the importance of employee engagement in low-contact service models

by

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B.A., Washburn University, 2005 M.S., Kansas State University, 2008

AN ABSTRACT OF A DISSERTATION

submitted in partial fulfillment of the requirements for the degree

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Department of Psychological Services
College of Arts and Sciences

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Abstract

A significant body of academic work has amassed supporting the importance of employee engagement in the workplace and its ability to influence business outcomes. However, much of this research has been concentrated in high-contact occupations in which the relationship between the employee and the customer is prolonged and involved (e.g., financial consulting, nursing, etc.). The current study utilized movie theatre environments to determine if the ability of employee engagement to influence service delivery and business outcomes persists in low-contact service environments. This research found that even in settings characterized by brief and perfunctory employee-customer interactions, employee engagement at the business unit level significantly influenced service delivery as measured by the resulting overall guest satisfaction. Furthermore, this relationship was fully mediated by guest satisfaction with friendliness of employees, speed of service and cleanliness of the environment which previous research has found to be the primary drivers of overall guest satisfaction within this environment. Partial support was found for the ability of employee engagement to significantly predict reductions in employee turnover as well as reductions in operational inefficiency and negligence. No support was found linking employee engagement to the productivity/profitability of the business unit. Given these research findings which provide additional support for the importance of having an engaged workforce, we examined how employee satisfaction with various aspects of the company and occupational environment correlate to the employee's level of engagement. We further segment these correlations by demographic groups to better understand the relationships and more effectively target future initiatives geared toward the improvement of employee engagement.

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Approved by:

Major Professor Patrick A. Knight

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Dedication

This achievement would not have been possible without the love and support of many individuals to whom I will forever be grateful. I would like to dedicate this dissertation:

To my husband Jesse. I'll never be able to tell you how much I appreciate you for always being the guiding hand in front of me, the supportive shoulder beside me and the motivational kick behind me. All the things in this world that I value the most, I have because of you. Thank you.

To my children. Thank you for motivating me every day to be the best possible version of myself. May you always have the courage to chase your dreams, the confidence to know your ability and your worth, and the comfort of having surrounded yourself with people who will cheer when you fly and catch you when you fall.

Introduction

Since the origination of the Hawthorne studies in the 1920s (Mayo, 1933), researchers and employers have placed increasing emphasis on the role of the workforce in affecting organizational outcomes. What began as an examination of how output and productivity could be improved across manufacturing and related industrial settings soon expanded into service industries. Due to the unprecedented growth of the service sector, today there is an abundance of research on the significant impact that the workforce and its interactions with customers has on the customer experience as well as on overall business performance. In recent years, much of this research has emphasized a construct known as employee engagement.

While there is no universally accepted definition of engagement, it is often characterized as a "persistent, positive, affective-motivational state of fulfillment" (Maslach, Schaufeli, & Leiter 2001, p. 417), an "individual's involvement and satisfaction with as well as enthusiasm for work" (Harter, Schmidt, & Hayes, 2002, p. 269), or as "a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication and absorption" (Schaufeli, Salanova, Gonzalez-Roma, & Bakker, 2002, p. 74). According to Schaufeli et al., vigor, dedication and absorption are characterized by putting forth additional energy and exertion into one's work, deriving meaning, purpose and pride from one's work, and becoming fully and completely immersed in one's work, respectively.

After more than a decade of research, there is little debate that an individual's degree of engagement can significantly influence their job performance and thereby influence the organization at large. Employee engagement has been empirically linked to such outcomes as employee burnout/turnover, employee safety, productivity and profitability, and customer satisfaction and loyalty (Harter et al., 2002; Laschinger and Finegan, 2005; Laschinger and Leiter, 2006; Salanova, Agut, & Peiro, 2005; Schaufeli and Bakker, 2004). To lend further credence to the stability of these findings, the aforementioned predictor-criterion relationships appear to transcend cultural and occupational

boundaries. The positive benefits of engagement have been replicated in studies from Finland (Hakanen, Bakker, & Demerouti, 2005; Hakenen, Bakker, & Schaufeli, 2006; Mauno, Kinnunen, & Ruokolainen, 2007), Norway (Richardsen, Burke, & Martinussen, 2006), the Netherlands (Llorens, Bakker, Schaufeli, & Salanova, 2006; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007), Spain (Llorens et al. 2006), Turkey (Koyuncu, Burke, & Fiksenbaum, 2006), the United States (Laschinger & Finegan, 2005; Leiter & Maslach, 2004; May, Gilson, Harter, 2004; Salanova, Agut, & Peiro, 2005; Schaufeli & Bakker, 2004) and more, as well as across occupational groups, including administration (Leiter & Maslach, 2004), architecture (Kahn 1990), banking (Koyunce et al. 2006), dentistry (Hakenen et al. 2005), education (Hakenen et al. 2006), engineering (Xanthopoulou et al. 2007), hospitality (Salanova et al. 2005), information technology (Llorens et al. 2006), insurance (May et al. 2004), law enforcement (Richardsen et al. 2006) and nursing (Laschinger & Finegan, 2005; Mauno et al. 2007) to name a few. Though the impact of employee engagement on individual job performance, the customer experience and, by extension, company performance has been widely supported, there is also evidence to suggest that the strength of this relationship may be dependent upon the nature of the staff-customer interaction. *Operationalizing Customer Contact*

In the 1960s, researchers began attempting to theoretically and operationally define the nature of a customer's contact with a company and its staff. For example, the nature of the relationship that one might have with one's financial advisor, physician or lawyer is likely very different than the relationship that they might have with their coffee shop barista, dry cleaner, etc. Yet, on what specific dimensions do these relationships vary and how does that impact their significance?

Lefton and Rosengren (1966) theorized a model highlighting two critical factors: time span (i.e., the overall duration of the relationship between the client and the organization) and breadth of interest (i.e., the extent or intensity of the involvement between the client and the organization). Granovetter

(1973) asserted that the strength of an interaction between individuals was the combined result of the duration of time, emotional intensity, level of intimacy and degree of service reciprocity.

Hill (1977) expanded further by attempting to place an economic value on the service received. He determined that the key components of customer-staff impact were permanence (i.e., the length of time that the changes provided by the service will persist) and reversibility (i.e., the degree to which the effects of the service can be reversed or undone), with high permanence and low reversibility services being arguably more valuable. Chase and Aquilano (1977) asserted that the majority of service systems could be placed under three broad classifications: pure (e.g., personal services), mixed (e.g., branch offices), and quasi-manufacturing (e.g., distribution centers) services. They posited that pure services required the highest degree of customer contact, followed by mixed services, and finally quasi-manufacturing, which are categorized by the lowest degree of customer contact.

Six years later, Chase and Tansik (1983) proposed the Customer Contact Model (CCM), which hypothesized that both the nature of the staff/customer interaction as well as overall organizational design/efficiency would vary based on whether the organization was characterized as high-contact (HC) or low-contact (LC). Within this model, degree of contact is loosely defined as the extent of human interaction that an organization would encounter during the service execution process. This model was not empirically tested, nor was a clear statistical method of classifying an organization as HC or LC provided.

In 1995, Kellogg and Chase utilized a hospital setting to empirically test a customer contact classification model incorporating coupling, interdependence and information richness. Coupling can be categorized as either loose (i.e., "parties affect each other suddenly, occasionally, negligibly, and eventually") or tight (i.e., "parties affect each other continuously, constantly, significantly, and immediately"; Weick, 1982). Interdependence has been defined by Victor and Blackburn (1987) as the degree to which one's outcomes are directly controlled by or contingent upon the actions of another.

Finally, information richness relates to the value of the information that is exchanged between two parties (Daft & Lengel, 1984). Using multidimensional scaling, Kellogg and Chase (1995) found that the total amount of time spent in communication between the customer and the staff, though not the only significant variable, had the greatest correlation to the overall contact score.

Despite the abundance of literature that exists today emphasizing the critical role that the workforce plays in influencing the customer experience, surprisingly little research factors in the nature/degree of contact (e.g., high versus low) between the client and the organization. It is within this area of interest that the current research aims to make a significant contribution, by focusing specifically on one such industry characterized by low-contact customer interactions: the movie exhibition industry. These findings may then be extended into additional industries/occupations characterized by similar degrees of contact.

The Movie Exhibition Industry

The birth of the movie exhibition industry began in the 1890s with the creation of Thomas Edison's kinetograph. With this new technology, loops of film containing images of trained animal acts, dancers, comedians and more would spool through the machine. These became known as "peep shows." The first building dedicated to peep shows was a converted shoe store that opened in 1894 and contained five kinetograph machines. The price of admission opened at twenty-five cents per person later falling to just five cents (Gomery, 1992). Fast forward 125 years and movie exhibition is a roughly \$38 billion global industry. In 2015, in the U.S. and Canada alone, more than 1.3 billion movie-goers paid an average of \$8.43 per ticket to view the latest movie releases on more than 43,000 screens (MPAA, 2015). Furthermore, as movie-going has continued to be an increasingly prevalent phenomenon in our culture, the workforce associated with it has continued to expand, employing more than 375,000 people each year (BLS, 2014).

Based on the work of Kellogg and Chase (1995), it is evident that movie exhibition constitutes a low-contact service model characterized by loose coupling, low interdependence and low information richness, such that minimal customer— staff interaction is required during the consumption of the product. To illustrate this point, we examine a typical movie-going experience from the customer contact perspective. In this archetypal example, guests approach the movie theatre box office and have a very brief interaction with an associate (i.e., box office cashier) while purchasing their tickets. The guests then have another very limited interaction with the associate who tears their tickets and informs them where their auditorium is located (i.e., ticket-taker). At this point, the guests may or may not purchase refreshments from another associate (i.e., concessionist) before proceeding to their auditorium. The guests then spend the remainder of their visit (e.g., 2 – 3 hours) within the confines of their auditorium where they would have no additional interaction with staff members before leaving the theatre entirely at the close of their visit. Given the average inclusive length of a movie theatre visit relative to the average transaction times at the various points of contact, it is estimated that less than 3% of a guest's visit time is spent interacting with associates. In summary, the average duration of the customer-staff interactions within movie exhibition combined with the perfunctory nature of those transactions clearly establishes them as low-contact by any of the previously discussed definitions. As such, an important question emerges: given the low degree of contact that characterizes the majority of movie-going experiences, can employee engagement significantly influence service delivery and business-unit financial performance within these settings?

The Current Research Study

As previously stated, the link between employee engagement and job performance has received significant investigation and support. Dalal et al. (2012) investigated the relative importance of various job attitudes in predicting task performance as well as organizational citizenship behaviors (OCB), defined as discretionary, not formally recognized behavior that promotes organizational

effectiveness (e.g., helping others due to absence or heavy workload, volunteering for things that are not required, etc.). The results of their relative weights analysis found that employee engagement was significantly related to both constructs, explaining 15% of the variance in task performance and 25% of the variance in OCB. Additional research has further supported the relationships between engagement and task performance (Harter et al., 2002; Christian et al., 2011; Rich et al., 2010) as well as engagement and OCB (Andrew & Sofian, 2012; Babcock-Roberson & Strickland, 2010; Christian et al., 2011; Rich et al., 2010; Saks, 2006; Sonnentag, 2003). Research has also linked the enhanced job performance resulting from higher engagement to increased customer satisfaction and loyalty (Harter et al., 2002; Yuan et al., 2012). Based on this body of literature, the current research posits that more highly engaged associates will perform their work responsibilities more happily, more thoroughly and more quickly than less engaged associates, thereby positively impacting overall guest satisfaction.

