Employer Ratings through Crowdsourcing on Social Media: An Examination of U.S. Fortune 500 Companies

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Abstract: The aims of this study are to examine the effect of crowdsourced employer ratings and employee recommendations of an employer as an employer of choice, to examine which employer ratings that represent different employee value propositions can predict the overall employer rating through crowdsourcing, to examine whether the Fortune 500 ranking can also influence overall employer ratings, and to mine which keywords are popularly used when employees post a comment about the pros and cons of their employers on a crowdsourced employer branding platform. The study collected crowdsourced employer review data from Glassdoor based on 2019 Fortune 500 companies, and the results found that crowdsourced employer ratings are positively associated with “recommend to a friend,” while culture and values predominantly influence overall employer ratings. The rank of Fortune 500 has less predictive power for overall employer ratings than for other specific employer ratings, except for business outlook. The most popular keywords of Pros on Glassdoor are work–life balance and pay and benefits, whereas the most popular keywords of Cons on Glassdoor are work–life balance and upper management.

Keywords: electronic word-of-mouth (e-WOM); employer branding; employee value proposition (EVP); Glassdoor

1. Introduction

Employer branding is “the functional, economic, and psychological benefits that are provided by employment and identified with the employing company” [1], and currently, the benefits are also called employee value proposition (EVP) [2], which enables an employer to differentiate and promote itself from the other competitors to potential and current employees [3]. Effective employer branding can reduce talent acquisition costs, improve labor relationships, and increase employees’ engagement with employers [4]. Therefore, a distinct and desirable employer branding positioning as an employer of choice has been recognized as a competitive strategy and critical resource for an organization’s sustainability [5–7]. Employer branding has two main target audiences: internal employees (current and former employees) and external job candidates [8]. External job candidates have limited information about an employer for which they have never worked, and they may perceive an employer’s branding based on incomplete information through interaction during the job application process [9] and/or word-of-mouth (WOM) from the internal employees connected with them [10].

Scholars have suggested that internal employees are the best indicators of employer branding based on what they encounter, observe, or feel in an organization [11], which is called employee experience [12]. Employers can collect and analyze the information on employee experience from
exit interviews, employee surveys, or other closed-door channels to understand the needs of internal employees and strengthen external job candidates’ perception of employer branding based on their needs [12]. However, employers have difficulty accessing natural information beyond closed-door channels, because internal employees may fear negative repercussions if they share something improperly [13].

As the popularity of social media enables users to create and share content through virtual networks or communities [14], an increasing number of internal employees are anonymously sharing their experience (including satisfactory and dissatisfactory employment stories) online, and an increasing number of external job candidates read these stories and understand prospective employers before applying for jobs or accepting job offers [3,13]. Dabirian et al. [13] adopted revised “crowdsourcing”—use of large groups of individuals towards the completion of a specific task [15]—and defined this type of social media as a crowdsourced employer branding platform that enables job applicants to transparently research employer brands according to anonymous ratings and comments from their internal employees, which are perceived to be more credible information sources without self-interest in promoting employers [16], such as Glassdoor [8]. A study found that crowdsourcing ratings are likely to converge with subject matter experts’ judgement [17]. As one of the world’s largest crowdsourced employer branding platforms with 50 million visitors per month, 86% of job candidates research company reviews and ratings for different employment attributes of a company before applying, according to Glassdoor in 2020 [18].

Glassdoor has 60 million employee reviews covering over 1 million companies across 200 countries [18]. Glassdoor offers participants reviews on CEO approval ratings, positive business outlook, whether they would recommend to a friend, and different employer ratings, including overall rating, culture and values, work–life balance, senior management, compensation and benefits, and career opportunities, which can reflect different facets of EVP for employer branding. The overall rating reflects overall job satisfaction, while the other specific ratings reflect facet-level job satisfaction (e.g., satisfaction with culture and values, work–life balance, etc.) [19]. Since job satisfaction reflects employees’ experience with their employers, the different crowdsourced ratings on Glassdoor would be valid indicators for employer branding by overall and different facets of EVP [8].

As suggested by some pioneering studies on Glassdoor or other crowdsourced employer branding social media platforms [8,13,19–21], effective employer branding leads to positive electronic WOM (e-WOM) endorsement, leading to the company being perceived as a good place to work, whereas negative e-WOM has the opposite effect. These significant changes in terms of employer branding through crowdsourcing raise the first research question in this project: can employer ratings truly predict WOM endorsement by internal employees (recommend to a friend)? Although customer satisfaction and recommendation behavior are intercorrelated in the marketing field, a satisfied customer may not perform recommendation behavior. That is why many marketers set the net promoter score as an independent performance indicator in addition to customer satisfaction ratings [22]. As well as in human resources, a satisfied employee may not recommend his or her employer to their friend. Therefore, it is necessary to examine whether employer satisfaction can drive recommendation behavior for employer branding research [8].

