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As intuition and experience suggest, employee engagement and satisfaction – two variables that incentives, recognition, and reward (IRR) professionals aim to influence – effect workers’ intent to remain with organizations. Knowing this, however, does not provide enough granularity for IRR professionals to target their interventions for the greatest effect.

The ability to target interventions at reducing turnover proves especially important in today’s workforce climate of high demand for workers and low availability. This is especially true in the hospitality sector, where following increases of less than 10% over the previous five years, turnover accelerated 165% in the first year of the COVID-19 pandemic – 2019 to 2020 – more than three times the US average across industries.¹ Through 2021, turnover in the US hospitality sector averaged 85%, twice the national average.² And as of December 2022, quit rates remain around 70%.³

Thus, for more than three years, from mid-2019 through early 2022, the Incentive Research Foundation (IRF) has worked with professors Haemoon Oh and Miyoung Jeong at the College of Hospitality, Retail, and Sport Management, University of South Carolina, and Hyejo Hailey Shin at the School of Hotel and Tourism Management, Hong Kong Polytechnic University to study the relationship between employee satisfaction and engagement (along with their many drivers) and turnover in the hospitality industry.

Across four experiments involving several hundred hospitality sales professionals, we found striking evidence of a complex and *non-linear* relationship between employee engagement, employee satisfaction, and turnover intention. So novel and powerful were the results of this research, that in November 2022, the paper describing them was accepted for publication in the prestigious *International Journal of Contemporary Hospitality Management*.⁴ What follows is a summary of that paper aimed at what practitioners need to know.

What You Need to Know

Hospitality organizations (and very likely all others) should invest in both Employee Engagement (EE) and Employee Satisfaction (ES) as employee retention strategies. IRR professionals should aim their interventions at factors that improve both EE and ES. Of particular interest to IRR professional, interventions aimed at ES may be more powerful in suppressing intent to leave than those aimed at EE.

If we consider Herzberg’s two-factor theory of motivation, key elements of satisfaction include tangible rewards, such as pay, status, security, working conditions, fringe benefits/rewards, and work relationships – what Herzberg referred to as “hygiene factors.” These, he argued, drive satisfaction. He called his other bucket “motivator factors,” which he advised, drive engagement, including meaningful and challenging work, recognition, feelings of accomplishment, autonomy, and learning.⁵



Of particular interest to rewards professionals, interventions aimed at worker satisfaction may be more powerful in suppressing turnover than those aimed at worker engagement.

IRR professionals design programs that impact both of Herzberg's factors and should continue to do so. However, our findings support the somewhat unpopular suggestion that extrinsic, tangible rewards may positively influence intent to stay even more than – and certainly as much as – providing meaningful, purposeful work, autonomy, and opportunities to learn.

Again, our study found that both EE and ES are negatively related to turnover intentions, and that there are significant interaction effects between EE and ES. This means that investing in EE and ES simultaneously may be more effective at reducing turnover intentions than investing in one or the other alone. Additionally, investing in both EE and ES may be more efficient, as they likely require similar resources, efforts, and programs (including incentives and rewards). Understanding the factors that contribute to EE and ES can help organizations develop effective retention strategies and avoid duplicate efforts.

However, unbridled investments in EE and ES likely bring diminishing returns over time. We found that the positive effects of EE and ES on turnover intentions reach a saturation point, after which additional investments are unlikely to generate commensurate returns. This “too much of a good thing” effect is consistent with conservation of resources theories, which predict that people have limited resources and may become overwhelmed or dissatisfied if they are overextended.

To determine when to adjust the level of investment in EE and ES, organizations should track the ratio of return on investment and compare it to employee turnover rates. A notable change in this ratio may signal that it is time to adjust the level of investment in EE and ES. Importantly, investing in both EE and ES simultaneously may delay the diminishing returns on investments in employee retention.

Background (nice to know)

A study published in 2021 analyzed 417 turnover studies and identified several key factors that contribute to turnover in the hospitality industry. These factors include job stress, emotional burnout, depersonalization, safety concerns, role conflict and ambiguity, and job demand. On the other hand, factors that suppress turnover include well-being, organizational support, fairness, organizational culture, engagement, and job satisfaction. The study also found that burnout, emotional exhaustion, job stress, and career plateau are major contributors to turnover, while organizational commitment, job satisfaction, person-organization fit, and job embeddedness are key suppressors.⁶

A 2020 meta-analysis of 144 hospitality turnover studies identified 35 antecedents of turnover.⁷ Similarly, a meta-review of 35 hospitality turnover studies identified 23 turnover factors at the individual level and 15 at the organizational level.⁸ In all, employee engagement and satisfaction were top predictors of turnover intention, within the hospitality sector and otherwise. Yet the complex matrix of dozens of drivers of turnover intent (each or which map to engagement and satisfaction) point to a bewildering landscape for those who aim to reduce turnover. By reducing the many antecedents of turnover into factors of employee engagement and satisfaction, a more useful model for intervention might emerge.