Previous research conducted by Service Management Group (SMG, 2017) has investigated the specific aspects of the movie-going experience that most significantly influence a guest's appraisal of their experience overall. Using relative weights logistic regression, they have found that cleanliness of the theatre, friendliness of the associates and speed of service are the most significant drivers of overall guest satisfaction explaining 22.3%, 17.8% and 12.6% of the variance respectively. As such, if employee engagement can significantly influence guest satisfaction with any or all of these service delivery components, then it should reasonably influence satisfaction with the overall experience as well.

Hypothesis 1a: Employee engagement will significantly predict guest satisfaction with the friendliness of employees.

Hypothesis 2a: Employee engagement will significantly predict guest satisfaction with the cleanliness of theatre.

Hypothesis 3a: Employee engagement will significantly predict guest satisfaction with the speed of service.

Hypothesis 4a: Employee engagement will significantly predict overall guest satisfaction.

However, it could further be theorized that theatres with lower levels of attendance and fewer employees have higher levels of employee engagement due to the increased time and attention that the theatre management team can spend with each associate. Yet theatres with fewer staff members may also have more difficulty providing expedited service, maintaining the cleanliness of their facility and consistently exhibiting a friendly demeanor to their guests. As such, the current study also posited that change in engagement over time predicts change in service execution and the resulting guest satisfaction.

Hypothesis 1b: Year-over-year changes in employee engagement will significantly predict year-over-year changes in guest satisfaction with the friendliness of employees.

Hypothesis 2b: Year-over-year changes in employee engagement will significantly predict year-over-year changes in guest satisfaction with the cleanliness of theatre.

Hypothesis 3b: Year-over-year changes in employee engagement will significantly predict year-over-year changes in guest satisfaction with the speed of service.

Hypothesis 4b: Year-over-year changes in employee engagement will significantly predict year-over-year changes in overall guest satisfaction.

Furthermore, due to the previously discussed significant predictive relationship between friendly, clean and quick service delivery and guest satisfaction, a mediation analysis was conducted to determine the extent to which the hypothesized relationship between employee engagement and overall guest satisfaction is mediated by satisfaction with the critical service delivery elements illustrated in Figure 1.

Hypothesis 5: The relationship between employee engagement and overall guest satisfaction will be mediated by guest satisfaction with friendliness of the associates, cleanliness of the theatre and speed of service.

Employee Engagement, Employee Turnover and Poor Performance/CWB

In addition to the body of research supporting the positive occupational/organizational benefits of higher levels of employee engagement, there is also significant evidence that lower levels of employee engagement can have negative consequences for the associates themselves and their companies. In addition to the previously discussed research linking lower levels of engagement to lower task performance, research has also found a significant negative relationship between employee engagement and counterproductive work behaviors (CWB) which are defined by Sackett and DeVore (2001) as volitional acts committed by employees that are intended to do harm to an organization or its stakeholders (Ariani, 2013; Iliescu et al., 2015). A meta-analysis conducted by Harter et al. (2002) found a significant correlation of -0.30 between employee engagement and observed employee turnover while numerous studies have found a significant negative relationship between employee engagement and intentions to quit (Koyuncu et al., 2006; Saks, 2006; Andrew and Sofian, 2012).

It has also been suggested that the negative effects of low engagement may be moderated by the nature of the industry/occupation in which an incumbent is employed. Select occupations (e.g., front-line service industry employees) require substantial emotional labor, defined by Hochschild (1983) as the necessity of an individual to induce or suppress specific emotions in order to successfully display behaviors that are pleasing to the service recipient. Prior research has found that occupations requiring a significant amount of emotional labor may leave the incumbents more susceptible to stress, turnover and lower levels of job satisfaction (Pienaar & Willemse, 2008). These negative consequences may be exacerbated by other aspects of work that are often characteristic of emotional-labor-laden jobs (e.g., long and inconsistent work hours, low wages, severe fluctuations in work volume/labor demands, etc.).

Extending this into the arena of movie exhibition, though classified as a low-touch service model as defined by the amount of time spent with each guest and the nature of those interactions, high volume multi-screen theatres may serve as many as 3,000 to 5,000 guests per day throughout the year

on average. This sheer volume alone, coupled with the fact that these guests' affective states may vary widely based on their level of satisfaction or dissatisfaction with any given aspect of their visit, indicates that a considerable amount of emotional labor may be required from the associates serving these guests. Additionally, movie exhibition industry front-line service positions are often affected by long and inconsistent work hours, relatively low wages and drastic fluctuations in work volume and labor demands. It is for these reasons that employee engagement may be a vital component to employee retention based on its ability to mitigate the consequences of these negative antecedents.

Hypothesis 6a: Employee engagement will be negatively related to employee turnover and operational ineffectiveness/negligence.

Hypothesis 6b: Year-over-year changes in employee engagement will be negatively related to year-over-year changes in employee turnover and operational ineffectivenss/negligence.

Employee Engagement and Business Performance

Harter et al.'s (2002) meta-analysis found weak to moderate correlations between employee engagement and profitability/productivity at 0.17 and 0.25 respectively. Though there were variations in the studies analyzed, profitability was often quantified as profit as a percent of revenue while productivity was defined by revenue or revenue per person figures. Profitability and productivity were found to be highly correlated (0.60) such that an equally weighted financial performance composite variable was created. Finally, in many of the meta-analytic studies, financial performance was based on a difference from the prior year or difference from a planned objective criterion in an effort to correct for lack of comparability from one business unit to the next. It is based on these findings that the following hypotheses are proposed:

Hypothesis 7: Year-over-year changes in employee engagement will be positively related to year-over-year changes in theatre profitability and productivity.

Unit Level of Measurement

While the most common approach in studying employee engagement is to utilize data at the individual-employee level, research has substantiated these links at the business-unit-level as well. The meta-analysis conducted by Harter et al. (2002) examined the links between employee satisfaction/engagement and several business-unit outcomes using data from 36 companies representing more than 198,000 respondents and 7,900 business units spanning five industries including financial, manufacturing, retail, service and transportation/public utilities. The results of their analysis support the link between employee satisfaction and engagement at the business-unit level and business-unit level outcomes including customer satisfaction, productivity, profitability, employee retention and employee safety.

Perhaps the most significant advantage to utilizing an aggregate, business-unit-level approach rather than an individual approach when studying engagement is that many of the most critical business metrics (e.g., productivity, profitability, customer loyalty, etc.) are only measured and reported at the business-unit level. Therefore, aggregating employee engagement at this level allows us to tie these antecedents and consequences more directly. As such, each of the hypotheses pertaining to the current study was analyzed at the aggregate theatre-level.

Method

Participants

For the purposes of this study, archival data collected during 2014 and 2015 from both employees and guests of a large US-based movie exhibition company was used. At the time of data collection, this company consisted of approximately 345 theatres nationwide.

Regarding the collection of guest satisfaction data, throughout 2014 a total of 215,941 guests submitted valid surveys regarding their experiences at these theatres and their degree of satisfaction with various aspects of the movie-going experience. In 2015, a total of 210,706 surveys were submitted representing a decrease of 2.4%.

Regarding the collection of employee engagement data, in October 2014, an electronic survey was sent to 14,832 theatre-level movie exhibition employees. A total of 11,311 employees submitted completed surveys, resulting in a response rate of 76.3%. In 2015, the same survey was sent to 15,631 theatre-level employees. A total of 11,546 employees submitted completed surveys, resulting in a response rate of 73.9%.

As previously stated, this study aggregated both employee and guest responses to create business-unit level (i.e., theatre) data. After removing theatres that had fewer than five employee responses for the building, insufficient data on one or more elements during the period of the study, or that had joined the company between the data collection periods of 2014 and 2015, the final sample size was approximately 287 theatres for all year-over-year (YOY) hypothesis testing and approximately 306 theatres for the purposes of all other hypothesis testing.

Materials

Employee Engagement. In October of 2014 and October of 2015, all employees were sent a 65-item electronic survey assessing their level of satisfaction on a 5-point Likert-type scale with the following aspects of their occupational environment: Involvement and Belonging, Recognition, Growth

and Development, Supervisor/Manager Effectiveness, Communication, Diversity and Inclusion, Health and Wellness, Social Responsibility, Leadership Trust, Performance Management, Performance Excellence, Change Management, Compensation and Benefits, Work/Life Balance, Behavioral Change and overall Employee Engagement. Employee engagement was assessed using four items from the proprietary measure developed by a reputable and established third-party vendor specializing in workforce intelligence. This 4-item construct was found to have an internal consistency reliability of 0.90 within the current study.

Guest Satisfaction. Guests of the participating theatre chain were invited via printed invitation at the box office to complete a survey regarding their visit. Questions on this survey assessed guest demographics, basic details regarding their visit (e.g., did they visit the concession stand, restroom, etc.) and their level of satisfaction on a 5-point Likert-type scale ranging from 1 (highly dissatisfied) to 5 (highly satisfied) with various aspects of their visit (e.g., friendliness of the associates, cleanliness of the building, speed of service, the overall experience, etc.). As employee engagement was measured during the October months, only responses from guest visits occurring within 3 months pre and post the employee engagement survey (i.e., July – December) were used. Throughout the applicable months, 108,226 and 106,831 surveys were completed in 2014 and 2015 respectively.

Employee Turnover. Turnover rate was measured as the percentage of employee turnover (both voluntary and involuntary) by theatre occurring within the 12-month periods ending June 2015 and June 2016. Annualized data was used to normalize the significant fluctuations in turnover that are experienced by the movie exhibition industry each year during the post-summer and post-winter holiday periods which is the direct result of seasonal business downturn.

Operational Ineffectiveness/Negligence. For the purposes of this research, operational ineffectiveness/negligence was operationalized as the number of compliance reports as well as the total number of on-site accidents occurring per theatre. Compliance reports refer to formally documented

submissions by theatre personnel to report allegations requiring investigation such as inappropriate conduct, discrimination, harassment, abuse, threats, wrongful termination, etc. On-site accidents (i.e., incidents/claims) refer to formally documented injuries occurring within the theatre to either guests or staff for which financial payments are made by the company (claims) or for which there is no financial compensation required (incidents). Examples of such injuries could include slipping on a wet floor, tripping on torn carpet, falling in a dark auditorium, etc.

Theatre Productivity/Profitability. For the purposes of this research, productivity/ profitability at the theatre level was operationalized as a measure of concession sales as well as theatre audit performance. Concession sales were measured as the average per capita dollar amount spent on concessions (Food and Beverage Per Patron (excluding alcohol); FBPP). Neither theatre attendance nor overall theatre revenue were used as measures of financial performance in this study as these variables are heavily influenced by factors such as competitive encroachment and film product, more so than by service delivery. However, if the environment is clean, service is quick and employees are friendly, a theatre may expect to generate higher levels of concession sales, controlling for fluctuations in attendance by factoring in the per capita adjustment. Regarding the second productivity/profitability measure, theatres are audited on an annual basis. These audits assess a variety of topics including, but not limited to:

- Shortages or surplus of cash on hand
- Documentation for voids and refunds
- Inventory of concession and other items
- Completion of required training for alcohol service
- Building security during non-operating hours
- Payroll being issued in a timely and accurate manner

Design and Procedure

Collection of Employee Engagement Data. Employees at the supervisor and manager levels were sent an engagement survey via their company-provided e-mail address, accompanied by a message encouraging their participation and establishing a 2-week completion deadline. One week later, employees who had not yet completed the survey were sent a reminder message containing a link to access the survey. Employees below the supervisor level (i.e., crew members) were provided access to the engagement survey via a link that was made available on a public computer at each theatre, as these associates do not have a company-provided e-mail address. These employees were made aware of the survey through the company's internal workforce communication system.

Survey responses were collected by the third party vendor. All identifying information was removed prior to the data being returned to the employer, thereby ensuring respondent confidentiality. Completion of this survey was entirely voluntary and, while management was strictly prohibited from requiring or coercing employees to participate, they could at their discretion incent participation. An example of one such tactic could include offering employees a pizza party once the theatre achieved a certain response rate on the survey. Each employee was allowed to access the survey only once to prevent multiple submissions. The final theatre-level employee engagement score was calculated as the equally weighted average percentage of employees who indicated they Strongly Agreed with any of the items on the 4-item engagement scale.

