

# **Unveiling Workplace Dynamics: Insights from Voluntary Disclosures on Business Outlook and CEO Approval**

**Ned Kock**

**Mohamed Yacine Haddoud**

**Adah-Kole Onjewu**

**Shiyu Yang**

Full reference:

Kock, N., Haddoud, M.Y., Onjewu, A.-K., & Yang, S. (2025). Unveiling workplace dynamics: Insights from voluntary disclosures on business outlook and CEO approval. *Personnel Review*, 54(2), 474–497.

## **Abstract**

### **Purpose**

This inquiry extends the discourse on job satisfaction and employee referral. It aims to examine the moderating effects of perceived business outlook and CEO approval in the dynamics of job satisfaction and employee referral. A model predicting job satisfaction and employee referral through the lens of Herzberg's two-factor theory is developed and tested.

### **Methodology**

To remedy the overreliance on self-reported surveys, impeding generalization and representativeness, this study uses large evidence from 14,840 voluntary disclosures of US employees. A Structural Equation Modeling technique is adopted to test the hypotheses.

### **Findings**

The inherent robust path analysis revealed intriguing findings highlighting culture and values as exerting the most substantial positive impact on job satisfaction, while diversity and inclusion played a relatively trivial role. Moreover, employees' view of the firms' outlook and their approval of the incumbent CEO were found to strengthen the job satisfaction - referral nexus.

### **Originality**

The study revisits the relationship between job satisfaction and employee referral by capturing the moderating effects of perceived business outlook and CEO approval. We believe that this investigation is one of the first to capture the impact of these two pivotal factors.

**Keywords:** *Job Satisfaction; Business Outlook; CEO Approval; Employee Referral; Robust Path Analysis*

## 1. INTRODUCTION

Employee satisfaction is often cited by scholars as a corollary of sound human resource practice and organizational performance (Melián-González *et al.*, 2015). This is especially true in high-skill environments where competition for talent has intensified in recent years (Ewers *et al.*, 2022). Thus, shaping the satisfaction of current and prospective employees is imperative for successfully attracting and retaining skilled staff to avert turnover (Stamolampros *et al.*, 2019; Moro *et al.*, 2021). Moreover, satisfied employees demonstrate greater commitment and engagement (Thant and Chang, 2021), and are more inspired and dedicated (Dhir *et al.*, 2020). They also exhibit higher levels of well-being and low absenteeism, not least (Escardíbul and Afcha, 2017). Satisfaction will also lead to referral, an essential asset to organizations in terms of talent access. Employee referral hiring is a popular recruitment approach that relies on employees to share job openings with people in their social network, contributing to 30% to 50% of positions filled (Schlachter and Pieper, 2019). Sourcing talent through internal referrals holds numerous advantages for organizations with evidence suggesting quicker and smoother recruitment and onboarding processes, access to stronger and more loyal candidates with improved retention, and a more efficient procedure overall (Burks *et al.*, 2015; Friebe *et al.*, 2023). Schlachter and Pieper (2019) add that referrals help organizations reach passive job seekers who would not have been identified otherwise. From their analysis of a large dataset comprising recruits and applicants of a U.S. corporation with 2,000 -

5,000 workers, Brown *et al.* (2016) determined that referred candidates are more likely to be hired and serve longer tenures, among other findings.

In the literature, the vast employee satisfaction corpus is mostly centered on Herzberg's two-factor theory as a lens for examining the discrete factors that dictate the former. Accordingly, (1) intrinsic factors such as achievement, recognition, work itself and responsibility along with (2) extrinsic factors such as job security and interpersonal relations have been linked with employee satisfaction and dissatisfaction respectively (Dhir *et al.*, 2020; Singh and Bhattacharjee, 2020; Sobaih *et al.*, 2020). Notwithstanding the abundance of extant evidence predicting job satisfaction, several empirical voids remain unaddressed. Firstly, while prior works have focused on the antecedents of satisfaction, its consequences, such as employee referral (Stamolampros *et al.*, 2019), have been overlooked. This is especially pertinent as scholars' understanding of the factors influencing employee referral seems far-fetched because there is a lack of research on the factors affecting employee recommendations (Saini *et al.*, 2021). Likewise, Thelen (2020) observed that despite the acclaimed benefits of employee advocacy (or referral), current works tend to overlook this dimension. Therefore, they [Thelen, 2020] implored new studies to explore the drivers of employee referral. Fresh evidence in this regard will clarify employees' communicative role as hinted by Andersson (2019). More to the point, Gross *et al.* (2021: 405) note that 'there has been no research, as yet that examines the relationship between employee job satisfaction in service organizations and its relatedness with employees' recommendation intentions'. Hence, this paper fills a gaping void by investigating the drivers of employee referral. Employees' willingness to recommend their organization could be seen as an indication of a strong internal brand. For more novel insights, the ensuing analysis captures the moderating effect of both business outlook and CEO approval in the employee satisfaction - referral nexus. This further assessment is inspired by