The Experiments

Our experiments aimed to demonstrate (or disprove) the hypothesis that the relationship between employee engagement/satisfaction and turnover intent is either “quadratic” or “cubic.” In research, quadratic and cubic effects refer to the relationship between two variables that are nonlinear, or not represented by a straight line. This means that the relationship between the two variables is not proportional to investment, but instead follows a more complex pattern. Quadratic effects occur when the outcome (i.e., turnover intent) is produced at an accelerating rate for the same amount of input (i.e., engagement or satisfaction), as exemplified in exponential growth or reduction. In a cubic relationship, by contrast, the outcome effect quickly dissipates for the same amount of input, which is characterized in many saturation examples.

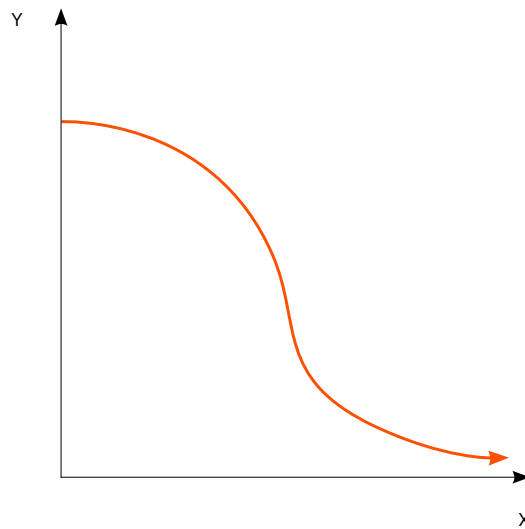
For example, the relationship between income and happiness may be quadratic and cubic, with people experiencing increasing happiness as their income increases up to a certain point, after which the relationship levels off or even reverses. Quadratic and cubic effects are often studied in research to better understand the complex relationships between variables.

Employees may embrace their job even if they are not necessarily happy with the organization they work for, or vice versa. In our experiments, therefore, we separated engagement and satisfaction into organizational engagement and satisfaction (OE/OS) vs. job engagement and satisfaction (JE/JS) as we felt this might reveal more granular insights to aid those targeting turnover.

Across four experiments, involving several hundred hospitality sales professionals, both organizational engagement (OE) and job engagement (JE), were, not surprisingly, found to be significant determinants of turnover intent (TI). Likewise, both job satisfaction (JS) and organizational satisfaction (OS) suppress TI.

We also found that employee engagement (EE) and employee satisfaction (ES) have nonlinear effects on turnover intentions. We used a polynomial model (an algebraic formula) to show that the relationship between EE, ES, and turnover intentions follows an inverted S-curve. An inverted S curve is a type of curve that is shaped like the letter “S” flipped upside down. This means that it has a gradual downward slope at first, followed by a steeper downward slope, and a leveling-off but slightly downward slope after a certain point. Inverted S curves are often used in mathematical modeling and can be used to accurately represent a variety of phenomena, such as population growth or the adoption of new technologies (Figure 1).

Figure 1: Inverted S-Curve



What this means is that the effects of EE and ES on turnover intentions are weak and take effect gradually at the low levels of EE and ES, but they get stronger quickly as investment in EE and ES continues. These turnover suppression effects of EE and ES saturate after a while, making excessive investments in EE and ES increasingly inefficient. Understanding these nonlinear relationships can be difficult, but this study shows that it is important for both theoretical and practical purposes.

For example, our study found that ES has a greater nonlinear influence on turnover intentions than EE at both the organizational and job levels. These results should be interpreted with caution because they may be influenced by the experimental manipulations used in the study but are very informative nonetheless given the much greater emphasis in recent years on intangible drivers of employee retention.

Employee engagement (EE) and satisfaction (ES) can have multiple inflection points on turnover intent. These inflection points, also known as “elbows,” can affect the strength and nature of the relationship between EE, ES, and turnover intentions. This means that investing in EE and ES may not always result in a consistent reduction in turnover but may instead have delayed or accelerated effects.

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