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Effort Reward Imbalance in the Nursing Profession - A Novel Way of Gathering Data of Gathering Data

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Effort Reward Imbalance in the Nursing Profession – A Novel Way of Gathering
Data

by

DORAILYS FAGUNDO

A thesis submitted in partial fulfillment of the requirements
for the Honors in the Major Program in Industrial Organizational Psychology
in the College of Sciences and in the Burnett Honors College
at the University of Central Florida
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Abstract

The effort-reward imbalance model allows us to see disparity in effort and reward and how this can be a predictor for a variety of constructs. The present study seeks to gather data utilizing the ERI model in the nursing profession. Previous research has utilized the ERI model but methods for gathering data were not quick and efficient. This study seeks to utilize a database called Glassdoor to rapidly and effectively gather data. The researchers are interested in seeing the likelihood of nurses to recommend their company to a friend based on perceived effort and rewards. The sample included a random selection of 40 reviews from 40 randomly selected hospitals. To collect these random samplings, we used an excel random generator formula. We selected the 40 hospitals based on the corresponding number of the excel random generator and utilized the same method to select the 40 reviews. Sample words were developed through reviewing previous research. The frequency of each type of word was summed to create a numerical variable for effort and reward. Not only was the actual content of the review assessed, but the overall rating the user gave on Glassdoor for each particular variable was also used as reference to maintain accuracy. Bivariate correlations were conducted on the data to determine the strength of the effort-likelihood to recommend relationship and the reward-likelihood to recommend relationship. Results indicated that nurses who reported putting more effort into their company, were significantly more likely to recommend their company to a friend. Results also indicated that nurses who reported more rewards such as raises, compensation, and benefits were significantly more likely to recommend their company to a friend.

Keywords: Effort-Reward Imbalance, high effort, low reward, workload, pay, respect, stress

DEDICATION

This study is dedicated to my aunt Dayami Gonzalez, my mother Daney Gonzalez, and my stepfather Joel Lopez. Without their continued guidance and support I would not be where I am today. Your strength and constant perseverance to give me a better future has forever marked the way I approach life.

Gracias por ser mis mayores ejemplos en esta vida.

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Introduction

The effort reward imbalance model posits that the disequilibrium between elevated levels of employee effort and reward, leads to high levels of occupational stress (Siegrist, 1998). Not only have studies shown a deterioration in the overall health of employees, but they have also shown deterioration in behavioral outcomes and psychological well-being. Current research has looked at behavioral outcomes such as sickness absence behavior and physical symptoms (Bakker, Killmer, Siegrist, and Schaufelli, 2000, pg. 886). As found by Feldt, Hyvönen, Mäkikangas, Rantanen, Huhtala, & Kinnunen (2016), “The ERI model has its roots in the notion of social reciprocity, which explains how the costs and gains of social exchanges determine people’s behavior with others (Pg. 310).

Furthermore, previous literature has found positive correlations between high intent to leave an organization and high effort and low reward. Further examination of the literature has also revealed a positive correlation between anticipated effort reward imbalance and high intent to leave an organization (Galatsch, Siegrist, Müller, Hasselhorn, and European NEXT Study group, 2011). As Bakker et al. (2000) posits, “Significant interaction effects indicated that burnout (i.e. emotional exhaustion and reduced personal accomplishment) was particularly prevalent among those nurses who experienced ERI and put relatively high intrinsic effort into their jobs, as reflected by their strong tendency to be personally in control over job conditions” (pg. 884). This is quite interesting as it suggests that the more emotionally involved one is with their occupation, the more likely they are to experience burnout when there is an effort reward

imbalance. In a similar way, this finding also suggests that lack of control can also lead to burnout when effort reward imbalance is present (Bakker et al., 2000).