On Glassdoor, different employer ratings in specific attributes represent different EVP facets that may have different impacts on overall employer ratings. Since there are different ratings for employer branding, there should be a priority on which employers can focus [13]. We proposed a second research question in this project: which EVP facets are more important for predicting overall employer ratings? Past studies have found that traditional public media impact all aspects of employer brands, including familiarity and reputation (e.g., U.S. Fortune 500 companies), and familiarity and reputation drive organizational attractiveness for both internal employees and external candidates, because the ranking list may signal that companies have a higher degree of familiarity and better reputation, which can make employees (and potential employees) feel pride for being (or having ever been) a part of these companies [23]. Therefore, how much the degree of familiarity and reputation ranked by the
public on social media influence employer ratings ranked by internal employees would be a third research question in this project.

Other than ratings of a company by current or former job holders (reviewers), Glassdoor asks each reviewer to post a comment including three pros and three cons related to the employer within the last five years. Every post will be reviewed by the Glassdoor team before appearing on the site to maintain data quality [18]. Any job holders who would like to review any job or company information on Glassdoor must complete the rating and posting process. Glassdoor uses sentiment analysis to retrieve the most popular text from comments about a company and highlights the keywords on the site for review. In other words, every reviewer can review any employers' ratings and comments on Glassdoor when s/he completes a review, including rating and posting about a company for which s/he works/has worked. Accordingly, the last research question in this project is proposed: what are the most popular pros and cons comments that describe internal employees’ work experience?

Crowdsourced ratings about a product or service have been proved as a critical leading indicator for long-term success of an organization, because the e-WOM greatly influences customers’ acquisition and retention in the digital era [22,24,25]. Understanding crowdsourced ratings about employer branding would be an important issue for organizational sustainability, because the e-WOM significantly affects talent acquisition and retention [8,21] that has been included in the new global environmental, social and governance (ESG) reporting guide launched by NASDAQ in 2019 [26].

This paper is structured as follows: we begin with a brief review of the literature on crowdsourced employer ratings on Glassdoor, with an emphasis on our four research questions. (Q1) Can employer ratings predict internal employees' recommendations to a friend about a company as an employer of choice? (Q2) Which specific employer ratings can significantly predict overall employer ratings? (Q3) Is the U.S. Fortune 500 ranking associated with employer ratings? (Q4) What are the most popular pros and cons in posted comments for employer branding? Thereafter, we use Glassdoor’s data source in 2019 based on the U.S. Fortune 500 list of companies 2019 to perform data analytics. The results are presented and discussed, with the accompanying practical and theoretical implications regarding employer ratings through crowdsourcing on social media.

2. Theoretical Background

2.1. Crowdsourced Employer Ratings and Employee Recommendations of an Employer as an Employer of Choice

Employer branding refers to positioning an organization as an employer of choice [27] and promising tangible and intangible employee value propositions (EVPs) that can be perceived on the basis of the experience of current and former employees of that employer [28]. According to the theory of psychological contracts [29], positive employee experience occurs when employees perceive the promised EVPs as being fulfilled; otherwise, the mismatch or gap causes a negative employee experience, called a psychological contract breach [30]. Both positive and negative employee experience create WOM about an employer, including whether they recommend the employer as an employer of choice [8].

As self-disclosure in social media has boomed in recent years [31], many internet users share their life experience on social media, such as rating or posting a comment about a service or product, called e-WOM [32]. According to marketing research, positive e-WOM generates a positive attitude and recommendation for purchase, whereas negative e-WOM has the opposite effect [33]. Empirical human resources (HR) studies also found that employee experience leads to both positive and negative e-WOM [3], and positive (negative) e-WOM leads (or not) to recommendations of employers as employers of choice [8]. Glassdoor provides different employer rating scales and invites participants to paint a whole picture of what it is like to work for an employer [34], and these scales represent different EVP promises fulfilled by an employer, including overall rating, culture and values, work–life balance, senior management, compensation and benefits, and career opportunity based on a five-point (star) scale. Moreover, Glassdoor invites participants to rate their CEO and the company’s six-month
business outlook based on a three-point scale (negative, neutral, or positive) and asks participants whether they would recommend the company to their friends as a good place to work [18]. In line with the applications of psychological contracts and e-WOM, we argue that the different employer ratings can predict whether internal employees recommend an employer as an employer of choice to their friends through crowdsourcing (Q1):

**Hypothesis 1.** All employer ratings will be positively associated with “recommend to a friend” on Glassdoor.

### 2.2. Specific Employer Ratings and Overall Employer Ratings through Crowdsourcing

As mentioned, the different employer rating scales reflect different facets of EVP. Although all EVP facets are promising, these different types of EVP do not matter to the same extent for internal employees [35]. In other words, different specific employer ratings (culture and values, work–life balance, senior management, compensation and benefits, career opportunity, CEO endorsement, and business outlook) have different weights in predicting or explaining the overall employer rating, which, in turn, allows employers to rank them in order of importance and priority; otherwise, employers may suffer from waste of resources on noncritical EVP facets [13]. Therefore, the second hypothesis is proposed as follows (Q2):

**Hypothesis 2.** Overall employer rating is primarily determined by limited specific employer ratings on Glassdoor.

### 2.3. U.S. Fortune 500 Ranking and Crowdsourced Employer Ratings on Glassdoor

According to signaling theory [36], when an employer brand is ranked over competitors by credible information resources (e.g., objective third parties), it sends a signal to internal employees that the employer is attractive to outsiders [37]. Internal employees perceive that their employers are appearing in the market, which enhances positive employer branding in the mind of internal employees [8]. Since the U.S. Fortune 500 ranking is conducted by a credible third party, we argue that the ranking will influence overall employer ratings by internal employees.