Collection of Guest Satisfaction Data. Data was collected from theatre guests via one of three methods: pop-up invitation at the box office, email survey or postcard invitation handed out at the box office. Though different methods of invitation were used, each type directed guests to respond to the same survey such that survey length, format and content was consistent across the various methodologies. Through these combined methods, each theatre was allowed maximum total 60 responses per month.

Pop-up Invitations. Following a ticket purchase at the box office, a survey invitation would print on the same ticket stock as the theatre ticket stubs. The printed invitation directed guests to an online survey soliciting feedback about their visit. Guests were allowed 7 days to respond in exchange for entry into a monthly drawing for one \$100 company gift card. Frequency of invitation varied by theatre such that invitations could print as frequently as one out of every two transactions (1:2) or as infrequently as one out of every thirteen transactions (1:13). This ratio was based on average monthly theatre attendance.

Email Invitations. Email invitations were sent to theatre loyalty cardholders within 24 hours of their transaction, provided that they had not received a survey invitation within the last 90 days. Each theatre had a total number of email invitations that could be sent to their guests daily with a frequency ranging from 10 to 40 total survey invitations sent per day. Again, guests were allowed 7 days to respond in exchange for entry into the same monthly \$100 gift card drawing.

Postcard Invitations. For theatres that consistently had difficulty obtaining 20-30 valid survey responses per month, supplemental postcard survey invitations were mailed to them in packages of 100 invitations. Theatres were provided instructions for manual distribution of the survey invitations. As with the other methods, guests were allowed 7 days to respond to the survey yet, with this method, guests were given a code following completion of the survey that provided one free small popcorn during their next theatre visit. As this form of incentive is often more effective at increasing survey response rate than a sweepstakes methodology, it was used in accordance with the manual invitations to drive additional response.

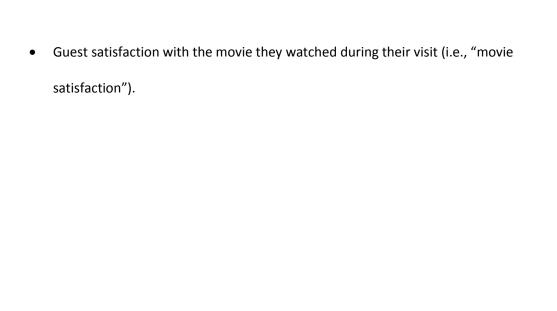
In both 2014 and 2015, pop-up invitations accounted for 50% of the responses, followed by email at 47% and postcard invitations at 3%. To ensure data quality, a number of methods were used to clean the data and eliminate invalid responses. Within a given month, surveys submitted from the same IP address and/or using the same coupon code were removed to prohibit the same individual from

providing feedback for the same theatre multiple times and potentially skewing the results. Surveys with total completion times of less than 45 seconds or greater than 20 minutes were eliminated to remove respondents who were likely completing the survey without reading the questions or who left the survey open but unfinished for an extended period of time. Finally, surveys with incomplete data, such that respondents did not respond to the question of overall satisfaction, were also removed. The final theatre score for each of the variables taken from the Guest Satisfaction Survey was calculated as the percentage of guests that indicated they were Highly Satisfied with each respective aspect of their visit (e.g., friendliness of employees, cleanliness of theatre, speed of service) or overall.

Collection of all other Dependent Variables. All other dependent variables in this study were maintained on an ongoing basis by various departments within the participating company including Human Resources, Food and Beverage, and Compliance and Risk.

Control Variables. Previous analysis has indicated that theatres may have systematic differences in guest satisfaction scores based on factors independent of service delivery such as their location, the demographics of the customer base they serve and the type of seating that they offer and how well the guest enjoyed their movie. As such, control variables were used in each of the following analyses to account for this impact. These control variables included:

- Theatre seating with traditional or core seating coded as 0 and recliner/dine-in seating coded as 1 (i.e., "theatre concept").
- Percent of the population within the theatre's zip code that identified themselves as
 White/Caucasian according to data from the U.S. Census Bureau (i.e., "percent White").
- Percent of the population within the theatre's zip code with a college degree according to data from the U.S. Census Bureau (i.e., "percent with a college degree").
- Estimated population of the zip code in which the theatre is located according to data from the U.S. Census Bureau (i.e., "population").



Analysis and Results

Prior to hypothesis testing, a short validation of the 4-item employee engagement scale was conducted. Because this proprietary measure was developed by a private-sector consulting firm and, to our knowledge, had not been utilized in academic research, a survey was conducted to provide additional evidence of the measure's validity. The survey was administered to 208 individuals selected from the general population who were employed full-time and had been in their current position for at least one year. They were asked to complete basic demographic information as well as the 4-item engagement measure, the 17-item Utrecht Work Engagement Scale (UWES; Schaufeli & Bakker, 2003) and the Job in General subscale of the Job Descriptive Index (JDI; Smith, Kendall, & Hulin, 1969). The final sample was 59% male, 67% White, 42% between the ages of 25-34 with a relatively equal distribution across the salary bands. The 4-item engagement scale, JDI and UWES each had sufficient reliability, with Cronbach's alphas of 0.90, 0.92 and 0.93, respectively. The 4-item measure was correlated at 0.70 with the JDI and 0.59 with the UWES. The JDI and UWES were correlated 0.63 with one another. These finding are consistent with a substantial body of research which has found moderate to strong correlations (i.e., r = 0.42 - 0.81) between scores on employee engagement and job satisfaction measures (Rich et al., 2010; Saks, 2006; Wefald, et al., 2011; Yalabik et al., 2013) thus further substantiating the 4-item engagement scale.

Test of Assumptions

The assumptions for a hierarchical multiple regression include: (a) variables are normally distributed in the population, (b) linear relationship between the independent and dependent variables, (c) homoscedasticity is present, (d) cases represent a random sample from the population and scores on variables are independent of other scores on same variables, and (e) no multicollinearity exists.

Univariate normality was assessed via the skewness and kurtosis indices of the variables. Per Kline (2011), a variable is not normally distributed if its skewness index is above three and if its kurtosis

Annual Growth 2000 to 2010 were not normally distributed prior to assessment for outliers. Next multivariate normality was examined via the normal probability plots generated by the linear regression procedure. Per Norusis (1991), multivariate normality is fulfilled when the points are clustered towards the diagonal. Examination of these plots revealed no violations to multivariate normality assumptions.

In order to identify univariate outliers, the variables were transformed into standardized scores. A total of 24 theatres whose standardized values were above the absolute value of 3.29 were deemed to be univariate outliers (Tabachnick & Fidell, 2007) and subsequently removed. Additionally, 3 theatres were removed due to having fewer than 5 total responses comprising their overall employee engagement score. To identify multivariate outliers, the Cook's Distance (D) values generated by the linear regression procedures were examined. Cases whose Cook's D values were two standard deviations outside of the Cook's D mean were deemed to be multivariate outliers and subsequently omitted from the respective regression procedure. Casewise diagnostics revealed no cases with standardized residual values above 3.0 or below –3.0.

The assumption of homoscedasticity was evaluated by examining scatter plots of the residuals generated during the multiple regression procedure. Examination of these scatter plots revealed that the residuals were randomly dispersed across all values of employee engagement indicating that the assumption for homoscedasticity was fulfilled.

Finally, the assumption of multicollinearity was assessed by examining the tolerance and variance inflation factor (VIF). Values of VIF that exceed 10 are often regarded as indicating multicollinearity. As shown in Table 2, no predictor exceeded this threshold indicating that the assumption of multicollinearity was fulfilled.

Descriptive Statistics

All hypotheses predicting YOY results were tested using change scores from 2014 to 2015. All other hypotheses were testing using only data from 2015. Descriptive statistics for the variables in the 2014 and 2015 datasets, as well as descriptive statistics for the YOY change variables can be seen in Table 3 and Table 4, respectively.

Hypothesis Testing

The first set of hypotheses in the current study posited that theatre-level employee engagement would significantly predict guest satisfaction with the friendliness of employees, cleanliness of theatre, speed of service and their overall experience. Four hierarchical regression analyses were conducted to assess these research questions.

Employee Engagement Predicting Satisfaction with Friendliness of Employees (Hypothesis 1a)

In Step 1 of the hierarchical linear regression, each of the aforementioned control variables were entered into the model. In Step 2, employee engagement was entered with guest satisfaction with friendliness of employees as the dependent variable. Results of this regression can be found in Table 5.

The hierarchical regression model revealed that the variables entered in Step 1 and Step 2 accounted for a significant portion of the variance in guest satisfaction with friendliness of employees. The control variables entered in Step 1 accounted for 29.6% (R^2 = .296) of the variance in guest satisfaction with friendliness of employees (F(5, 306) = 25.69, p < .01). Employee engagement was entered in Step 2, producing a statistically significant model, (F(6,305) = 27.96, p < .01) with an R^2 of .355. The change in R^2 from Step 1 to Step 2 of .059 was statistically significant (p < .01), indicating that the addition of employee engagement to the regression model added significantly to the overall regression equation. In Step 2, several of the control variables as well as employee engagement significantly predicted guest satisfaction with friendliness of employees. Theatre concept (θ = .12, p = .009), percent White (θ = .28, p = .001), movie satisfaction (θ = .33, p = .001) and employee engagement

(θ = .25, p = .001) were statistically significant positive predictors of friendliness of employees. As we might expect, individuals with higher levels of education appear to more discerning judges of the service they receive as percent with a college degree (θ = -.11, p = .04) emerged as a negative statistically significant predictor of guest satisfaction with friendliness of employees. Given these findings, Hypothesis 1a was supported.

Employee Engagement Predicting Satisfaction with Cleanliness of Theatre (Hypothesis 2a)

In Step 1 of this hierarchical linear regression, the same control variables were entered as in the previous analyses. In Step 2, employee engagement was entered with guest satisfaction with cleanliness of theatre as the dependent variable. Results of this regression can be found in Table 6.

The hierarchical regression model indicated that the models in Step 1 and Step 2 accounted for a significant portion of the variance in cleanliness of theatre. The control variables entered in Step 1 accounted for 33.4% ($R^2 = .334$) of the variance in cleanliness of theatre (F(5, 306) = 32.15, p < .01). After controlling for the impact of those variables, employee engagement was entered in Step 2 producing a better statistically significant model (F(6,305) = 29.61, p < .01) with an R^2 of .356. This change in R^2 from Step 1 to Step 2 of .022 was statistically significant (p < .01), indicating that the addition of employee engagement to the regression model added significantly to the overall regression equation. In Step 2, several of the control variables and employee engagement significantly predicted cleanliness of theatre. Theatre concept ($\theta = .36, p = .001$), percent White ($\theta = .16, p = .001$), movie satisfaction ($\theta = .38, p = .001$) and employee engagement ($\theta = .15, p = .001$) were statistically significant positive predictors of cleanliness of theatre. Given these findings, Hypothesis 2a was also supported.

Employee Engagement Predicting Satisfaction with Speed of Service (Hypothesis 3a)

In Step 1 of this hierarchical linear regression, the same control variables were entered as in the previous analyses. In Step 2, employee engagement was entered with guest satisfaction with speed of service as the dependent variable. Results of this regression can be found in Table 7.