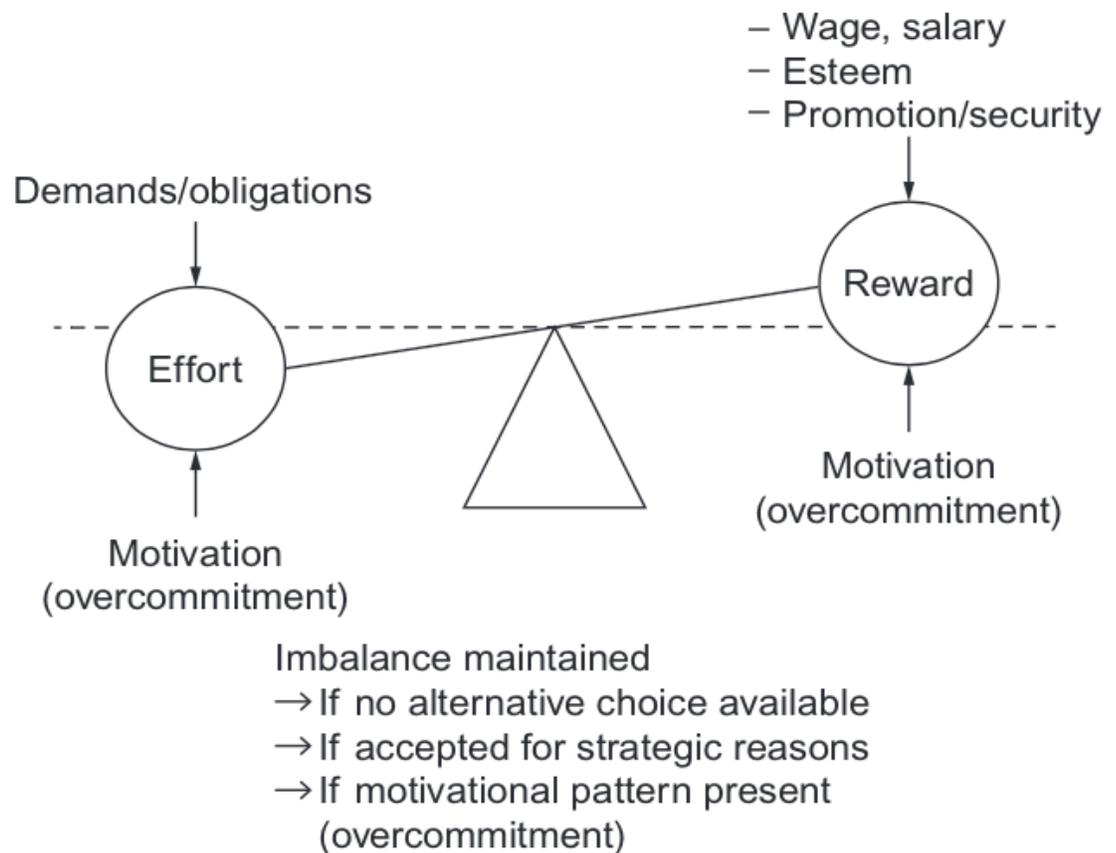


Figure 1: Effort Reward Imbalance Model.

The importance of considering the effort reward imbalance model when it comes to employee satisfaction is undeniable. This model shows what can occur if a lack of reciprocity is continuously present within an organization. As found by Fink (2016), high effort and low reward, or “high cost/low gain” situations, increases the risk for stress. These situations of high cost/low gain have shown to violate the basic principle of the brains reward system (Fink, 2016).

This model emphasizes what occurs when too much stress is present in a work environment. Social reciprocity is a construct that has been found to be a fundamental aspect of human exchange. Equity theory as found by (Adams, 1965) accounts for employee perceived fairness about their occupational outcomes and what they receive from their company (Sweeney, 1990, p. 329). The disparity between the high cost/low gain scenario violates the rules of social reciprocity, therefore, creating a stressful occupational environment for employees. This effort-reward imbalance is frustrating to employees and negates basic equality in the exchange between work and rewards. This disparity affects employee's self-esteem and creates negative emotional reactions (Fink, 2016).