Compared to traditional WOM, a large volume of updated e-WOM is available to anyone and can be accessed over time. Accordingly, e-WOM itself creates virtual communities in which crowdsourced information has more influencing power than other information sources regarding recommendations for purchasing specific services or products [38], as well as different employer ratings on Glassdoor that are generated from the employees’ real experience, which includes every interaction that occurs along with their employer [8]. Therefore, we argue that even the ranking conducted by a third-party publication (e.g., the U.S. Fortune 500) can significantly influence overall employer ratings, but it has less predictive power for overall employer rating than other specific employer ratings on Glassdoor. In line with signaling theory and a comparison of WOM versus e-WOM, the last two hypotheses are proposed as follows (Q3):

**Hypothesis 3a.** The U.S. Fortune 500 ranking will significantly predict overall employer ratings on Glassdoor.

**Hypothesis 3b.** The U.S. Fortune 500 ranking has less predictive ability for overall employer ratings on Glassdoor than the other specific employer ratings.

To better understand an employer brand, conducting text mining from crowdsourced data on social media, such as Glassdoor, would be a good way, beyond quantitative ratings [3], which is called employer brand intelligence [13]. Even having higher employer ratings on Glassdoor, conducting text mining from posted comments (pros and cons) can identify important insights regarding whether employees are satisfied or dissatisfied. In turn, this information can shed light on opportunities for improving employer brands and creating a positive employee experience in general [13]. Glassdoor provides the service of employer brand intelligence, in which the popular keywords of pros and cons
regarding the employee experience can be reviewed and sorted by any user [18]. Hence, we scrape the reviewing text data to understand what the current and former employees like and dislike about employers within the U.S. Fortune 500 ranking list (Q4).

3. Research Methodology

3.1. Data Source and Collection

For the research questions of this study, we manually scraped Glassdoor’s company review data contributed by current and former full-time employees on 2019/12/31 [39] for companies featured on the U.S. Fortune 500 list [40], ranked by Fortune magazine based on total revenue in 2019.

3.1.1. Fortune Rankings

Because 11 companies within Fortune 500 have no review data or had fewer than 5 reviews when we scraped the company review data, we excluded them from this project: Energy Transfer Equity, Plains GP Holdings, Icahn Enterprises, Liberty Interactive, Dick’s Sporting Goods, A-Mark Precious Metals, Yum China Holdings, HRG Group, Alleghany, Liberty Media, and Vistra Energy. Therefore, we analyzed the other 489 Fortune companies with a total of 1,063,848 reviews as our sample for this study. We directly adopt the ordinal scale of Fortune ranking for this variable, in which rank 1 represents the largest company by revenue, whereas rank 500 represents the company that gained the least revenue within the list.

3.1.2. Crowdsourced Employer Ratings

Employer ratings on Glassdoor are determined by current and former employees’ evaluations. Internal employees are asked to rate their overall satisfaction with their employers (called Overall) and rate the key EVPs such as culture and values, work–life balance, senior management, compensation and benefits, and career opportunities based on a 5-point scale (1: very dissatisfied, 2: dissatisfied, 3: OK, 4: satisfied, and 5: very satisfied). Additionally, internal employees are asked whether they would recommend their employer to a friend (percentage of employees who would recommend their employer to a friend), whether they approve of their CEO (percentage of employees who approve their CEO), and whether they believe the organization’s six-month business outlook is positive (percentage of employees who believe the six-month business outlook is positive). Glassdoor calculates these attributes of employer ratings using a proprietary rating algorithm, and the ratings will be updated within 7 business days for public review on Glassdoor’s website [41], as shown in Figure 1.

![Figure 1. Employer ratings on Glassdoor.](image)

3.1.3. Crowdsourced Employee Comments

In addition, when submitting a company review, employees are asked to post their opinion on some of the best reasons to work for their employer (pros), any downsides (cons), and a title for the review that is displayed on the site and are encouraged to provide advice to management, limited to
5000 characters in English [41]. Glassdoor displays the five most popular pros and cons for public review, as shown in Figure 2. We scraped the keywords of the five pros and cons for this study to address Q4.

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| Pros                                                                 | Cons                                                                 |
|---------------------------------------------------------------------|---------------------------------------------------------------------|
| "Good salary and good environment for green thumb" (in 61 reviews)  | "As an engineer, you have to endure long working hours" (in 58 reviews) |
| "Nice people, great place for logical thinking training, good pay,     | "NO work-life balance even works are finished" (in 37 reviews)       |
| challenging" (in 24 reviews)                                        | "High pressure and people are busy" (in 37 reviews)                  |
| "good working environment (physically)" (in 20 reviews)              | "The working time could be flexible" (in 28 reviews)                  |
| "High salary and good working office" (in 15 reviews)                | "Long work hours, high pressure, on-call all the time" (in 22 reviews) |
| "You can learn a lot from your smart and hard-working colleagues" (in |                                                                 |
| 14 reviews)                                                          |                                                                       |
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**Figure 2.** An example of employee comments on Glassdoor.