The hierarchical regression model indicated that the models in Step 1 and Step 2 accounted for a significant portion of the variance in guest satisfaction with speed of service. Step 1, which contained the control variables, accounted for 29.7% (R^2 = .297) of the variance in guest satisfaction with speed of service (F(5, 306) = 25.69, p < .01). After controlling for the impact of those variables, employee engagement was entered in Step 2 producing a better statistically significant model (F(6, 305) = 26.50, p < .01) with an R^2 of .343. The change in R^2 from Step 1 to Step 2 of .046 was statistically significant (p < .01), indicating that the addition of employee engagement to the regression model added significantly to the overall regression equation. In Step 2, several of the control variables as well as employee engagement predicted guest satisfaction with speed of service. Theatre concept (θ = .19, p = .001), percent White (θ = .32, p = .001), movie satisfaction (θ = .31, p = .001) and employee engagement (θ = .21, p = .001) were positive statistically significant predictors of guest satisfaction with speed of service. Given these findings, Hypothesis 3a was also supported.

Employee Engagement Predicting Overall Guest Satisfaction (Hypothesis 4a)

In Step 1 of this hierarchical linear regression, the same control variables were entered as in the previous analyses. In Step 2, employee engagement was entered with guest satisfaction with their overall experience as the dependent variable. Results of this regression can be found in Table 8.

The hierarchical regression model indicated that the models in Step 1 and Step 2 accounted for a significant portion of the variance in overall guest satisfaction. The control variables entered in Step 1 accounted for 42% (R^2 = .420) of the variance in overall guest satisfaction (F(5, 306) = 44.23, p < .01). After controlling for the impact of those variables, employee engagement was entered in Step 2 producing a better statistically significant model (F(6,305) = 39.29, p < .01) with an R^2 of .436. This change in R^2 from Step 1 to Step 2 of .016 was statistically significant (p < .01), indicating that the addition of employee engagement to the regression model added significantly to the overall regression equation. In Step 2, several of the control variables as well as employee engagement predicted overall

guest satisfaction. Theatre concept (β = .44, p = .001), percent White (β = .16, p = .001), movie satisfaction (β = .39, p = .001) and employee engagement (β = .13, p = .003) were statistically significant positive predictors of overall guest satisfaction. Given these findings, Hypothesis 4a was also supported. Impact of YOY Change in Employee Engagement on Guest Satisfaction (Hypotheses 1b – 4b)

The next set of hypotheses posited that YOY changes in employee engagement would significantly positively predict YOY changes in the dependent variables of guest satisfaction with friendliness of employees, cleanliness of theatre, speed of service as well as satisfaction with the overall experience. Change scores (2014 to 2015) were calculated for employee engagement as well as for each of the dependent variables to assess improvement. Four hierarchical linear regression models were used to assess these research questions; detailed results of these analyses can be found in Tables 9 – 12.

The first analysis examined the impact of YOY change in employee engagement on YOY change in guest satisfaction with friendliness of employees (Hypothesis 1b). In the first step, the control variables used in the previous analyses were entered into the equation. In the second step, YOY improvement in employee engagement was entered into the model.

The hierarchical regression model indicated that the models in Step 1 and Step 2 accounted for a significant portion of the variance in YOY improvement in friendliness of employees. Step 1 accounted for 5.9% (R^2 = .059) of the variance in YOY improvement in friendliness of employees (F(5, 287) = 3.56, p < .01). Step 2, with YOY improvement in employee engagement added to the regression model, was a better statistically significant model (F(6,286) = 5.02, p < .01) with an R^2 of .095. The change in R^2 from Step 1 to Step 2 of .037 was statistically significant (p < .01), indicating that the addition of YOY improvement in employee engagement added significantly to the regression equation.

In Step 2, several of the control variables and YOY improvement in employee engagement predicted YOY improvement in friendliness of employees. Theatre concept (β = .12, p = .03) and YOY improvement in employee engagement (β = .19, p = .001) were statistically significant and positive

predictors of YOY improvement in friendliness of employees. Movie satisfaction (β = - .16, p = .01) emerged as a negative statistically significant predictor of YOY improvement in friendliness of employees. Given the findings, the null hypothesis was rejected.

The second analysis examined the impact of YOY change in employee engagement on YOY change in guest satisfaction with cleanliness of theatre (Hypothesis 2b). Once again, the control variables were entered into the equation in Step 1, while YOY improvement in employee engagement was entered into the model in Step 2.

The hierarchical regression model indicated that the models in Step 1 and Step 2 accounted for a significant portion of the variance in YOY improvement in cleanliness of theatre. Step 1 accounted for 11.4% (R^2 = .114) of the variance in YOY improvement in cleanliness of theatre (F(5, 287) = 7.39, p < .01). Step 2, with YOY improvement in employee engagement added to the regression model, was a better statistically significant model (F(6, 286) = 7.91, p < .01) with an R^2 of .142. This change in R^2 from Step 1 to Step 2 of .028 was statistically significant (p < .01), indicating that the addition of YOY improvement in employee engagement to the regression model added significantly to the regression equation.

In Step 2, several of the control variables and YOY improvement in employee engagement predicted YOY improvement in cleanliness of theatre. Theatre concept (β = .30, p < .001) and YOY improvement in employee engagement (β = .17, p = .002) were statistically significant and positive predictors of YOY improvement in cleanliness of theatre. Additionally, movie satisfaction was a negative statistically significant predictor of YOY improvement in cleanliness of theatre (β = -.16, p < .01). None of the other variables in the model were statistically significant predictors of YOY improvement in cleanliness of theatre. Given the findings, the null hypothesis was rejected.

The third analysis examined the impact of YOY change in employee engagement on YOY change in guest satisfaction with speed of service (Hypothesis 3b). Once again, the control variables were

entered in Step 1, while YOY improvement in employee engagement was entered into the model in Step 2.

The hierarchical regression model indicated that the model in Step 2 accounted for a significant portion of the variance in YOY improvement in speed of service. Step 1 accounted for 2.8% (R^2 = .028) of the variance in YOY improvement in speed of service and the model was not statistically significant (F(5, 287) = 1.62, p = .15). Step 2, with YOY improvement in employee engagement added to the regression model, was a better statistically significant model (F(6,286) = 2.62, p < .01) with an R^2 of .052. This change in R^2 from Step 1 to Step 2 of .025 was statistically significant (p < .01), indicating that the addition of YOY improvement in employee engagement added significantly to the regression equation.

In Step 2, only YOY improvement in employee engagement predicted YOY improvement in speed of service. YOY improvement in employee engagement (β = .15, p = .007) was a statistically significant and positive predictor of YOY improvement in speed of service. None of the other variables in the model were statistically significant predictors of YOY improvement in speed of service. Given the findings, the null hypothesis was rejected.

The final YOY analysis examined the impact of YOY change in employee engagement on YOY change in overall guest satisfaction (Hypothesis 4b). Once again, the control variables were entered into the equation in Step 1, while YOY improvement in employee engagement was entered into the model in Step 2.

The hierarchical regression model indicated that the models in Step 1 and Step 2 accounted for a significant portion of the variance in YOY improvement in overall guest satisfaction. Step 1 accounted for 11.8% (R^2 = .118) of the variance in YOY improvement in overall guest satisfaction (F(5, 287) = 7.68, p < .01). Step 2, with YOY improvement in employee engagement added to the regression model, was a better statistically significant model (F(6, 286) = 9.93, p < .01) with an R^2 of .173. This change in R^2 from

Step 1 to Step 2 of .054 was statistically significant (p < .01), indicating that the addition of YOY improvement in employee engagement added significantly to the regression equation.

In Step 2, several of the control variables and YOY improvement in employee engagement predicted YOY improvement in overall guest satisfaction. Theatre concept (β = .31, p = .001) and YOY improvement in employee engagement (β = .23, p = .001) were statistically significant and positive predictors of YOY improvement in overall guest satisfaction. None of the other variables in the model were statistically significant. Given the findings, the null hypothesis was rejected.

Mediation Analysis (Hypothesis 5)

Given previous research findings that satisfaction with friendliness of employees, speed of service and cleanliness of theatre significantly predict overall guest satisfaction, Hypothesis 5 posited that the significant impact of employee engagement on overall guest satisfaction would be mediated by these three service execution variables. To assess this research question, one parallel multiple mediation analysis was performed using the PROCESS macro for SPSS (Hayes, 2013). Per Kline (2011), a variable is deemed a mediator when the following criteria are met: (a) the independent variable significantly predicts the mediator; (b) the mediator significantly predicts the dependent variable; and (c) the indirect effect is statistically significant while the direct effect is not statistically significant. A 1,000-sample bootstrapping estimation procedure was conducted to determine the significance of the direct and indirect effects.

Regarding the first criteria outlined by Kline (2011), results of this analysis, located in Table 13, found that employee engagement was a significant predictor of each mediating variable: friendliness of employees (b = .128, SE = .022, p < .001), cleanliness of theatre (b = .119, SE = .028, p < .001), speed of service (b = .113, SE = .021, p < .001). Regarding the second criteria outlined by Kline (2011), results found that both friendliness of employees (b = .266, SE = .067, p < .001) and cleanliness of theatre (b = .614, SE = .044, p < .001) were significant predictors of overall guest satisfaction. However, this criteria

was not fulfilled for speed of service (b = -0.034, SE = .062, p = .585). Finally, regarding the third criteria outlined by Kline (2011), the direct effect of employee engagement on overall guest satisfaction was not significant after controlling for the mediator variables (b = -0.003, SE = .016, p = .854). In summary, results found that friendliness of employees and cleanliness of theatre fully mediated the relationship between employee engagement and overall guest satisfaction. Speed of service was not a statistically significant mediator.

Employee Engagement Predicting Employee Turnover and Operational Ineffectiveness/ Negligence (Hypothesis 6a)

Based on previous research findings that higher levels of employee engagement lead to lower levels of employee turnover and improved task performance, Hypothesis 6a posited that higher levels of employee engagement would predict lower levels of both observed employee turnover as well as operational ineffectiveness/negligence (operationalized via compliance reports and on-site accidents). Three linear regression models were used to address this research question. Prior to the interpretation of these regression models, tolerance and VIF values were examined for all variables; no issues of multicollinearity were identified.

The results of the regression equations can be found in Tables 14 - 16. The first regression model as a whole was not statistically significant (F(1, 311) = 0.13, p = .71) as employee engagement accounted for 0% of the variance in employee turnover ($R^2 = .00$). The test of the regression model indicated that employee engagement (B = -.05, p = .71) was not a statistically significant predictor of employee turnover. The second regression model as a whole was also not statistically significant (F(1,310) = 3.50, p = .06) as employee engagement accounted for 1.1% of the variance in the number of compliance reports filed ($R^2 = .011$). The test of the regression model indicated that employee engagement (B = -.01, p = .06) was not a significant predictor of number of compliance reports filed. Finally, the third regression model was statistically significant (F(1,311) = 9.02, p = .00) as employee

engagement accounted for 2.8% of the variance in accidents occurring at the theatre (R^2 = .028). The test of the regression model indicated that employee engagement (B = -.05, p = .003) was a negative statistically significant predictor of accidents occurring at the theatre. As such, the results of these three analyses reveal that Hypothesis 6a was partially supported.

YOY Change in Employee Engagement Predicting YOY Change in Employee Turnover and Operational Ineffectiveness/ Negligence (Hypothesis 6b)

Hypothesis 6b posited that YOY change in employee engagement would significantly predict YOY change in employee turnover as well as YOY change in the number of compliance reports and accidents occurring at the theatre. YOY change scores were calculated for employee engagement as well as for each of the dependent variables to assess improvement/decline (2014 to 2015). Consistent with the previous analyses, three linear regression models were used to address this research question. Prior to the interpretation of these regression models, tolerance and VIF values were examined for all variables and once again, no issues of multicollinearity were identified.