As found by Fink (2016) the long-term effects of these high stress situations can lead to the constant activation of the main stress areas in the brain. This constant activation of these brain areas can lead to mental and even physical related issues in the future. To lower these risks companies should consider measures towards decreasing employee stress. This is done by increasing health promoting behaviors, non-material rewards, and redistribution of workload among other factors (Fink, 2016).

The effort reward imbalance model explains the everyday mechanisms that motivate employees. Effort can be viewed as day to day obligations that an employee must fulfill, effort is seen to lead to rewards within the workplace such as a raise in wages, social respect, and further career opportunities. This suggests that when paired together, or when rewards and overcommitment are paired together, one influences the other leading to effort reward imbalance

(Kinman & Jones, 2008). These can be seen as crucial to the overall satisfaction of an employee within an organization.

The effort reward imbalance model is essential as it gives in depth information on the satisfaction, wellbeing, and overall can be a great predictor of employee commitment and turnover. As found by Scanlan, Meredith, & Poulsen (2013), “Occupational therapists working in mental health who experience burnout, low work engagement, or poor job satisfaction are at risk of poor wellbeing at work and may be more likely to leave their jobs” (pg. 395). The previous study found significant associations between turnover and wellbeing, turnover being largely predicted by job satisfaction (Scanlan, Meredith, & Poulsen, 2013). Furthermore, we see a direct connection between high effort and low rewards and emotional wellbeing. De Jonge, Bosma, Peter, & Siegrist (2000) posit, “high (psychological and physical) efforts and low rewards adversely affected employee well-being. Preliminary findings also indicate excess risks of poor well-being in overcommitted persons suffering from high cost — low gain conditions at work” (pg. 1317). Upon deeper analysis we see emotional exhaustion being a big concern as far as high effort low reward as well, specifically ERI is found to be positively related to emotional exhaustion (Feuerhahn, Kühnel, Kudielka, & B.M, 2012).

With the integration of social media and social networking sites such as Glassdoor, knowledge about employee satisfaction has become more readily available. Even more specifically, it can be seen first-hand the way ER influences turnover decisions through a simple analysis of data provided by the employees themselves. This research seeks to study the effort reward imbalance model and employee satisfaction by using a different approach that has not

been widely seen in previous literature. Past research has focused on gathering data through questionnaires and has had a predominant focus on the nursing profession. This can be seen as AbuAlRub, Omari, & Al-Zaru (2009) demonstrated through the way data was gathered in this particular study.

They found that their sample of Jordanian nurses versus American nurses, although differing widely demographically, had similar responses in the association of job stress and social support from coworkers. This study revealed that when both social support and job satisfaction increased, so did the likely hood of remaining within the company. Furthermore, they found an increase in job satisfaction when high levels of social support were present (AbuAlRub, Omari, & Al-Zaru, 2009). These two factors, therefore, seem to go hand in hand.

The aforementioned research sought to replicate a previously conducted study, through the internet. Although not quite utilizing social media, they gathered data by a questionnaire through readily accessible American nurses on the internet. “The predicted comparability of findings with different methods and samples lends credence to the reliability and validity of internet-based research” (AbuAlRub, 2006). Building on previous survey-based research, we investigate the utility of a novel data collection approach to study effort reward imbalance. We will use publicly available social media reviews from nurses in a sample of hospitals to test the relationships between effort-focused review content, reward-focused review content, and likelihood to recommend the company to a friend.

We are interested in seeing how positively or negatively an employee will rate an organization based on their perceived dedicated effort and lack of reward. More specifically, we

want to measure how much effort they feel was put on their part versus how much reward they received. We will be looking at employee ratings through Glassdoor and using the effort reward imbalance model as a point of reference. Perceived dedicated effort and lack of reward will be examined and analyzed based on the content of the review, how likely they are to recommend the company to a friend, and their ratings on a scale of 1 to 5.

Study Hypothesis

Hypothesis I: Frequency of effort-associated words will be negatively associated with likelihood to recommend.

Hypothesis II: Frequency of reward-associated words will be positively associated with likelihood to recommend.