### 3.2. Data Analysis

The analysis of employer rating data was made based on multiple linear regression using IBM SPSS 23. As a predictive analysis for the research questions, multiple linear regression is appropriate for explaining the relationship between one continuous dependent variable (such as recommendation and overall ratings) and two or more independent variables (such as specific employer ratings, CEO approval, positive business outlook, and Fortune 500 ranking), which can be continuous, ordinal, or categorical (dummy coded as appropriate). To interactively explore which specific ratings seem to provide a good fit for overall rating (Q2), stepwise regression was used to selecting a subset of effects for the regression model. To investigate a moderating effect of number of reviews for Q1 and the U.S. Fortune ranking for Q3b, hierarchical regression was conducted to find out how much the number of reviews and the Fortune ranking can explain the overall employer ratings after calculating the effects of the other specific employer ratings. To understand the strength of the relationships among variables used in this study, correlation analysis was also conducted.

Marketing research has found that the volume of e-WOM (e.g., number of reviews) affects crowdsourced ratings, because extremely satisfied or dissatisfied customers generate more online comments to express their experiences than do satisfied or unsatisfied customers [32]. In the context of employer reviewing, one study also found that internal employee posts included more praises or complaints about their employers than neutral comments on Glassdoor [13]. Therefore, the number of reviews was controlled in this study. Dabirian et al. [13] suggested that different sectors of industry may influence crowdsourced employer ratings because different industries may have specific employment practices that affect the employee experience. In that study, we controlled for the industrial sectors classified by the Fortune 500 ranking list.

### 4. Results

#### 4.1. Crowdsourced Employer Ratings by Industry

This organizational-level study was performed based on the U.S. Fortune 500 listed company review data retrieved from Glassdoor’s website on 2019/12/31. Analysis of variance was conducted to analyze whether the sectors of industry affect the crowdsourced employer ratings on Glassdoor (overall and specific ratings were included), and there was no significant effect ($p > 0.05$). Thus, the industry factor was excluded from the following analysis. The data profile of employer ratings (arithmetic mean) by industry is shown in Table 1.
Table 1. The data profile of employer ratings by industry.

| Industry                                | Overall Ratings | Culture and Values | Compensation and Benefits | Senior Management | Work-Life Balance | Career Opportunity | Business Outlook | CEO Approval | Recommend to a Friend |
|-----------------------------------------|-----------------|--------------------|----------------------------|-------------------|-------------------|--------------------|------------------|-------------|-----------------------|
| Aerospace and Defense                   | 3.43            | 3.17               | 3.57                       | 2.86              | 3.34              | 3.25               | 55%              | 81%         | 66%                   |
| Apparel                                 | 3.68            | 3.62               | 3.40                       | 3.10              | 3.44              | 3.14               | 56%              | 81%         | 71%                   |
| Business Services                       | 3.39            | 3.27               | 3.37                       | 2.94              | 3.35              | 3.18               | 56%              | 80%         | 62%                   |
| Chemicals                               | 3.47            | 3.39               | 3.55                       | 2.97              | 3.39              | 3.19               | 53%              | 73%         | 66%                   |
| Energy                                  | 3.54            | 3.31               | 3.81                       | 3.01              | 3.38              | 3.24               | 53%              | 78%         | 66%                   |
| Engineering and Construction            | 3.34            | 3.29               | 3.42                       | 2.95              | 3.12              | 3.18               | 50%              | 73%         | 59%                   |
| Financials                              | 3.46            | 3.47               | 3.46                       | 3.10              | 3.50              | 3.20               | 55%              | 82%         | 63%                   |
| Food and Drug Stores                    | 3.24            | 3.17               | 3.16                       | 2.79              | 3.00              | 3.09               | 40%              | 58%         | 53%                   |
| Food, Beverages and Tobacco             | 3.42            | 3.26               | 3.68                       | 2.97              | 3.20              | 3.10               | 46%              | 73%         | 61%                   |
| Health Care                             | 3.33            | 3.26               | 3.45                       | 3.42              | 3.22              | 3.11               | 50%              | 70%         | 60%                   |
| Hotels, Restaurants and Leisure         | 3.68            | 3.62               | 3.54                       | 3.21              | 3.39              | 3.49               | 60%              | 84%         | 71%                   |
| Household Products                      | 3.50            | 3.49               | 3.54                       | 2.97              | 3.44              | 3.15               | 49%              | 80%         | 66%                   |
| Industrials                             | 3.55            | 3.44               | 3.51                       | 3.03              | 3.50              | 3.32               | 54%              | 80%         | 68%                   |
| Materials                               | 3.28            | 3.03               | 3.67                       | 2.72              | 2.88              | 3.04               | 48%              | 74%         | 56%                   |
| Media                                   | 3.50            | 3.40               | 3.25                       | 3.07              | 3.41              | 3.12               | 47%              | 72%         | 66%                   |
| Motor Vehicles and Parts                | 3.50            | 3.32               | 3.62                       | 2.99              | 3.16              | 3.26               | 58%              | 89%         | 68%                   |
| Retailing                               | 3.19            | 3.15               | 2.99                       | 2.78              | 2.94              | 2.98               | 42%              | 67%         | 54%                   |
| Technology                              | 3.63            | 3.59               | 3.56                       | 3.15              | 3.54              | 3.36               | 56%              | 80%         | 69%                   |
| Telecommunications                      | 3.02            | 3.01               | 3.36                       | 2.70              | 3.10              | 2.87               | 38%              | 59%         | 50%                   |
| Transportation                          | 3.48            | 3.38               | 3.59                       | 2.98              | 3.11              | 3.36               | 54%              | 71%         | 64%                   |
| Wholesalers                             | 3.02            | 2.92               | 3.10                       | 2.61              | 3.03              | 2.79               | 42%              | 64%         | 49%                   |
| Average                                 | 3.41            | 3.32               | 3.46                       | 3.00              | 3.29              | 3.16               | 51%              | 75%         | 62%                   |
4.2. Number of Reviews and Crowdsourced Employer Ratings