Detailed results of these analyses can be found in Tables 17 - 19. The first regression model was statistically significant (F(1, 291) = 7.22, p = .008) as YOY change in employee engagement accounted for 2.4% of the variance in YOY change in employee turnover ($R^2 = .024$). The test of the regression model indicated that YOY change in employee engagement (B = -.36, p = .008) was a negative statistically significant predictor of YOY change in employee turnover. The second regression model was also a statistically significant (F(1,236) = 4.06, p = .04) as YOY change in employee engagement accounted for 1.7% of the variance in YOY change in compliance reports ($R^2 = .017$). The test of the regression model indicated that YOY change in employee engagement (B = -.02, P = .04) was a negative statistically significant predictor of YOY change in the number of compliance reports submitted. The third regression model was not statistically significant (F(1, 291) = 0.025, P = .87) as YOY change in employee engagement accounted for 0% of the variance in YOY change in the number of accidents reported at the

theatre (R^2 = .00). The test of the regression model indicated that YOY change in employee engagement (B = -.002, p = .87) was not a statistically significant predictor of YOY change in the number of accidents reported. As was the case with Hypothesis 6a, the results of these three analyses reveal that Hypothesis 6b was also partially supported.

YOY Change in Employee Engagement Predicting YOY Change in Productivity/Profitability

The final hypothesis posited that YOY change in employee engagement would significantly positively predict YOY change in theatre profitability and productivity. As discussed, theatre productivity/profitability was operationalized as the average dollar amount spent per guest on concessions excluding alcohol (FBPP), as well as theatre performance on the annual audit. Consistent with the previous analyses, YOY change scores (2014 to 2015) were calculated for employee engagement as well as for each of the dependent variables. Prior to the interpretation of these regression models, tolerance and VIF values were examined for all variables and once again, no issues of multicollinearity were identified.

Detailed results of these regression analyses can be found in Tables 20 - 21. The first regression model was not statistically significant (F(1, 289) = 0.22, p = .63) as YOY improvement in employee engagement accounted for only 0.1% of the variance in YOY improvement in audit performance ($R^2 = .001$). Given the lack of a statistically significant model, the regression coefficient for YOY improvement in audit performance was not interpreted (B = .000, p = .63). Similarly, the second regression model was also not statistically significant (F(1, 290) = .001, p = .97) as YOY improvement in employee engagement accounted for none of the variance in YOY improvement in FBPP ($R^2 = .000$). Given the lack of a statistically significant model, the regression coefficient for YOY improvement in FBPP was also not interpreted (B = .000, p = .63).

Discussion

The current study was conducted to examine the impact of employee engagement on service delivery and other relevant business-unit-level outcomes within a low-contact service environment. The results presented here provide further evidence of the universal importance of employee engagement. Employee engagement at the theatre level was a positive statistically significant predictor of guest satisfaction with the friendliness of employees, the speed of service, the cleanliness of the theatre and, consequently, with the overall guest experience. Each of these relationships remained statistically significant when looking at the impact of YOY improvements in employee engagement on YOY improvements in guest satisfaction with each of the service delivery components as well as with the overall experience. Furthermore, mediation analysis identified that employee engagement does not impact guest overall satisfaction directly, but rather does so through specific service delivery components, thereby providing more actionable avenues through which companies can improve the guest experience.

For those employers who may still doubt the relevance of employee engagement, we have found that employee engagement can impact the guest experience even during the most brief and basic of interactions. This reinforces the need for employers in low-contact service sectors to regularly assess and advance the engagement level of their workforce as this impacts the quality of service that is provided to guests, not only during direct contact interactions, but also peripherally by the level of effort exerted in other essential areas of their job functions. Specifically, the participating company in this study, as well as others characterized by similar service platforms, can use this information to prescribe targeted customer-staff interaction guidelines that are designed to create high-impact, brief-duration exchanges. Examples within the current sample could include the box office cashier reminding guests to stay for the extra scenes after the movie credits, the concessionist making specific recommendations

based on his or her personal preferences, or the usher inquiring whether guests enjoyed the movie as they exit the auditorium and wishing them a pleasant evening.

The present study further examined the ability of employee engagement to mitigate negative business impacts in the forms of employee turnover, number of compliance reports submitted and number of accidents occurring at the theatre. These hypotheses were partially supported. While employee engagement was not found to significantly predict turnover on a same-year basis, it was determined that YOY improvements in employee engagement significantly predicted YOY declines in employee turnover. This was also the case with compliance reports submitted from the theatre. A slightly different relationship was found with the number of accidents such that higher levels of employee engagement significantly predicted lower numbers of accidents on an individual-year basis, however, these results did not extend to YOY improvements. On balance, these results indicate that employee engagement does have some ability to mitigate negative business-related outcomes, but more research in this area is needed.

Finally, this study examined the ability of employee engagement to predict positive business-related outcomes in terms of productivity/profitability. These hypotheses were not substantiated, as YOY change in employee engagement did not significantly predict YOY improvement in theatre audit performance nor YOY growth in the average amount each guest spent on concessions. It could be theorized that other variables such as change in theatre leadership, economic conditions of the area, the propensity of guests in the area to be health-conscious consumers, etc. are simply much more relevant for influencing these metrics. Again, additional research is needed.

Despite the lack of support for some hypotheses in the current study, the support for the link between employee engagement and service delivery was clear. Given these findings, it would be remiss not to subsequently discuss how companies could improve the engagement of their workforces to fully realize these benefits. To lend additional insight into this area, we examined responses from 9,817

employees to determine which aspects of their work/organizational environment were significantly correlated to their overall level of engagement. Furthermore, these correlations were compared across the various demographic groups (e.g., men versus women, under 25 years of age versus over 25 years of age, managers versus crew level, etc.) using Fisher's r-to-z transformation to determine how efforts to improve employee engagement could be targeted for the greatest degree of impact. Descriptive statistics as well as results of these correlational comparisons can be found in Tables 22 – 27.

Interesting insight was gained when the correlations were compared among the various demographic groups of respondents. For example, recognition became one of the top three correlates of employee engagement when isolating the responses of female associates. Additionally, work-life balance was significantly more highly correlated with employee engagement for respondents from minorities compared to their White counterparts. Satisfaction with opportunities for growth/development was more highly correlated to engagement for White/Caucasian respondents. When comparing age groups, recognition was a stronger correlate to engagement for those under 25, while factors such as health/wellness and performance excellence were stronger correlates for those over 25. Feelings of involvement and belonging were stronger correlates of engagement for film crew level associates whereas behavioral change and compensation/benefits were stronger correlates for managerial level associates. Finally, when comparing results between those with higher and lower levels of tenure within the organization, those with more than 5 years of tenure saw higher correlations between engagement and health/wellness, future vision and leadership trust than those with less than 5 years of tenure. These findings, as well as others presented in the correlation tables, provide unique insight into the differences between demographic groups and the work factors that may drive their overall engagement thereby facilitating the development of strategic engagement initiatives.

There are certain limitations to the current study which should be considered when interpreting these results and which may provide additional direction for future research. First and foremost, the measure used to assess employee engagement was developed by a private consulting firm. This measure, and many others that are commonly used in industry practice, are often not validated through the processes that are customary in the academic arena. Our brief analysis of this measure found that while all correlations were significant, the 4-item engagement scale was more highly correlated with an existing job satisfaction scale (r = 0.70 with the JDI) than with the most commonly used engagement scale (r = 0.59 with the UWES). As such, one could speculate that this study is not researching engagement, but rather another element of the broader classification of job attitudes (e.g., satisfaction, commitment, etc.). This ambiguity surrounding the engagement construct has been inherent since its original inception. Over time, research has continually struggled to clearly delineate engagement from other long-standing and widely supported constructs (Rigg, 2013). As recently as 2016, Nimon, Shuck and Zigarmi conducted research suggesting that the significant correlations between employee engagement and job satisfaction may be due to the semantic similarity inherent in the wording of the specific scale items. Additionally, even when keeping within the existing engagement paradigm, inconsistent results can be found between established, commonly used scales purporting to measure engagement. Byrne, Peters and Weston conducted a study examining the relationships among the UWES and the Job Engagement Scale (JES), as well as other job attitudes and outcome variables. Their findings showed that both scales, while related, were not entirely consistent such that they displayed differential relationships with many variables including stress, job performance, job commitment and burnout. This highlights two important issues that should be addressed by future research endeavors. First, practitioners and academicians should continue to bridge the gap between concepts, scales and approaches that are supported by science and those that are applied in practice. Second, future

research should continue to investigate the notion of engagement as a truly unique construct as well as to further validate the existing scales currently used to assess it.

A final limitation affecting the current study is its utilization of employees from one company within one specific industry to represent low-contact service models which may limit the generalizability of these findings. Additionally, the movie exhibition industry was determined to be low-contact on a theoretical, rather than empirical, basis. As not all low-contact service models would constitute a homogeneous level of service, future research should aim to assess service models on a degree of contact continuum to determine the extent to which the impact of employee engagement is moderated within this paradigm.

As previously discussed, research investigating the significance of employee engagement within low-contact service models has been limited up to this point. The current study provides further evidence that employee engagement is a significant antecedent of many business-related outcomes, even when the degree of contact between employees and guests is limited. By extension, if employee engagement can account for 2.2% - 5.9% incremental variance in guest satisfaction in low-contact environments, it becomes an even more significant factor when the degree of customer-staff interaction is high. These findings have important implications for both academic and applied settings. This research also provides a basis upon which to extend research incorporating degree of contact as well as a business-unit level of analysis into the employee engagement literature.

References

- Andrew, O.C. & Sofian, S. (2012). Individual factors and work outcomes of employee engagement. *Procedia Social and Behavioral Sciences*, 40, 498-508.
- Ariani, D.W. (2013). The relationship between employee engagement, organizational citizenship behavior, and counterproductive work behavior. *International Journal of Business*Administration, 4(2), 46-56.
- Babcock-Roberson, M.E. & Strickland, O.J. (2010). The relationship between charismatic leadership, work engagement and organizational citizenship behaviors. *Journal of Psychology*, 144, 313-326.
- Bureau of Labor Statistics. (2012). Consumer Expenditures in 2010: Lingering Effects of the Great Recession. Retrieved from the U.S. Department of Labor Bureau of Labor Statistics website: http://www.bls.gov/cex/csxann10.pdf
- Bureau of Labor Statistics. (2013). *Consumer expenditures 2013* (News Release). Retrieved from the U.S. Department of Labor Bureau of Labor Statistics website:

 http://www.bls.gov/news.release/pdf/cesan.pdf
- Bureau of Labor Statistics (2014). *National industry-specific occupational employment and wage estimates: NAICS 512100 Motion Picture and Video Industries*. Retrieved from the U.S.

 Department of Labor Bureau of Labor Statistics website:

 http://www.bls.gov/oes/current/naics4 512100.htm#00-0000
- Byrne, Z. S., Peters, J.M., Weston, J.W. (2016). The struggle with employee engagement: measures and construct clarification using five samples. *Journal of Applied Psychology*, 101(9), 1201-1227.

- Chase, R.B. (1981). The customer contact approach to services: Theoretical bases and practical extensions. *Operations Research*, 29, 698-706.
- Chase, R.B., Aquilano (1977). *Production and Operations Management: A Life Cycle Approach*, rev. ed. Richard D. Irwin, Homewood, Ill.
- Chase, R.B., Tansik, D.A. (1983). The customer contact model for organizational design. *Management Science*, 29, 1037-1050.
- Christian, M.S., Garza, A.S., Slaughter, J.E. (2011). Work engagement: a quantitative review and test of its relations with task and contextual performance. *Personnel Psychology*, 64, 89-136.
- Daft, R.L., Lengel, R.H. (1984). Information richness: A new approach to managerial behavior and organizational design. *Research in Organizational Behavior*, 6, 191-225.
- Gomery, D. (1992). Shared Pleasures: A History of Movie Presentation in the United States.