Methods

Procedure

Data were collected from a publicly available social media site dedicated to reviews of employers, Glassdoor. Because a review of all profiles would be too cumbersome, we randomly select a sample of reviews to code. We chose to focus on reviews of hospitals written by Glassdoor users in the nurse profession for several reasons. First, a good deal of previous effort reward imbalance research focuses on healthcare professions, allowing us to test replicability of findings in this industry. Second, the nursing profession is suffering from a labor shortage, making the dependent variable “likelihood to recommend” a meaningful variable in this occupation. Finally, taking a narrow focus on a single industry and occupation creates greater confidence that observed relationships are due to differences in effort and reward, rather than differences in occupational context.

To collect each data point, we used an Excel random number generator formula to generate a list of 40 random numbers. When looking at the list of hospitals reviewed on Glassdoor, which are listed in alphabetical order, we selected the 40 companies that corresponded to the random numbers. Once the list of companies was identified, we generated a random number that identified the page of the reviews that we would choose, and a final random number that identified the review on that page that we would choose. For example, if the random numbers two and six were generated, we could advance to the second page of reviews for that hospital and select the sixth review on that page. The content of the selected review was copied into an Excel workbook. The final Excel workbook contained forty randomly selected reviews,

each representing a unique user and a unique hospital. The content of the data contained the qualitative review and a numerical score for likelihood to recommend the company to a friend, which the Glassdoor user rated on a scale from one to five.

Data Coded & Analysis

The first author reviewed the content of all selected reviews and coded them for the frequency of effort-associated words (i.e. stress, energy, workload), and the frequency of reward-associated words (i.e. pay, respect, support, personal health). These sample words were developed through reviewing previous research. The frequency of each type of word was summed to create a numerical variable for effort and reward. Bivariate correlations were computed to determine the strength of the effort-likelihood to recommend relationship and the strength of the reward-likelihood to recommend relations.

Results

Correlations

		Effort_Freq	Recommend
Effort_Freq	Pearson Correlation	1	.919**
	Sig. (2-tailed)		.000
	N	40	40
Recommend	Pearson Correlation	.919**	1
	Sig. (2-tailed)	.000	
	N	40	40

** . Correlation is significant at the 0.01 level (2-tailed).

Figure 2: Correlation table for effort and likelihood to recommend.

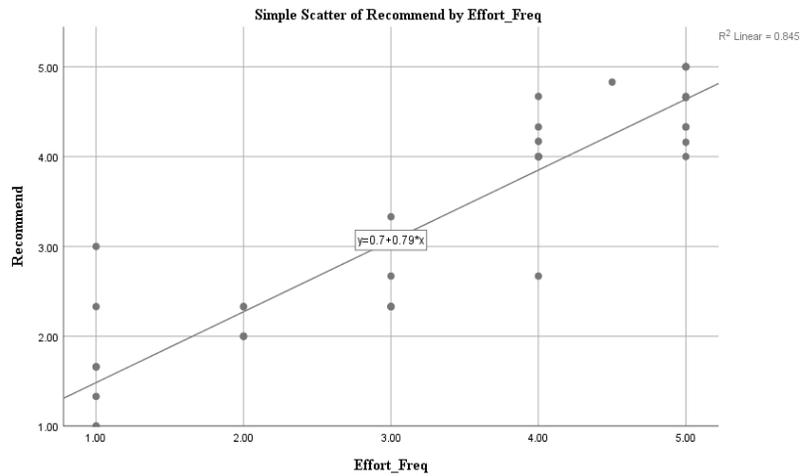


Figure 3: Scatterplot for effort frequency and likelihood to recommend.

Correlations

		Recommend	Reward_Freq
Recommend	Pearson Correlation	1	.828**
	Sig. (2-tailed)		.000
	N	40	40
Reward_Freq	Pearson Correlation	.828**	1
	Sig. (2-tailed)	.000	
	N	40	40

** . Correlation is significant at the 0.01 level (2-tailed).

Figure 4: Correlation table for reward frequency and likelihood to recommend.