Table 2 shows that Fortune ranking was negatively associated with overall and most specific employer ratings except compensation and benefit and CEO approval, which means that higher-revenue companies with less ordinal ranking numbers have higher employer ratings evaluated by the internal employees. Also, the number of company reviews slightly affects culture and values ($p < 0.05$) and career opportunity ($p < 0.01$), and the results indicate that when employees have a positive experience with culture and values and career opportunity, they engage in slightly more e-WOM about their employers. Consistent with some empirical studies on consumer e-WOM, employees and consumers will be more pleased to share some positive experiences than negative experiences [32]. The other findings from Table 2 would be explained in the following sections.

Table 2. Correlations matrix.

| Variables                  | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 |
|----------------------------|----|----|----|----|----|----|----|----|----|----|
| 1. Fortune ranking         |    | 1  |    |    |    |    |    |    |    |    |
| 2. Number of reviews       | −0.422 ** |    | 1  |    |    |    |    |    |    |    |
| 3. Overall ratings         | −0.183 ** | 0.075 |    | 1  |    |    |    |    |    |    |
| 4. Culture and values      | −0.171 ** | 0.104 * | 0.916 ** |    | 1  |    |    |    |    |    |
| 5. Compensation and benefits | −0.078 | 0.043 | 0.761 ** | 0.785 ** | 1  |    |    |    |    |    |
| 6. Senior management       | −0.107 * | 0.002 | 0.892 ** | 0.896 ** | 0.749 ** | 1  |    |    |    |    |
| 7. Work-life balance       | −0.166 ** | −0.075 | 0.730 ** | 0.598 ** | 0.503 ** | 0.586 ** | 1  |    |    |    |
| 8. Career opportunity      | −0.242 ** | 0.136 ** | 0.881 ** | 0.838 ** | 0.615 ** | 0.850 ** | 0.631 ** | 1  |    |    |
| 9. Recommend to a friend   | −0.168 ** | 0.066 | 0.948 ** | 0.888 ** | 0.740 ** | 0.861 ** | 0.705 ** | 0.868 ** | 1  |    |
| 10. CEO approval           | −0.066 | −0.017 | 0.730 ** | 0.712 ** | 0.554 ** | 0.729 ** | 0.514 ** | 0.655 ** | 0.748 ** | 1  |
| 11. Business outlook       | −0.098 * | −0.013 | 0.767 ** | 0.723 ** | 0.514 ** | 0.774 ** | 0.578 ** | 0.778 ** | 0.796 ** | 0.737 ** |

* $p < 0.05$; ** $p < 0.01$.

4.3. Crowdsourced Employer Ratings and Recommend to a Friend

The correlation between recommendation to a friend and different employer ratings in Table 2 indicates that, when employees recognize their employers as a good place to work in general (from 0.74 to 0.948, $p < 0.01$), they will be more likely to recommend their employers as an employer of choice to their friends. Moreover, hierarchical regression was conducted to examine Hypothesis 1, and the results, as shown in Table 3, show that the overall employer ratings explain 89.8% of whether employees recommend the company to their friends when we control for the number of reviews in Model A. In addition, we inserted other attributes of employer ratings plus overall employer ratings and number of reviews in Model B, and we found that Model B contributed only 2% incremental prediction power to recommend to a friend. The results indicate that overall employer rating was the best and adequate predictor for recommending to a friend. Adjusted R-squared was used in this study because this indicator adds precision and reliability by considering the impact of additional independent variables that tend to skew the results of R-squared measurements [24].