Barnes and Cheng's (2023) stipulation that the CEO - employee relationship has received little attention due to the empirical difficulty of capturing both phenomena.

Secondly, current works on employee motivation seem to be dogged by significant methodological limitations. For one, scholars' overreliance on self-reported surveys poses limitations in generalization and representativeness (Lee and Choi, 2023). For redress, investigating secondary online data extracted from the *Glassdoor* review platform exceeds the customary approach of observing job satisfaction and employment referral. Launched in 2008, *Glassdoor* gathers anonymous data from current and former employees in its 'Best Places to Work Survey'. The platform's popularity has seen it record over 100 million individual reviews of 1.9 million employers (Bergstrom, 2022). This alternative data source offers several advantages which pose potential contributions to the literature by affording insights derived from employees' proactive rather than reactive disclosure. Although employees are often unwilling to cooperate with researchers soliciting their data, they seem enthused to share their opinions on job review websites which have emerged as large repositories of work-related cues (Lam *et al.*, 2022; Li, 2022). Poignantly, it is arguable that data collected from volunteers or more willing employees better reflect perceptions of working conditions. In this vein, Filbeck and Zhao (2023: 2) claim that Glassdoor 'serves as a superior proxy for employee satisfaction' because its 'ranking is not subject to company self-nomination or expert reviews'. Moreover, Stamolampros *et al.* (2019) attest that the platform provides access to anonymous opinions that cannot be captured via internal surveys due to fears of reprisal. In such surveys, employees may choose to disguise their true perceptions due to pressures from the hierarchy (Fang *et al.*, 2021). In addition, unlike traditional surveys which are more or less cross-sectional, Glassdoor data captures seasonal dynamics since reviews are posted boundlessly. This makes employee review platforms a useful, unrestrained and truer

gauge of employee job satisfaction (Sainju *et al.*, 2021). Yet, it remains an untapped source of intelligence in the extant literature (Symitsi *et al.*, 2021). Specifically, in the US, Glassdoor is viewed as a robust and objective dataset that satisfies the 4 Vs of big data encompassing volume, variety, velocity and value (Chang *et al.*, 2022). It is reported that nearly half of US job seekers use Glassdoor (Dube and Zhu, 2021). Stamolampros *et al.* (2019: 134) describe Glassdoor as a ‘popular job listing website in the US with 50 million unique users’. It also offers an ‘unexplored informational cue which arrives directly from current and former employees’ (Stamolampros *et al.*, 2019: 131)

Third, Chang *et al.* (2022) noted that prior works addressing job satisfaction have mainly attended to specific sectors, limiting the usefulness of their findings. Hence, to extend applicability, this study examines evidence across industries including IT, financial services, entertainment, food and travel firms. This broad representation is important because, although employee retention and turnover is a perpetual challenge in the IT sector (Moro *et al.*, 2021), this is also the case in financial services (Bontis and Serenko, 2009) and the travel industry (Kim, 2014).

This study extends the scope of the two-factor theory by offering evidence from voluntary data on the consequences of job satisfaction through job referral and the intricate interactions that shape this connection. Precisely, highlighting the role of job satisfaction as a precursor to employee referrals adds depth to Herzberg’s model, showcasing its broader organizational implications to improve talent acquisition and employee retention. Furthermore, the study adds a new layer of complexity to the two-factor theory by showing that leadership and environment perceptions can shape relationships between satisfaction and subsequent outcomes, such as referrals. Lastly,

investigating voluntary data corroborates and extends Herzberg's perspective with less biased and more authentic indicators.

To illustrate the aforementioned contributions, the rest of the paper is structured as follows: Section 2 scopes the research background and embarks on hypotheses development by appraising the key variables. Subsequently, the data collection approach is explained in section 3 followed by a presentation of the analysis and results in section 4. In section 5, a discussion is initiated to synthesize the findings with existing literature. Section 6 concludes the study by reflecting on the theoretical and practical contributions arising.