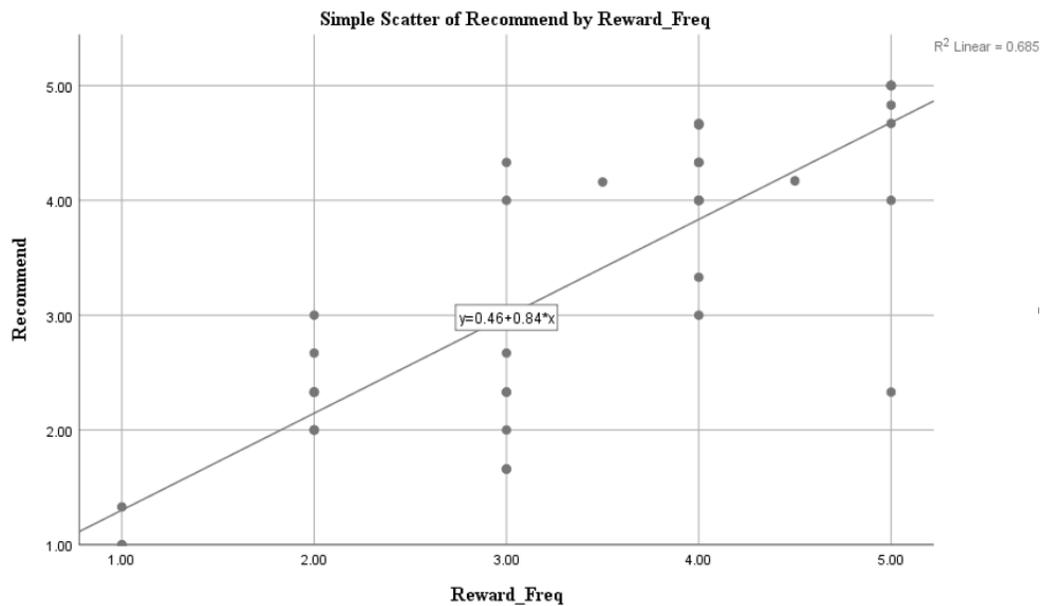


Figure 5: Scatterplot for reward frequency and likelihood to recommend.

Correlations

		Effort_Freq	Reward_Freq
Effort_Freq	Pearson Correlation	1	.611**
	Sig. (2-tailed)		.000
	N	40	40
Reward_Freq	Pearson Correlation	.611**	1
	Sig. (2-tailed)	.000	
	N	40	40

** . Correlation is significant at the 0.01 level (2-tailed).

Figure 6: Correlation table for effort and reward frequency.