Due to multicollinearity, culture and values (variance inflation factor (VIF) = 8.604) and compensation and benefits (VIF = 7.718) could not significantly predict the recommendation to a friend when we put all the employer ratings together as independent variables, but they were all positively associated with recommendation to a friend, as shown in Table 2. VIF measures the impact of collinearity among the variables in a regression model. There is no formal VIF value for determining presence of multicollinearity, but there would be a problem with multicollinearity when the VIF value exceeds 4.0 [24]. Therefore, Hypothesis 1 was supported.
Table 3. Hierarchical regression for prediction of recommendation to a friend.

| Model | Independent Variables | Standardized β | T Value | p Value | Adjusted R-Square |
|-------|-----------------------|----------------|---------|---------|-------------------|
| A     | Overall Rating        | 0.948          | 65.155  | 0.000   | 0.898             |
|       | Number of Reviews     | −0.006         | −0.404  | 0.686   |                   |
|       | Overall Rating        | 0.631          | 13.200  | 0.000   |                   |
|       | Number of Reviews     | −0.004         | −0.304  | 0.761   |                   |
|       | Culture and Values    | 0.063          | 1.634   | 0.103   |                   |
|       | Compensation and Benefits | 0.028   | 1.372   | 0.171   | 0.916             |
| B     | Senior Management     | 0.109          | 2.983   | 0.003   |                   |
|       | Work–Life Balance     | 0.088          | 3.834   | 0.000   | 0.916             |
|       | Career Opportunities  | 0.126          | 3.912   | 0.000   |                   |
|       | CEO Approval          | 0.080          | 3.667   | 0.000   |                   |
|       | Business Outlook      | 0.132          | 5.322   | 0.000   |                   |

Dependent variable: Recommend to a Friend.

4.4. Specific Employer Ratings and Overall Employer Rating through Crowdsourcing

To select adequate predictor variables of overall employer rating on Glassdoor, a stepwise regression model was conducted to examine which specific employer rating(s) is/are significant. The model added or removed the attribute of specific employer ratings at a time using the variable’s statistical significance in six steps, as shown in Table 4, which demonstrates that culture and values could significantly predict 83.6% of the variance in overall employer rating, and compensation and benefits could explain 5.3% of the variance in the model by controlling for the number of reviews. The other significant attributes of specific employer ratings were ranked by incremental predictive power for overall employer rating as follows: career opportunity (2.2%), senior management (0.6%), work–life balance (0.4%), and CEO approval (0.2%). However, business outlook was removed from the model, because it was not significant to the overall employer rating or number of reviews.

Table 4. Stepwise regression for prediction of overall employer rating.

| Step | Independent Variables | Standardized β | T Value | p Value | Adjusted R-Square |
|------|-----------------------|----------------|---------|---------|-------------------|
| 1    | Culture and Values    | 0.914          | 49.723  | 0.000   | 0.836             |
| 2    | Culture and Values    | 0.746          | 39.901  | 0.000   | 0.889             |
| 3    | Compensation and Benefits | 0.286   | 15.292  | 0.000   | 0.911             |
| 4    | Culture and Values    | 0.544          | 21.897  | 0.000   |                   |
| 5    | Compensation and Benefits | 0.229   | 13.050  | 0.000   | 0.917             |
| 6    | Culture and Values    | 0.425          | 13.814  | 0.000   |                   |

Dependent variable: Overall Rating.

The results in Figure 3 indicate that the overall employer rating of the Fortune 500 company list through crowdsourcing on Glassdoor was primarily determined by the culture and values perceived by internal employees, and the other attributes of employer branding were minor or insignificant to the overall satisfaction of the EVPs perceived by the Fortune 500 companies’ current and former
employees. In other words, the different EVPs prioritize employer branding, and Hypothesis 2 was thus supported.

Figure 3. Overall employer rating explained by specific employer ratings based on U.S. Fortune 500 companies.

4.5. The Fortune 500 Ranking and Overall Crowdsourced Employer Ratings

Table 2 shows that the company ranking (ordinal number) of Fortune 500 was negatively associated with the overall employer ratings on Glassdoor (β = −0.183; p < 0.01), which indicates that the internal employees who work(ed) for upper-rank companies rated their overall employers’ brand better than did employees who work(ed) for lower-rank companies within the Fortune 500 list. Thus, the correlation analysis supports Hypothesis 3a. To examine the predictive power of the ranking for the overall employer rating compared with other attributes of EVP (specific employer ratings), hierarchical regression was conducted by controlling for number of reviews, and the results are demonstrated in Table 5. The results show that the rank of the Fortune 500 list (β = 0.002; p > 0.05) as a business outlook (β = 0.026; p > 0.05) could not generate incremental explanation power for overall employer ratings when we included the other attribute of specific employer ratings, which indicates that, in terms of overall employer ratings, the signal of the Fortune 500 ranking has less predictive power than the other attributes of EVP perception through crowdsourcing on social media. Therefore, Hypothesis 3b was supported.