## **2. THEORETICAL BACKGROUND AND HYPOTHESES**

### **2.1. Job Satisfaction**

Employee satisfaction is an exhaustively defined and researched attribute of organizational behavior (Lee *et al.*, 2022). This is mainly due to its bearing on averting absenteeism, underperformance and demotivation among employees (Mgaiwa, 2023). Broadly speaking, job satisfaction describes employees' feelings about their work and the inherent quality (Jung and Yoon, 2015; Koncar *et al.*, 2022) and the positivity of emotions retained throughout their employment (Lee *et al.*, 2022). This is consistent with Locke's (1976) seminal definition of job satisfaction as the pleasurable and positive emotion arising from employees' appraisal of their work experience. Informed by this [Locke's, 1976] characterization, scholars have since pondered the emotional component of job satisfaction. For instance, Liu *et al.* (2016) and Penconek *et al.* (2021) deemed job satisfaction as a pleasant feeling arising from the dovetailing of individuals' job needs and desires. Similarly, Navimipour and Soltani (2016) regarded job satisfaction as the positive emotional state felt by employees when assessing their work environment and experience.

Echoing this emotional perspective, Sanjeev and Surya (2016) note that job satisfaction emanates from the pleasant feeling generated when the job outcome matches expectations. Yet, in addition to the emotional aspect, there is also an attitudinal component of job satisfaction in respect to how employees evaluate the quality and experience of their job (Barakat *et al.*, 2016). Likewise, Wu *et al.* (2024) consider job satisfaction as reflecting employees' perception of the overall quality of their work experience. Thus, employees' perception influences their assumed job satisfaction which accrues from a gap between expected and actual gains in the course of employment (Tsai *et al.*, 2007). This conceptualization proceeds on the premise that job satisfaction comprises emotional and behavioral aspects that are catalyzed by the evaluation of employees' overall experience. This is in line with the approach adopted by the Glassdoor rating, which showcases the employee's overall rating of their job experience.

## **2.2. Herzberg's Two-Factor Theory**

Having described the ambit of job satisfaction, Herzberg *et al.*'s (1959) two-factor theory is now reviewed as a popular stance for viewing job satisfaction (Thant and Chang, 2020; Koncar *et al.*, 2022). Jobs are structured to incorporate certain motivational elements to sustain employee engagement. In line with this, Herzberg's two-factor theory identifies and categorizes these elements into motivators and hygiene factors. Hence, it is widely recognized as a model for explaining job satisfaction (Sanjeev and Surya, 2016), and has been applied and validated in a wide array of industries and countries (Sobaih and Hasanein, 2020; Alrawahi *et al.*, 2020), proving its versatility (Koncar *et al.*, 2022). Thant and Chang (2021) highlight its inductive approach to explore new determinants and its comprehensive nature that accommodates a diverse range of job satisfaction factors. This is particularly useful for this study as it allows us to capture key Glassdoor

factors. It also embraces contemporary aspects related to work-life balance, workplace culture and values, which are also captured in the Glassdoor data.

In essence, the two-factor theory maintains that job satisfaction is shaped by a confluence of (1) ‘motivating’ and (2) ‘hygiene’ factors (Valk and Yousif, 2023), challenging the notion that job satisfaction and dissatisfaction are opposite ends of a spectrum. Accordingly, it posits that both outcomes are indeed asymmetric (Ann and Blum, 2020). To compare, motivating factors are said to be drivers of job satisfaction and high productivity (Afif *et al.*, 2023), while hygiene factors elicit job dissatisfaction and lower productivity (Adeoye, 2023). The former [motivating factors] comprises individuals’ job needs and encompass their appreciation of responsibilities, achievement, opportunities for career advancement and the content of one’s work (Timmreck, 2001). In contrast, hygiene factors relate to the contextual elements of work including organizational policy and administration, supervision, job security, salary, interpersonal relations, status and personal life (Chittiprolu *et al.*, 2021; Koncar *et al.*, 2022; Mgaiwa, 2023). Nevertheless, Thant and Chang (2020) argue that there is an obscure distinction between motivating and hygiene factors as certain elements could suffice for both. For instance, Amzat *et al.* (2017) found salary to be a motivating rather than a hygiene factor. To address such ambiguity, this inquiry takes a data driven approach to examine (1) culture & values, (2) senior management support, (3) career opportunities, (4) compensation & benefits, (5) work-life balance and (6) diversity & inclusion as determinants of job satisfaction. As opposed to a prior categorization of these six factors, their designation as motivating or hygiene factors will be dependent on firsthand evidence.