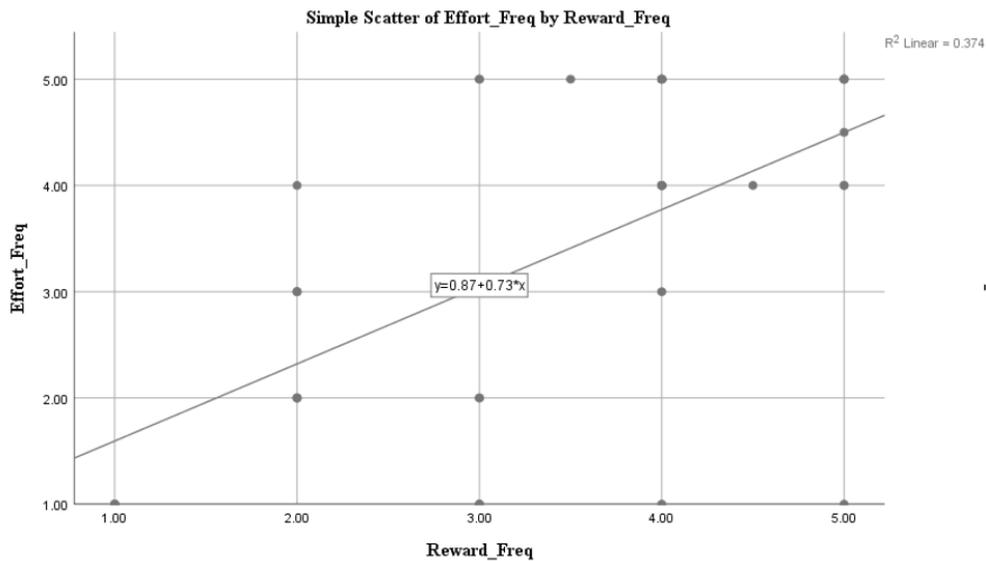


Figure 7: Scatterplot for effort and reward frequency.

The researchers were interested in seeing the likelihood of nurses to recommend their company based on perceived effort and rewards. 40 samples were taken from 40 different companies through a readily available database called Glassdoor. The higher the rating a user

gave, the higher the chances to recommend their company, and vice versa. This was measured on a scale of 1 (being the lowest) and 5 (being the highest). A bivariate correlation was conducted on the frequency score. Results indicated that nurses who reported putting more effort into their company such as amount of work and work life balance ($M = 3.33$, $SD = 1.49$) were significantly more likely to recommend their company to a friend ($M = 3.32$, $SD = 1.28$) than those who put in less effort ($r(39) = .91$, $p < .05$). Results also indicated that nurses who reported more rewards such as raises, compensation, and benefits ($M = 3.40$, $SD = 1.26$) were significantly more likely to recommend their company to a friend ($M = 3.32$, $SD = 1.28$) than those who rated their company lower in rewards ($r(39) = .82$, $p < .05$).

Discussion

The goal of the present study was to utilize the ERI modal to gather data on the nursing profession. As it pertains to this study, nurses reported a disparity between reward and likelihood to recommend their company. Contrary to our initial prediction for hypothesis 1, effort-likelihood to recommend was not found to be negatively correlated. Perhaps what is occurring here is those who reported higher effort within their organization were also reporting work-life balance (see Figure 1). Nonetheless, effort is highly correlated with likelihood to recommend.

In this case higher ratings in work-life balance can be seen as a motive for more likelihood to recommend (See Figure 2). The results being positively correlated is an indication that effort can be significantly attributed to likelihood to recommend. In line with our second prediction, those who reported higher rewards, were found to be more likely to recommend their company to a friend (see Figure 3 and 4). Interestingly enough, we found that effort and reward were positively correlated, suggesting that people have both in their jobs as opposed to one or the other (see Figure 5 and 6).

There are several complex factors that could be influencing the unexpected results in hypothesis one. It could be suggested that the nursing profession is one that requires effort at all times. As found by The National Center for O*NET Development, 51% of nurses reported time pressure within their occupation. Further examining the nursing profession, we see that 57% also reported “extremely serious” consequence of error.

When it comes to decision making 88% of nurses reported that this is an “everyday occurrence”. In terms of responsibility for outcome of results 40% responded “very high responsibility”. All of these variables play a big role in making the nursing profession one of

high effort, regardless of company values, culture, etc. These results can suggest to us that effort, in terms of healthcare, can be quantified differently than other occupations.

Furthermore, leading hospitals can receive more cases than lower ranked hospitals further increasing the need for effort. Through the National Center for O*NET Development we see an array of variables that could be influencing the high effort reported within the nursing profession. The frequent exposure to infectious diseases can also be seen as a stressor, 80% of nurses report that exposure is an “everyday” occurrence. The stressful conditions in which nurses have to work in, as well as the amount of responsibilities that they have to constantly keep at the forefront of their minds, can influence the reported effort.

Previous research has found a great deal of burnout within the nursing profession. As found by Scanlan, Meredith, & Poulsen (2013), nurses who experience burnout are more at risk for leaving their job (pg. 395). Nurses experiencing burnout in exponentially high rates, and therefore being more likely to leave their organization, can be attributed to the high demand and need for effort within this profession. Nurses reporting higher effort, yet more likelihood to recommend, suggests that higher levels of effort are required in top ranked hospitals.