Table 5. Hierarchical regression for prediction of overall employer rating.

| Model | Independent Variables | Standardized β | T | p Value | Adjusted R-Square |
|-------|-----------------------|----------------|---|---------|------------------|
| A     | Number of Reviews     | 0.022          | 1.653 | 0.099  |                  |
|       | Culture and Values    | 0.332          | 9.838 | 0.000  |                  |
|       | Compensation and Benefits | 0.214   | 12.550 | 0.000  |                  |
|       | Senior Management     | 0.136          | 3.947 | 0.000  |                  |
|       | Work-Life Balance     | 0.107          | 5.022 | 0.000  |                  |
|       | Career Opportunities  | 0.228          | 7.868 | 0.000  |                  |
|       | CEO Approval          | 0.057          | 2.759 | 0.006  |                  |
|       | Business Outlook      | 0.027          | 1.130 | 0.259  |                  |
|       | Number of Reviews     | 0.023          | 1.592 | 0.112  |                  |
|       | Culture and Values    | 0.332          | 9.829 | 0.000  |                  |
|       | Compensation and Benefits | 0.214   | 12.447 | 0.000  |                  |
|       | Senior Management     | 0.136          | 3.924 | 0.000  |                  |
| B     | Work-Life Balance     | 0.107          | 5.000 | 0.000  |                  |
|       | Career Opportunities  | 0.228          | 7.799 | 0.000  |                  |
|       | CEO Approval          | 0.057          | 2.753 | 0.006  |                  |
|       | Business Outlook      | 0.026          | 1.117 | 0.264  |                  |
|       | Rank of the Fortune 500 | 0.002    | 0.170 | 0.865  |                  |

Dependent variable: Overall Rating.
4.6. Popular Pros and Cons of Working with an Employer

To understand what internal employees comment on about their employers listed in the Fortune 500 ranking, we scraped the five most popular keywords of pros and cons in Table 6. The text mining results show that the most popular positive (33.58%) and negative (37.92%) comments about an employer are all about work–life balance, which indicates that employees will be more likely to openly share the work–life balance experience on social media when they are satisfied or dissatisfied with that issue. Since work from home (5.74%) and long hours (8.38%) can be classified as the EVP of work–life balance [13], the issue dominates 39.32% of positive valence and 46.3% of negative valence for crowdsourced employer branding. Table 6 also shows that internal employees praise their employers because of pay and benefits (28.16%), while they complain about upper management (16.67%) on social media. Some employees may share their positive experience about great people (4.57%) and work environment (4.25%) and post negative experiences about full-time work (1.6%) and low pay (1.4%); however, these are relatively minor EVPs compared to work–life balance, pay and benefits, and upper management.

Table 6. The five most popular keywords of pros and cons.

| Pros                      | Number of Reviews | Percentage | Cons                      | Number of Reviews | Percentage |
|---------------------------|-------------------|------------|----------------------------|-------------------|------------|
| Work–life balance        | 316               | 33.58%     | Work–life balance          | 380               | 37.92%     |
| Pay and benefits          | 265               | 28.16%     | Upper management            | 169               | 16.87%     |
| Work from home            | 54                | 5.74%      | Long hours                 | 84                | 8.38%      |
| Great people              | 43                | 4.57%      | Full-time work             | 16                | 1.60%      |
| Work environment          | 40                | 4.25%      | Low pay                    | 14                | 1.40%      |
| Others                    | 223               | 23.70%     | Others                     | 339               | 33.83%     |
| Total                     | 941               | 100.00%    | Total                      | 1002              | 100.00%    |

5. Discussion and Conclusions

5.1. Key Findings

The study utilized Glassdoor’s crowdsourced employee review data based on the U.S. Fortune 500 list of companies and obtained several critical findings. First, crowdsourced employer ratings influence employees’ recommendation of an employer as an employer of choice to their friends, and the overall employer rating has more predictive power than the other attributes of specific employer ratings. Consistent with the theory of psychological contracts, crowdsourced employer ratings reflect matches or mismatches between the employer brand and actual employee experience [20], which leads to employee recommendations [8].

Second, although each specific employer rating (EVP) is relevant to the overall employer rating, culture and values can predict the overall employer rating by 83.6%. The finding proves that different EVPs have different weights on employer branding [13], and culture and values are the top priority. Culture and values underlie the bases of employment practices [42] and crucially influence employer branding, employees’ experience, and e-WOM on social media [43].

Third, the ranking of the U.S. Fortune 500 is associated with some employer ratings through crowdsourcing, but the ranking is minor compared to the other specific employer ratings that reflect internal employees’ experience. Although the Fortune 500 ranking signals to employees how better the performance of their employers’ business is, the signal may have less importance than internal employee experience regrading fulfilled or unfulfilled psychological contracts from an employer brand [44].
Fourth, when employees were asked to share their experience with their employers by text, the most popular keyword is work–life balance, including both positive and negative experiences. Other than work–life balance, the second most popular keyword of Pros is pay and benefits, whereas the second most popular keyword of Cons is upper management. However, work–life balance was not the best predictor of overall employer rating and employee recommendation in this study. The result can be explained by the mitigation effect. e-WOM research in marketing has found that extremely satisfied or dissatisfied customers share more text comments, whereas most neutral customers share fewer text comments online [32]. As a result, the effect of work–life balance would be mitigated by the mode or U-shaped relationship between overall employer ratings and employee recommendation.