 Madison, WI: University of Wisconsin Press.
- Granovetter, M.S. (1973). The strength of weak ties. *American Journal of Sociology*, 78, 1360-1380.
- Hakanen, J., Bakker, A.B., Demerouti, E. (2005). How dentists cope with their job demands and stay engaged: the moderating role of job resources. *European Journal of Oral Sciences*, 113, 487–497.
- Hakenen, J.J., Bakker, A.B., Schaufeli, W.B. (2006). Burnout and work engagement among teachers. *Journal of School Psychology*, 43, 495–513.

- Harter, J.K., Schmidt, F.L., Hayes, T.L. (2002). Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: a meta-analysis. *Journal of Applied Psychology*, 87(2), 268–279.
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford Press.
- Hill, T.P. (1977). On goods and services. Review of Income and Wealth, 23, 315-338.
- Hochschild, A.R. (1983). The managed heart. Berkeley, CA: University of California Press.
- Iliescu, D., Ispas, D., Sulea, C., Ilie, A. (2015). Vocational fit and counterproductive work behaviors: A self-regulation perspective. *Journal of Applied Psychology*, 100(1), 21-39.
- Kahn, W.A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33(4), 692–724.
- Kellogg, D.L., Chase, R.B. (1995). Constructing an empirically derived measure for customer contact. *Management Science*, 41(11), 1734-1749.
- Kline, R.B. (2011). *Principles and practice of structural equation modeling* (3rd ed.). New York, NY: The Guilford Press.
- Koyuncu, M., Burke, R.J., Fiksenbaum, L. (2006). Work engagement among women managers and professionals in a Turkish bank: potential antecedents and consequences. *Equal Opportunities International*, 25, 299–310.
- Laschinger, H.K.S., Finegan, J. (2005). Empowering nurses for engagement and health in hospital settings. *Journal of Nursing Administration*, 35(10), 439–449.

- Laschinger, H.K.S., Leiter, M.P. (2006). The impact of nursing work environments on patient safety outcomes: the mediating role of burnout/engagement. *Journal of Nursing Administration*, 36(5), 259–267.
- Lefton, M., Rosengren, W.R. (1966). Organizational and clients: Lateral and longitudinal dimensions. *American Sociological Review*, 31, 802-810.
- Leiter, M.P., Maslach, C. (2004). Areas of worklife: a structured approach to organizational predictors of job burnout. In: Perrewe, P.L., Ganster, D.C. (Eds.), Emotional and Physiological Processes and Positive Intervention Strategies, Research in Occupational Stress and Well Being, 3. Elsevier, Oxford, pp. 91–134.
- Leiter, M.P., Laschinger, H.K.S., 2006. Realtionships of work and practice environment to professional burnout: Testing a casual model. *Nursing Research*, 55(2), 137–146.
- Llorens, S., Bakker, A.B., Schaufeli, W.B., Salanova, M. (2006). Testing the robustness of the job demands—resources model. *International Journal of Stress Management*, 13, 378–391.
- Maister, D.H., Lovelock, C.H. (1982). Managing facilitator services. *Sloan Management Review*, 23, 19-31.
- Maslach, C., Schaufeli, W.B., & Leiter, M.P. (2001). In S.T. Fiske, D.L. Schacter, & C. Zahn-Waxler (Eds.), *Job burnout. Annual Review of Psychology*, 52. (pp. 397-422).
- Mauno, S., Kinnunen, U., Ruokolainen, M. (2007). Job demands and resources as antecedents of work engagement: a longitudinal study. *Journal of Vocational Behavior*, 70, 149–171.
- May, D.R., Gilson, R.L., Harter, L.M. (2004). The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work. *Journal of Occupational and Organizational Psychology*, 77(1), 11–37.

- Mayo, E. (1933). *The human problems of an industrial civilization*. Cambridge, MA: The Murray Printing Company.
- Motion Picture Association of America. (2016). *Theatrical Market Statistics: 2015*. Retrieved from http://www.mpaa.org/wp-content/uploads/2016/04/MPAA-Theatrical-Market-Statistics-2015_Final.pdf.
- Nimon, K., Shuck, B., & Zigarmi, D. (2016). Construct overlap between employee engagement and job satisfaction: a function of semantic equivalence? *Journal of Happiness Studies*, 17, 1149-1171.
- Norusis, M. J. (1991). SPSS-PC Plus 4.0 Base Manual for the IBM PC-XT and PS-2. SPSS Incorporated.
- Rich, B.L., LePine, J.A., & Crawford, E.R. (2010). Job engagement: antecedents and effects on job performance. *Academy of Management Journal*, 53, 617-635.
- Richardsen, A.M., Burke, R.J., Martinussen, M., 2006. Work and health outcomes among police officers: the mediating role of police cynicism and engagement. *International Journal of Stress Management*, 13, 555–574.
- Rigg, J. (2013). Worthwhile concept or old wine? A review of employee engagement and related constructs. *American Journal of Business and Management*, 2(1), 31-36.
- Sackett, P. R., & DeVore, C. J. 2001. Counterproductive behaviors at work. In N. Anderson, D. S. Ones, H. K. Sinangil, & C. Viswesvaran (Eds.), *Handbook of industrial, work, and organizational psychology: Vol. 1*, 145-164. London: Sage.
- Saks, A.M. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*, 21, 600-619.

- Salanova, M., Agut, S., Peiro, J.M. (2005). Linking organizational resources and work engagement to employee performance and customer loyalty: the mediation of service climate. *Journal of Applied Psychology*, 90(6), 1217–1227.
- Schaufeli, W. B., & Bakker, A. B. (2003). Utrecht work engagement scale: Preliminary manual.

 Occupational Health Psychology Unit, Utrecht University, Utrecht.
- Schaufeli, W. B., Bakker, A B. (2004). Job demands, job resources and their relationship with burnout and engagement: a multisample study. *Journal of Organizational Behavior*, 25, 293–315.
- Schaufeli, W., Salanova, M., Gonzalez-Roma, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, 3, 71–92.
- Service Management Group (2017). Driving action through insights at AMC Theatres

 [PowerPoint slides]. Retrieved directly from Service Management Group Client Services.
- Shrout, P., & Bolger, N. (2002). Mediation in experimental and nonexperimental studies: New procedures and recommendations. *Psychological Methods*, 7(4), 422-445.
- Smith, P. C., Kendall, L., & Hulin, C. L. (1969). *The measurement of satisfaction in work and retirement*. Chicago: Rand McNally.
- Sonnentag, S. (2003). Recovery, work engagement and proactive behavior: a new look at the interface between nonwork and work. *Journal of Applied Psychology*, 88, 518-528.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Experimental designs using ANOVA*.

 Thomson/Brooks/Cole.

- Victor, B., Blackburn, R.S. (1987). Interdependence: An alternative conceptualization. *Academy of Management Review*, 12, 486-498.
- Wefald, A. J., & Downey, R. G. (2009). Construct dimensionality of engagement and its relationship with satisfaction. *Journal of Psychology*, 143, 91-111.
- Xanthopoulou, D., Bakker, A.B., Demerouti, E., Schaufeli, W.B. (2007). The role of personal resources in the job demands–resources model. *International Journal of Stress*Management, 12, 121–141.
- Yalabik, Y. Z., Popaitoon, P., Chowne, J. A., & Rayton, B. A. (2013). Work engagement as a mediator between employee attitudes and outcomes. *International Journal of Human Resource Management*, 24, 2799–2823.
- Yuan, B., Lin, M., Shieh, J., Li, K. (2012). Transforming employee engagement into long-term customer relationships: evidence from information technology salespeople in Taiwan. Social Behavior and Personality, 40(9), 1549-1554.

Figure 1

Hypothesized relationship between employee engagement and overall guest satisfaction mediated by critical aspects of service delivery.

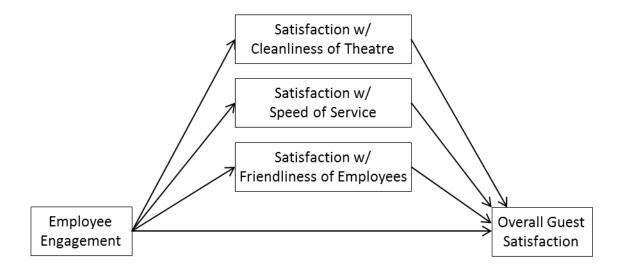


Table 1
Skewness and Kurtosis for the Primary Variables

Variable	N	Min	Max	М	SD	Kurtosis	Skewness
2014 Employee Engagement	340	4.41%	100.00%	38.42%	14.64%	1.62	0.67
2015 Employee Engagement	340	9.38%	92.36%	37.77%	13.88%	1.48	0.92
2014 Overall Satisfaction	340	34.09%	83.96%	58.53%	8.93%	.33	-0.16
2015 Overall Guest Sat	340	28.57%	78.37%	60.59%	8.066%	.21	-0.35
2014 Friendliness of Emp	340	44.67%	83.15%	63.51%	6.251%	22	-0.22
2015 Friendliness of Emp	340	45.10%	82.39%	64.90%	6.25%	.02	-0.35
2014 Cleanliness of Theatre	340	30.11%	81.23%	51.57%	8.97%	.06	0.24
2015 Cleanliness of Theatre	340	30.59%	75.72%	53.45%	7.99%	.01	-0.13
2014 Speed of Service	340	43.17%	76.11%	59.100%	6.15%	20	0.02
2015 Speed of Service	340	44.01%	80.11%	59.89%	6.12%	08	0.07
2014 Movie Satisfaction	340	48.29%	79.25%	63.87%	4.302%	.60	-0.28
2015 Movie Satisfaction	340	49.11%	78.46%	66.677%	4.59%	.31	-0.27
Turnover_LTM June 2015	340	20.00%	240.00%	104.23%	37.96%	.86	0.81
Turnover_LTM June 2016	340	33.33%	253.57%	108.43%	39.98%	.18	0.68
Total Turnover DLY	340	123.70%	117.21%	4.19%	33.59%	.90	0.07
2014 Total Risk Claims	340	.00	24.00	4.42	4.23	3.39	1.56
2015 Total Risk Claims	340	.00	51.00	6.65	6.11	13.69	2.75
2014 Compliance Reports	281	.00	14.00	2.33	2.381	4.69	1.89
2015 Compliance Reports	339	.00	14.00	1.57	2.24	7.49	2.48
2014 FBPP	339	2.93	12.67	4.30	1.25	23.56	4.56
2015 FBPP	339	2.86	11.97	4.57	1.11	19.27	3.94
2014 Audit	336	.26	.95	.67	0.14	17	-0.52
2015 Audit	339	.32	.96	.72	0.13	.03	-0.61
Estimated 2015 Population	339	.00	107594.30	34933.44	18527.50	.98	0.79
Annual Growth 2000 to 2010	339	01	.18	0.01	0.02	20.35	3.93
Median Age	339	.00	67.09	38.80	5.87	8.21	-0.01
Average Household Size	339	.00	4.56	2.48	0.48	2.86	0.05
White	339	.00	.97	.72	0.19	1.22	-1.20
Median Household Income	339	.00	151133.14	69960.01	26453.61	05	0.65
College Degree	339	.00	.89	0.47	0.17	62	0.19

Note. SE for Skewness is .13. SE for Kurtosis is .26.