Limitations

Although it is a great advantage to be able to acquire data through Glassdoor relatively fast, there are a couple of concerns with this:

Research Limitation 1: With the virtual gathering of data, especially in this way where we were not in direct contact with the person who wrote the review, misinterpretations can occur. We were unable to get clarification from the nurse who wrote the review to further explain their statements

about their company. In this case one would think that a survey-based approach where you would gather the nurse's opinion is needed. This would entail a long survey to assess effort and reward.

Research Limitation 2: We were unable to verify if the review was written from true occurrences as anyone can write a review for any company on Glassdoor.

To overcome these limitations, we had to filter through a couple of reviews to see that there was a general consensus among the majority of the reviews. When interpreting the reviews, we did not make any assumptions about what the reviewers were saying. Glassdoor provides a rating scale which is a great way to verify what they put on the rating scale and the actual content of their review. Furthermore, Glassdoor actually tells you if the employee would recommend their company to a friend.

Glassdoor allows you to get the whole picture as to how that employee feels about their particular company. Providing several different ratings on a scale of 1 to 5 that can be utilized to see exactly why that employee would or would not recommend their company to a friend. The actual content of the review goes into detail as to why they rated their company the way in which they did. It was important for the researchers to consider all of these factors when data coding as it gave a more accurate representation of what was occurring.

Strengths

Research Strength 1: The ability to gather data in a fast and more efficient manner.

Research Strength 2: The facility to see exactly what that particular employee feels about the company. As these reviews are being done on the own free will of the employees, responses are not faked or made to sound better.

There is always worry in terms of collecting accurate data. Although there are several concerns with utilizing Glassdoor, the employees who write these reviews don't need to feel pressure when doing so. More specifically, there is no worry with having to rate the company more favorably, and reviewers might feel more inclined to not filter themselves. Having the ability to see what the employees truly feel about their company is an advantage from a research standpoint.

When utilizing survey-based methods of data collection employees might be worried about rating their company unfavorably and might choose to filter what they say. This can lead to an inaccurate representation of the company or occupation in question. Glassdoor eliminates that pressure for employees. Furthermore, perhaps employees feel inclined to rate their company more favorably in a survey-based approach for fears of getting terminated and not remaining anonymous. This can be a bigger concern when it is the organization themselves that are conducting the study.

Perhaps this method of data collection can be seen as more accurate when the company themselves are conducting the research because of the aforementioned concerns. An organization would quickly gather the needed data utilizing this method. There would be no need to schedule employees to take a survey and lose productivity attempting to get their responses. This data would be readily and easily accessible.

Implications and Direction for Future Research

The results in this study as well the method of data collection have implications in a lot of areas. The results suggest to us that the nursing profession is one of high effort regardless of conditions within the organization. The responsibilities and emotional strains placed on people of the nursing profession can be seen as far too great. The method for data collection can be seen as a game changer especially when gathering occupational data such as this. Not only can this method be utilized in future research but can also be used on an organizational level.

This method of data collection can benefit companies greatly, it is of low resources and can be seen as an efficient method to obtain information. The information that can be found on Glassdoor is vast and the ways in which companies can benefit from it are endless. Employees freely speak their mind when reviewing their organization and companies can utilize this information to create better work environments. Future researchers can also benefit from this way of data collection.

Glassdoor does the majority of the logistical setup when it comes to the differing rating scales. This leaves very little room for guessing in terms of how an employee feels about core and essential occupational variables. Using Glassdoor for this type of research is fast and effective and researchers can expect to get results fairly quickly. The facility with which one can gather data comes at a cost, this being the inability to get clarification on what the rater is saying about their company.

Not only has this method of data collection shown to be quicker and more efficient but it allows us to see the impact this could have on a company. Workplaces should monitor sites such as Glassdoor because it could greatly impact public perception of their organization.

Implementing employee suggestions and working towards eliminating negatively perceived aspects of their organization could highly improve public perception and future employee retention.