Finally, the mitigation effect can also explain why the control variable—number of reviews—could not significantly predict the overall ratings and other specific employer ratings (except culture and values and career opportunity), and as the number of reviews increases, the valence (either positive or negative) becomes more balanced [32]. Moreover, this study alleviates the concern about manipulation (or faking) of employer ratings on Glassdoor. The Wall Street Journal reported that some companies might game the rating system by asking their employees to boost the ratings [45], which indicates that the number of reviews may distort the rating results. However, our study found that the relationship between the number of reviews and specific employer ratings on Glassdoor is nonsignificant or marginal (culture and values = 0.104, p < 0.5; career opportunity = 0.136, p < 0.01). Although some companies can solicit their employees to leave positive but dishonest reviews, the statistic effect of rating results is not concerned with misleading users according to our empirical evidence. Commentators said that the unethical tacit might make the employees return to leave negative ratings on Glassdoor, where participants can commiserate together about their gripes about employers by posting anonymous comments [46].

5.2. Practical Implications

The research findings can provide some practical implications for employer branding through crowdsourcing. First, employers can utilize crowdsourced employer ratings to identify which EVP can satisfy or dissatisfy their employees. Second, employers should invest resources in enhancing employee experience that may become e-WOM on social media and therefore determine a credible and comparable signal of employer branding to attract and retain their talents. Third, employers should prioritize their resource of employer branding on culture and values that influence most of the employer ratings on crowdsourced employer ratings platforms.

Fourth, since work–life balance can be a present or poison for e-WOM, employers can encourage their employees to share their honest positive work–life experience, whereas employers should adjust their HR practices to reduce online complaints when their employees have negative experiences with work–life balance. Moreover, work–life balance has been identified as a key component in the pursuit of social sustainability represented by many local organizations and global institutions such as the United Nations [47]. Organizations can collect the positive ratings of work–life balance from social media (if applicable) and demonstrate these evidences on the ESG reporting that can not only help stakeholders understand how an organization create sustainable values, but also enhance employer branding for talent acquisition and retention [26].

Fifth, employers can investigate whether the pay and benefits can satisfy their employees and utilize this EVP that is commonly promoted by employees for employer branding. Finally, employers should monitor employee attitudes toward upper management on Glassdoor and effectively communicate to their employees if there is something misunderstood between management and employees.

5.3. Research Limitations and Implications

This study provides some key findings in line with psychological contracts and signaling theory, and we believe that these two foundations can be integrated and augmented with the employer branding framework for research [44]. As with the advances made in crowdsourced employer branding on
social media following the recognition of it as a signal source distinct from traditional employer ratings conducted by the third-party press, the development of employer branding stands to gain from internal employee experiences, rather than that of outsiders. Acknowledging the distinctiveness of this new employer branding platform will help guide researchers to the crowdsourced employer ratings that will perhaps facilitate the most meaningful development of theory.

However, there are some limitations that should be noted for the study results. First, the study used U.S. Fortune 500 companies as a sample, and the sampling results may just represent the employee experience for large companies in the world. Caution should be taken to generalize the findings to small and medium-sized enterprises (SMEs). Future studies can re-examine our findings based on SMEs that have enough employer reviews on Glassdoor. Second, the study snapshotted the data from Glassdoor’s website and Fortune magazine in 2019, which are all cross-sectional data that can be used to draw conclusions about population groups, but they are not inappropriate to make conclusions about causal relationships. Thus, longitudinal studies are required in the future. Third, all review data of Glassdoor through crowdsourcing are assumed valid. However, there is currently insufficient evidence to claim that there are high-quality measures of specific employer ratings on Glassdoor [19] which would reflect concern with the accuracy of data used in this study. Finally, although Glassdoor is one of the largest crowdsourced employer branding websites [18], it is not the only one. Future studies can explore the relative research questions on www.indeed.com and www.vault.com.

5.4. Conclusions

In the past, employer branding was a marketing or public relation champion that could be manipulated by organizations. Currently, employer branding is significantly associated with the e-WOM shared through internal employees’ experience on crowdsourced employer branding platforms. Compared to other information sources, real employees’ anonymous voices on social media are more credible and comparable to disclose which psychological contracts (implying different EVPs) have been fulfilled or unfulfilled by an employer. Our study findings show that crowdsourced employer ratings are positively related to whether employees recommend their employer as an employer of choice to their friends. Since there are different attributes (or EVPs) of the crowdsourced employer rating scale on the employer branding platform, the overall employer rating is the best predictor of employee recommendation, while culture and values can explain most of the overall employer ratings. Although an objective company ranking (e.g., Fortune 500) is a signal that influences how an employee judges his or her employer, it cannot predict the overall employer rating when we consider the other specific employer ratings that represent an employee’s satisfaction or dissatisfaction regarding different EVPs. Other than quantitative employer ratings, employees post positive comments about work–life balance and compensation and benefits at a company, whereas employees openly complain their negative experience regarding work–life balance and upper management in a company on Glassdoor.

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