Table 2

Multicollinearity Diagnostics

	Collinearity S	Statistics
Variable	Tolerance	VIF
2014 Employee Engagement	.707	1.414
2015 Employee Engagement	.633	1.579
2014 Overall Satisfaction	.135	7.398
2015 Overall Guest Satisfaction	.123	8.099
2014 Friendliness of Employees	.157	6.370
2015 Friendliness of Employees	.138	7.238
2014 Cleanliness of Theatre	.103	9.697
2015 Cleanliness of Theatre	.120	8.368
2014 Speed of Service	.177	5.653
2015 Speed of Service	.177	5.647
2014 Movie Satisfaction	.435	2.296
2015 Movie Satisfaction	.460	2.173
Total Turnover_LTM June 2015	.692	1.445
Total Turnover DLY	.690	1.450
2014 Total Risk Claims	.579	1.726
2015 Total Risk Claims	.559	1.790
2014 Compliance Reports	.643	1.555
2015 Compliance Reports	.616	1.624
2014 FBPP	.042	9.902
2015 FBPP	.040	9.313
2014 Audit	.777	1.286
2015 Audit	.759	1.318
Estimated 2015 Population	.680	1.470
Annual Growth 2000 to 2010	.737	1.357
Median Age	.615	1.627
Average Household Size	.365	2.742
White	.570	1.754
Median Household Income	.196	5.114
College Degree	.180	5.552

Table 3

Descriptive Statistics for the 2014 and 2015 Variables

Variable	N	Min	Max	М	SD
% White	312	.04	.97	0.72	0.18
% With a College Degree	312	.07	.89	0.46	0.17
Estimated 2015 Population	312	37.67	97160.03	35151.86	18003.92
2015 Employee Engagement	313	9.38%	86.54%	38.01%	13.59%
2014 Employee Engagement	313	4.41%	82.33%	38.32%	13.53%
2014 Overall Satisfaction	313	34.09%	83.96%	59.25%	8.60%
2015 Overall Guest Satisfaction	313	41.18%	77.92%	61.27%	7.41%
2014 Friendliness of Employees	313	49.73%	83.15%	63.99%	5.96%
2015 Friendliness of Employees	313	48.54%	82.39%	65.40%	5.87%
2014 Cleanliness of Theatre	313	30.11%	81.23%	51.78%	8.81%
2015 Cleanliness of Theatre	313	30.59%	73.65%	53.58%	7.68%
2014 Speed of Service	313	43.17%	76.11%	59.45%	6.03%
2015 Speed of Service	313	44.88%	80.11%	60.35%	5.82%
2014 Movie Satisfaction	313	51.64%	79.25%	64.13%	4.16%
2015 Movie Satisfaction	313	51.63%	77.22%	66.80%	4.46%
Total Turnover_LTM June 2015	313	20.00%	240.00%	102.81%	37.94%
Total Turnover_LTM June 2016	313	33.33%	253.57%	106.97%	39.87%
Total Turnover DLY	313	-123.70%	117.21%	4.15%	34.05%
2014 Total Risk Claims	313	.00	19.00	4.02	3.60
2015 Total Risk Claims	313	.00	25.00	5.91	4.59
2014 Compliance Reports	255	.00	11.00	2.10	2.02
2015 Compliance Reports	312	.00	9.00	1.26	1.58
2014 FBPP	312	2.93	6.71	4.09	0.45
2015 FBPP	312	2.86	6.70	4.38	0.49
2014 Audit	310	0.26	0.95	0.68	0.14
2015 Audit	312	0.36	0.96	0.72	0.12

For this dataset, 78.6% (n = 246) of the theatres were Core and 21.4% (n = 67) were Recliner concept.

Table 4

Descriptive Statistics for the YOY Improvement Variables

Variable	N	Min	Max	М	SD
YOY Improvement in Employee Engagement	293	-78.90	44.41	0.35	14.60
YOY Improvement in Overall Guest Satisfaction	293	-28.13	11.39	-1.33	4.87
YOY Improvement in Friendliness of Employees	293	-20.23	11.32	-1.29	4.20
YOY Improvement in Cleanliness of Theatre	293	-21.93	11.12	-1.19	4.95
YOY Improvement in Speed of Service	293	-19.97	11.95	-0.86	4.30
YOY Improvement in Total Turnover	293	-117.21	123.70	-4.28	34.49
YOY Improvement in Compliance Reports	238	-7.00	8.00	0.51	2.47
YOY Improvement in Total Risk Claims	293	-12.00	10.00	-1.79	3.80
YOY Improvement in FBPP	292	-1.94	.16	-0.27	0.16
YOY Improvement in Audits	291	53	.38	-0.04	0.15

For the YOY dataset, 94% (n = 246) of the theatres were Core and 16% (n = 47) were Recliner concept.

Table 5

Results of Hierarchical Linear Regression Analysis for Variables Predicting Guest Satisfaction with

Friendliness of Employees

Variables	В	SE	в	F	R^2	ΔR^2
Step 1	-	-	-	25.69**	0.296	-
(Constant)	26.45	5.37				
Theatre Concept	1.62	.69	.11*			
% White	9.58	1.58	.30***			
% With a College Degree	-4.44	1.88	13			
Estimated 2015 Population	1.41	.00	.04			
2015 Movie Satisfaction	.49	.07	.37***			
Step 2	-	-	-	27.96**	0.355	0.059
(Constant)	26.27	5.15				
Theatre Concept	1.75	.67	.12**			
% White	8.78	1.52	.28***			
% With a College Degree	-3.72	1.80	11*			
Estimated 2015 Population	1.57	.000	.04			
2015 Movie Satisfaction	0.44	0.07	.33***			
2015 Employee Engagement	0.10	0.02	.25***			

^{*}p < .05, **p < .01, ***p < .001

Table 6

Results of Hierarchical Linear Regression Analysis for Variables Predicting Guest Satisfaction with

Cleanliness of Theatre

Variables	В	SE	в	F	R^2	ΔR^2
Step 1	-	-	-	32.15**	0.334	-
(Constant)	-2.17	6.76				
Theatre Concept	6.78	0.88	.36***			
% White	7.21	1.99	.17***			
% With a College Degree	2.81	2.37	.06			
Estimated 2015 Population	9.03	.00	.002			
2015 Movie Satisfaction	0.71	0.09	.41***			
Step 2	-	-	-	29.61**	0.356	0.022
(Constant)	-2.31	6.65				
Theatre Concept	6.89	0.86	.36***			
% White	6.55	1.96	.16***			
% With a College Degree	3.39	2.33	.07			
Estimated 2015 Population	2.26	0.001	.005			
2015 Movie Satisfaction	0.66	.09	.38***			
2015 Employee Engagement	0.08	.02	.15***			

^{*}p < .05, **p < .01, ***p < .001

Table 7

Results of Hierarchical Linear Regression Analysis for Variables Predicting Guest Satisfaction with Speed of Service

Variables	В	SE	в	F	R ²	ΔR^2
Step 1	-	-	-	25.89**	0.297	-
(Constant)	21.17	5.32				
Theatre Concept	2.66	0.69	.18***			
% White	10.87	1.56	.34***			
% With a College Degree	-1.87	1.86	05			
Estimated 2015 Population	1.88	.00	.05			
2015 Movie Satisfaction	0.46	.07	.35***			
Step 2	-	-	-	26.50**	0.343	0.046
(Constant)	21.02	5.16				
Theatre Concept	2.78	0.67	.19***			
% White	10.18	1.52	.32***			
% With a College Degree	-1.25	1.81	03			
Estimated 2015 Population	2.02	.00	.06			
2015 Movie Satisfaction	0.41	0.07	.31***			
2015 Employee Engagement	0.09	0.02	.21***			

^{*}p < .05, **p < .01, ***p < .001

Table 8

Results of Hierarchical Linear Regression Analysis for Variables Predicting Overall Guest Satisfaction

Variables	В	SE	в	F	R^2	ΔR^2
Step 1	-	-	-	32.15**	0.334	_
(Constant)	-2.17	6.76				
Theatre Concept	6.78	0.88	.36***			
% White	7.21	1.99	.17***			
% With a College Degree	2.81	2.37	.06			
Estimated 2015 Population	9.03	.00	.002			
2015 Movie Satisfaction	0.71	0.09	.41***			
Step 2	-	-	-	29.61**	0.356	0.022
(Constant)	-2.31	6.65				
Theatre Concept	6.89	0.86	.36***			
% White	6.55	1.96	.16***			
% With a College Degree	3.39	2.33	.07			
Estimated 2015 Population	2.26	0.001	.005			
2015 Movie Satisfaction	0.66	.09	.38***			
2015 Employee Engagement	0.08	.02	.15***			

p < .05, p < .01, p < .001

Table 9

Results of Hierarchical Linear Regression Analysis for Variables Predicting YOY Improvement in Guest

Satisfaction with Friendliness of Employees

Variables	В	SE	в	F	R^2	ΔR^2
Step 1	-	-	-	3.56**	0.059	-
(Constant)	10.80	4.66				
Theatre Concept	1.46	0.66	.12*			
% White	-1.18	1.37	05			
% With a College Degree	-0.007	1.59	.001			
Estimated 2015 Population	1.91	.00	.08			
2015 Movie Satisfaction	-0.18	0.06	18**			
Step 2	-	-	-	5.02**	0.095	0.036
(Constant)	9.17	4.60				
Theatre Concept	1.38	0.65	.12*			
% White	-1.19	1.34	05			
% With a College Degree	0.23	1.56	.01			
Estimated 2015 Population	1.73	.00	.07			
2015 Movie Satisfaction	-0.15	0.06	16*			
YOY Improvement in	0.05	0.01	.19**			
Employee Engagement						

^{*}p < .05, **p < .01, ***p < .001

Table 10

Results of Hierarchical Linear Regression Analysis for Variables Predicting YOY Improvement in Guest

Satisfaction with Cleanliness of Theatre

Variables	В	SE	в	F	R^2	ΔR^2
Step 1	-	-	-	7.39**	0.114	-
(Constant)	13.61	5.32				
Theatre Concept	4.13	0.75	.30**			
% White	-1.51	1.56	05			
% With a College Degree	-1.90	1.82	06			
Estimated 2015 Population	1.13	.00	.04			
2015 Movie Satisfaction	-0.20	0.07	18**			
Step 2	-	-	-	7.91**	0.142	0.028
(Constant)	11.93	5.27				
Theatre Concept	4.05	0.74	.30***			
% White	-1.52	1.54	05			
% With a College Degree	-1.65	1.79	05			
Estimated 2015 Population	9.45	.00	.03			
2015 Movie Satisfaction	-0.18	0.07	16*			
YOY Improvement in	.05	0.01	.17**			
Employee Engagement						

^{*}p < .05, **p < .01, ***p < .001

Table 11

Results of Hierarchical Linear Regression Analysis for Variables Predicting YOY Improvement in Guest

Satisfaction with Speed of Service

Variables	В	SE	в	F	R^2	ΔR^2
Step 1	-	-	-	1.62	0.028	-
(Constant)	7.09	4.84				
Theatre Concept	1.16	0.69	.09			
% White	1.55	1.42	.06			
% With a College Degree	-0.98	1.65	03			
Estimated 2015 Population	6.78	.00	.02			
2015 Movie Satisfaction	-0.13	0.06	13			
Step 2	-	-	-	2.62**	0.052	0.024
(Constant)	5.73	4.82				
Theatre Concept	1.09	0.68	.09			
% White	1.54	1.40	.06			
% With a College Degree	-0.74	1.64	03			
Estimated 2015 Population	5.25	.00	.02			
2015 Movie Satisfaction	-0.11	0.06	11			
YOY Improvement in	0.04	0.01	.15**			
Employee Engagement						

^{*}p < .05, **p < .01, ***p < .001

Table 12

Results of Hierarchical Linear Regression Analysis for Variables Predicting YOY Improvement in Overall

Guest Satisfaction

Variables	В	SE	β	F	R^2	ΔR^2
Step 1	-	-	-	7.68**	0.118	-
(Constant)	8.15	5.22				
Theatre Concept	4.22	.74	.31***			
% White	-1.43	1.53	05			
% With a College Degree	59	1.78	02			
Estimated 2015 Population	2.04	.00	.07			
2015 Movie Satisfaction	14	.07	12*			
Step 2	-	-	-	9.93**	0.173	0.055
(Constant)	5.85	5.10				
Theatre Concept	4.11	.72	.31***			
% White	-1.44	1.49	05			
% With a College Degree	26	1.73	009			
Estimated 2015 Population	1.78	.00	.06			
2015 Movie Satisfaction	11	.06	09			
YOY Improvement in	.07	.01	.23***			
Employee Engagement						