More specifically, the monitoring of rewards can be seen as vital in maintaining favorable employee perception. As results showed, the higher ratings in employee perceived rewards leads to more likelihood to recommend. Not only can one suggest that likelihood to recommend might attract future employees, but it can also be suggested this might retain current employees.

Conclusion

There are two very interesting findings that we were not expecting to see, one being the positive correlation of effort with likelihood to recommend. The other being the correlation between effort and reward. In Glassdoor, users rate their experience in regard to effort along with how much they believe work-life balance was also present. We believe this is the reason for the positive correlation, despite more effort. If users reported their company as being high in work-life balance, their ratings in effort for that company went up. This could be an indication that future studies should look at the relationship between work-life balance and likelihood to recommend.

Furthermore, as found in the National Center for O*NET Development nurses report high rating in areas that can be said to be contributing factors to higher effort. The positive correlation between effort and likelihood to recommend can be due to the fact that those who rated higher effort were working for top hospitals. We can also suggest that this could be due to effort justification. These hospitals have higher caseloads, and therefore might require more effort on behalf of the employees. Therefore, nurses still reporting high likelihood to recommend could also be influenced by the reward-likelihood to recommend.

The correlation between effort and reward is quite interesting, we did not expect to find this. This positive correlation suggests that both effort and rewards play a big part within an organization. Perhaps it can be suggested that employees do not have either or within their company. A mixture between effort and rewards are needed for overall satisfaction, and therefore, more likelihood to recommend their company.

Utilizing Glassdoor to gather this type of data can be beneficial for future research, especially when it pertains to employee satisfaction. There are a couple of interesting points found within this study that can be analyzed and expanded on in the future. Not only can this method of gathering data be beneficial for future academic research, it can also benefit companies as well. Using readily available data like this would allow companies to gather information on employee opinions and satisfaction at a fast rate, while also maintaining accuracy.

If interested in boosting employee retention and figuring out why there are high turnover rates this method of gathering information can be beneficial. Using Glassdoor to figure out what can be modified and changed within an organization is not only quick and efficient but allows companies to gain insights into the opinions of their employees. These opinions can really shift the overall employee experience. Within a review employees can attest for even the smallest area of a company, such as management.

When filtering through the reviews some nurses reported not wanting to recommend their company because of poor management skills. This was seen from a small scale, such as departmental, or companywide such as CEO and general management. These smaller variables that affect an employee's satisfaction rate, and therefore their likelihood to recommend their company to a friend, can have a huge impact. These types of issues are easily detectable utilizing Glassdoor.

This method of gathering data can ultimately save companies resources, money, and time. By choosing this method of data collection they are more efficiently getting the

information they need to implement change within an organization. It would be quite interesting to see this way of data collection being utilized in future research as it pertains to turnover. This novel way of gathering data can be seen as a way to get an accurate idea as to why there are high turnover rates. Perhaps further research should be conducted on the use of Glassdoor to close that gap and retain employees at a higher rate.

Although our findings were not completely in line with our initial hypothesis these differences allowed us to consider further differing ideas. These ideas allowed for a deeper consideration of future research and how these can be utilized in a variety of ways. Glassdoor is a huge aid in maintaining accurate representation of the data you are seeing. With the ability to differentiate between varying areas of an organization.

It allows you to see rating scales of work/life balance, culture and values, career opportunities, compensation and benefits, and senior management. Among all of these different rating scales it also tells you whether or not that employee would recommend their company to a friend, and their overall rating of the company as a whole. This division of the scales is useful as it can provide companies with a greater understanding of the areas in which perhaps, they need improvement on. There are endless possibilities in which companies can use this method of data collecting.

From a research standpoint there are countless variables that can be tested by utilizing Glassdoor. As previously mentioned, this method of data collection can potentially change the way in which we approach these types of studies. Glassdoor allows for researchers to see an accurate depiction of what is happening when it comes to measuring various different variables.

The facility and ease with which this can be obtained cannot be beat and should be considered in future employee research.

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