### **2.3. Determinants of Job Satisfaction and Employee Referrals**

#### *Culture & Values*



Deemed to be one of the most researched themes in management, Lam *et al.* (2022) describe organizational culture as employees' perceptions of their company's ethos and the nature of co-worker relationships. According to the company ratings site, Glassdoor, culture is the set of values that fosters the community (Filbeck and Zhao, 2023). It is also the 'binding agent' that brings employees together to work toward a common organizational purpose (Lam *et al.*, 2022). The rating for culture and values indicates how employees perceive the company's ethos and the compatibility of its principles with their own. Company culture is often defined as the values that an organization expects its employees to embody, such as integrity, customer-centricity, and respect (Sull *et al.*, 2019). Similarly, organizational culture comprises the set of norms and values predominant in the organization (O'Reilly and Chatman, 1996). Here, values reflect what is important to employees, while norms provide guidance on how they should behave to demonstrate those values. As per Herzberg's theory, company culture is an environmental condition that can potentially lead to dissatisfaction when there is a lack of alignment with employees' own values (Lee *et al.*, 2022). In Herzberg's terms, corporate culture could be seen as part of the hygiene factors, which reflect the job surroundings rather than the job content (Koncar *et al.*, 2022).

Prior studies have reported strong evidence of a relationship between corporate culture and job satisfaction. For instance, assessing employee reviews obtained from Glassdoor.com, Lee and Kang (2017) reasoned that culture & values play a lead role in influencing job satisfaction vis-à-vis employee retention. Likewise, drawing on evidence from Glassdoor reviews in US tourism and hospitality, Stamolampros *et al.* (2019) ascertained that organizational cultures that encourage innovation, employee development and delivering greater customer value engender higher job satisfaction. Specifically, employees in their sample cited the culture in their work environment as a foremost organizational motivator. Also probing Glassdoor data, Lam *et al.* (2022: 484) surmised

that the companies more likely to be rated ‘as one-star were those in the *workplace malaise* and *toxic interactions* clusters’. Notwithstanding, Jung and Suh (2019) offer a divergent view. Their analysis of South Korean employee reviews deduced that, although culture remained a significant factor, it constituted one of the weakest predictors of job satisfaction. Having said that, on balance, given the weight of evidence suggesting the positive impact of organizational culture on job satisfaction, the first hypothesis is proposed:

**H1.** *Culture & values are positively related to job satisfaction*

#### *Senior Management Support*

Senior management support captures employees’ perceived backing from their hierarchy. Such support is shaped by the quality of the relationship between employees and managers, which is in turn determined by how well the managers understand employees’ roles and tasks. Consistent with Herzberg’s theory, it is plausible to view management support as a hygiene factor for job satisfaction since it reflects the job surroundings (Lee *et al.*, 2022). Management support in the form of empowerment, autonomy, transparent communication, and a safe work environment can instill a sense of security and psychological well-being among employees (Loo *et al.*, 2024).

Stamolampros *et al.*’s (2019) assessment of Glassdoor reviews in US tourism and hospitality also revealed that senior management’s aura considerably foreshadowed job satisfaction. Relatedly, supervisors’ technical competence was the second strongest predictor of job satisfaction in the sector (Ann and Blum, 2020). Similar findings have also been reported in the US IT sector where management behaviour shapes job satisfaction in a substantial way (Moro *et al.*, 2021). In fact, Moro *et al.* (2021) add that improving the management system is critical for enhancing employees’

satisfaction as supervisors' support yields a positive environment for employees to thrive. This is conceivable as Koncar *et al.*'s (2022) investigation of 2,240, 276 employee reviews in Austria, German, Switzerland and the US discerned that dissatisfied employees cited management support issues more than satisfied employees. Furthermore, Chittiprolu *et al.*'s (2021) study of Indian hotels, also based on Glassdoor data, found employees' opinion of senior leadership to be a significant trigger, although the coefficient did not rank among the highest. Thant and Chang's (2021) evidence from the public sector also confirmed the contribution of leadership supervision to job satisfaction. They enlist flexibility, fair treatment and the exhibition of care as key to enhancing workers' happiness and unity which, in turn, foster job satisfaction. Reverting to Jung and Suh's (2019) South Korean survey, the authors unequivocally concluded that senior management was the most important factor for job satisfaction overall. To verify this notion, a second hypothesis is outlined.