^{*}p < .05, **p < .01, ***p < .001

Table 13

Parallel Multiple Mediation Model with Unstandardized Regression Coefficients Predicting Overall Guest

Satisfaction

Independent Variable (IV)	Dependent Variable (DV)	Mediator	Effect of IV on Mediator	Effect of Mediator on DV	Indire	ect Effect
			(a)	(b)	(a x b)	95% CI
Employee	Overall Guest					_
Engagement	Satisfaction	Friendliness	0.128***	0.266***	0.034	[.015, .057]
		Cleanliness	0.119***	0.614***	0.073	[.040, .113]
		Speed	0.113***	-0.034	-0.004	[020, .009]

^{*}p < .05, **p < .01, ***p < .001

Table 14

Regression Coefficients for the Relationship between Employee Engagement and Employee Turnover

Model	В	Std. Error	в	t	р
2015 Employee Engagement	05	.15	02	36	.71

Table 15

Regression Coefficients for the Relationship between Employee Engagement and Compliance Reports

Model	В	Std. Error	в	t	р
2015 Employee Engagement	01	.007	10	-1.87	.06

Table 16

Regression Coefficients for the Relationship between Employee Engagement and Incidents/Claims

Model	В	Std. Error	в	t	р
2015 Employee Engagement	05	.01	16	-3.00	.003

Table 17

Regression Coefficients for the Relationship between YOY Change in Employee Engagement and YOY

Change in Employee Turnover

Model	В	Std.	в	t	р
		Error			
YOY Improvement in Employee Engagement	36	.13	15	-2.68	.008

Table 18

Regression Coefficients for the Relationship between YOY Change in Employee Engagement and YOY

Change in Compliance Reports

Model	В	Std. Error	в	t	р
YOY Improvement in Employee Engagement	02	.01	13	-2.01	.04

Table 19

Regression Coefficients for the Relationship between YOY Change in Employee Engagement and YOY

Change in Incidents/Claims

Model	В	Std. Error	в	t	р
YOY Improvement in Employee Engagement	002	.01	009	-0.15	.87

Table 20

Regression Coefficients for the Relationship between YOY Change in Employee Engagement and YOY

Change in Audit Performance

Model	В	Std. Error	в	t	р
YOY Improvement in Employee Engagement	.000	.001	02	-0.47	.63

Table 21

Regression Coefficients for the Relationship between YOY Change in Employee Engagement and YOY

Change in FBPP

Model	В	Std. Error	в	t	р
YOY Improvement in Employee Engagement	1.94	.001	.002	0.03	.97

Table 22

Frequencies and Percentages for the Employee Demographics

Variable	N	%
Gender		
Male	5379	54.8
Female	4438	45.2
Total	9817	100.0
Ethnicity		
'American Indian Alaskan Native'	69	.7
Asian	418	4.3
Black	2125	21.7
Hispanic	2066	21.1
Pacific Islander	29	.3
Two or More Race	337	3.4
White	4762	48.6
Total	9806	100.0
Age		
< 15	11	.1
15 to < 20	3222	32.8
20 to < 25	3551	36.2
25 to < 30	1280	13.0
30 to < 35	571	5.8
35 to < 40	366	3.7
40 to < 45	223	2.3
45 to < 50	177	1.8
50 to < 55	131	1.3
55 to < 60	109	1.1
60+	176	1.8
Total	9817	100.0
Occupational level		
Film Crew	8466	86.2

Management	1351	13.8
Total	9817	100.0
Employment Status		
PT	9422	96.0
TM	395	4.0
Total	9817	100.0
Tenure		
'0 to < 5'	8282	84.5
'5 to < 10'	788	8.0
'10 to < 15'	352	3.6
'15 to < 20'	215	2.2
'20 to < 25'	70	.7
'25 to < 30'	53	.5
'30 to < 35'	25	.3
'35 to < 40'	13	.1
'40 +	1	.0
Total	9799	100.0

Table 23

Pearson Correlations between the AEI Factors and Employee Engagement by Gender

	Correlations for Women		Correlation	Correlations for Men		Group
	(N = 4	438)	(N = 5	379)	Compa	arison
Employee Engagement with:	r	p	r	р	Z_{observed}	p
Behavioral Change	.19*	.001	.29*	.001	-5.24	.001
Change Management	.08	.07	.23*	.001	-7.59	.001
Communication	.18*	.001	.26*	.001	-4.15	.001
Comp & Benefits	.28*	.001	.32*	.001	-2.17	.030
Diversity & Inclusion	01	.81	.12*	.001	-6.44	.001
Future Vision	-	-	.28*	.001	-	-
GM Effectiveness	02	.56	.08*	.01	-4.94	.001
Growth & Development	.28*	.001	.39*	.001	-6.12	.001
Health & Wellness	.04	.33	.26*	.001	-11.15	.001
Involvement & Belong	02	.64	.08*	.01	-4.94	.001
Leadership Trust	01	.74	.19*	.001	-9.97	.001
Performance Excellence	.09*	.03	.10*	.002	-0.50	.617
Perf Management	-	-	-	-	-	-
Recognition	.27*	.001	.23*	.001	2.10	.038
Social Responsibility	-	-	-	-	-	-
Work/Life Balance	.14*	.002	.14*	.001	0.00	1.00

Note. There was a lack of variation in the social responsibility and performance management variables; therefore, the correlation could not be calculated. There was also a lack of variation for the Future Vision variable for women; therefore, the correlation could not be calculated.

Table 24

Pearson Correlations between the AEI Factors and Employee Engagement by Ethnicity

	Correlations for Non-		Correlations for Whites		Between Group	
	Whites (<i>N</i> = 4975)		(N = 4762)		Comparison	
Employee Engagement with:	r	p	r	p	$Z_{observed}$	p
Behavioral Change	.32*	.001	.23*	.001	4.81	.001
Change Management	.19*	.07	.19*	.001	0.00	1.00
Communication	.17*	.001	.23*	.001	-3.08	.002
Comp & Benefits	.32*	.001	.27*	.001	2.70	.007
Diversity & Inclusion	01	.80	.14*	.001	-7.44	.001
Future Vision	.29*	.001	.16*	.001	6.76	.001
GM Effectiveness	.01	.69	.06	.07	-2.47	.014
Growth &Development	.24*	.001	.42*	.001	-10.01	.001
Health & Wellness	.14*	.001	.21*	.001	-3.56	.001
Involvement & Belong	01	.72	.07*	.02	-3.95	.001
Leadership Trust	.13*	.002	.11*	.001	1.00	.317
Performance Excellence	.07	.09	.09*	.005	-0.99	.322
Perf Management	-	-	-	-	-	-
Recognition	.22*	.001	.26*	.001	-2.09	.037
Social Responsibility	-	-	-	-	-	-
Work/Life Balance	.26*	.001	.01	.62	12.63	.001

Note. There was a lack of variation in the social responsibility and performance management variables; therefore, the correlation could not be calculated.

Table 25

Pearson Correlations between the AEI Factors and Employee Engagement by Age

	Correlations for ≤ 25		Correlations for ≥ 26 years		Between Group	
	Years of Ag	e (<i>N</i> = 6784)	of Age (N = 3033)		Comparison	
Employee Engagement with:	r	ρ	r	p	Z_{observed}	p
Behavioral Change	.21*	.001	.27*	.001	-2.91	0.004
Change Management	.23*	.001	.19*	.001	1.92	0.055
Communication	.15*	.009	.25*	.001	-4.77	0.001
Comp & Benefits	.21*	.001	.33*	.001	-5.93	0.001
Diversity & Inclusion	01	.85	.11*	.001	-5.51	0.001
Future Vision	.18*	.002	.24*	.001	-2.87	0.004
GM Effectiveness	02	.73	.06*	.04	-3.66	0.001
Growth &Development	.31*	.001	.37*	.001	-3.11	0.002
Health & Wellness	02	.71	.24*	.001	-12.12	0.001
Involvement & Belong	01	.85	.05	.07	-11.66	0.001
Leadership Trust	.10	.07	.16*	.001	-2.75	0.006
Performance Excellence	04	.48	.14*	.001	-8.28	0.001
Perf Management	-	-	-	-	-	-
Recognition	.29*	.001	.23*	.001	2.95	0.003
Social Responsibility	-	-	-	-	-	-
Work/Life Balance	.14*	.013	.14*	.001	0	1.000

Note. There was a lack of variation in the social responsibility and performance management variables; therefore, the correlation could not be calculated.

Table 26

Pearson Correlations between the AEI Factors and Employee Engagement by Occupational Level

	Correlations for Managers (N = 1351)		Film Crew (<i>N</i> = 8466)		Between Group Comparison	
Employee Engagement with:	r	p	r	p	$Z_{observed}$	p
Behavioral Change	.26*	.001	.10*	.001	5.65	.001
Change Management	.20*	.001	.14*	.001	2.11	.035
Communication	.23*	.001	.19*	.001	1.43	.153
Comp & Benefits	.30*	.001	.20*	.001	3.64	.001
Diversity & Inclusion	.07*	.008	.09*	.001	-0.69	.490
Future Vision	.23*	.001	-	-	-	-
GM Effectiveness	.04	.10	.12*	.001	-2.75	.006
Growth &Development	.35*	.001	.31*	.001	1.53	.126
Health & Wellness	.20*	.001	-	-	-	-
Involvement & Belong	.04	.07	.10*	.001	-2.06	.039
Leadership Trust	.14*	.001	-	-	-	-
Performance Excellence	.10*	.001	.16*	.001	-2.08	.038
Perf Management	-	-	-	-	-	-
Recognition	.24*	.001	.17*	.001	2.49	.013
Social Responsibility	-	-	-	-	-	-
Work/Life Balance	.14*	.001	-	-	-	-

Note. There was a lack of variation in the social responsibility and performance management variables; therefore, the correlation could not be calculated. There was also a lack of variation in the Future Vision, Health & Wellness, Leadership Trust, and Work/Life Balance variables for the film crew; therefore, the correlations with these variables could not be calculated.

Table 27

Pearson Correlations between the AEI Factors and Employee Engagement by Tenure

	Correlations Employees with < 5		Correlations for Employees with > 5		Between Group Comparison	
	Years Tenure		Years Tenure			
	(N = 8282)		(<i>N</i> = 1517			
Employee Engagement with:	r	р	r	p	$Z_{observed}$	p
Behavioral Change	.10*	.001	.21*	.001	-4.04	0.001
Change Management	.13*	.001	.24*	.001	-4.08	0.001
Communication	.15*	.001	.19*	.001	-1.47	0.142
Comp & Benefits	.20*	.001	.26*	.001	-2.27	0.023
Diversity & Inclusion	.08*	.001	.08*	.001	0	1.000
Future Vision	.003	.79	.21*	.001	-7.52	0.001
GM Effectiveness	.12*	.001	.06*	.01	2.16	0.031
Growth &Development	.31*	.001	.30*	.001	0.39	0.697
Health & Wellness	.03	.44	.28*	.001	-9.22	0.001
Involvement & Belong	.09*	.001	.06*	.009	1.08	0.280
Leadership Trust	006	.001	.15*	.001	-5.77	0.001
Performance Excellence	.16*	.001	.13*	.002	1.1	0.271
Perf Management	-	-	-	-	-	-
Recognition	.18*	.001	.17*	.001	0.37	0.711
Social Responsibility	-	-	-	-	-	-
Work/Life Balance	.09*	.02	.17*	.001	-2.91	0.004

Note. There was a lack of variation in the social responsibility and performance management variables; therefore, the correlation could not be calculated.