**H2. Senior management support is positively related to job satisfaction**

*Career Opportunities*

Career opportunities concern pathways for progression and growth (Chang *et al.*, 2022). Such opportunities involve growth opportunities, professional development, and job rotation. Based on Herzberg's view, Lee *et al.* (2022) consider this aspect as a motivating factor since it is related to job content rather than its surrounding. These pathways empower employees to advance their careers by undertaking new responsibilities (Loo *et al.*, 2024). Moreover, the availability of career opportunities showcases the organizational commitment in employees' long-term career evolution (Zhang *et al.*, 2024). Access to growth opportunities is key to employees' development and commitment, which subsequently foster job satisfaction (Kong *et al.*, 2015). They effectively reduce employees' feeling of uncertainty and help them to plan for positive outcomes which bode

well for job satisfaction (Chen *et al.*, 2004). Likewise, promotion and self-development opportunities alleviate employees' stress and anxiety caused by career-related matters, granting them a sense of stability (Lee *et al.*, 2022). Arkwright *et al.* (2018) identified career progression as an ingredient of job satisfaction in the 'important' and 'very important' categories. They stressed that limited career pathways, the lack of alternative avenues and a glass-ceiling feeling for career progression impact on the quality of job satisfaction. Not surprisingly, employees with access to promotion opportunities exhibit significantly higher levels of job satisfaction than their counterparts without (Theodossiou and Zangelidis, 2009). Merely affording employees a forum to discuss their career opportunities is seen as a positive scenario that significantly increases their overall satisfaction (Stamolampros *et al.*, 2019). Moreover, Chang *et al.*'s (2022) review of internet service firms in the US concluded that career opportunities were a material determinant of job satisfaction. Hence, inferring the foregoing, a third hypothesis is framed:

**H3.** *Career opportunities are positively related to job satisfaction*

#### *Compensation & Benefits*

Similar to culture & values, compensations are also a highly researched subject in human resource management (Jung and Suh, 2019). Considered to be amongst the most explored HR practices (Li *et al.*, 2023), they are a bona fide tool for aligning tangible rewards with job satisfaction. Taking the form of increased pay and bonuses, compensation remunerates employees' performance and enhances their perception of organizational fairness and equity (Moro *et al.*, 2021). With increasing financial pressures and rising inflation, additional pay benefits help employees fulfil financial needs, reduce financial stress, enhance job security and improve satisfaction (Loo *et al.*, 2024). In Herzberg's theory, compensations and benefits that are perceived to be fair are considered a hygiene factor that prevents dissatisfaction, although additional bonuses and incentives could serve as motivators. As a hygiene factor, it is linked to employees' surrounding.

In fact, a fair payment system presents an environment that allows employees to concentrate on their jobs, without being distracted by financial worries (Lee *et al.*, 2022). Such an environment will positively impact employees' perception toward their employers (Zhang *et al.*, 2024)

Furthermore, Chang *et al.* (2022) believe that the mechanism of organizational justice and the reciprocity compels the offer of compensation that matches the effort of employees to achieve job satisfaction. Hence, there is no shortage of research affirming the link between compensation and job satisfaction. In Jung and Suh's (2019) study, compensation & benefits were ranked as the second highest factor in job satisfaction. Conversely, Chang *et al.*'s (2022) study of internet service firm in the US determined compensation to be merely a determinant and, in fact, the least influential factor in job satisfaction. This was also the case in the US tourism and hospitality industry, where compensation & benefits amounted to a least important factor for achieving job satisfaction (Stamolampros *et al.*, 2019). Still, the authors caution that such findings could strengthen the argument that compensation & benefits are superfluous to employee satisfaction. Hence, compensation & benefits 'are basic needs of employees, where their lower level can increase dissatisfaction but their higher level by itself, will not lead to high satisfaction' (Stamolampros *et al.*, 2019: 136). Thus, a fourth hypothesis is stated as:

**H4.** *Compensation & benefits are positively related to job satisfaction*

#### *Work-Life Balance*

Work-life balance is now a priority for many employees (Hildenbrand et al., 2023). Employees' impression of the amicability between work and other aspects of life, known as work-life balance, has also been linked to job satisfaction in Lee *et al.*'s (2022) analysis of Glassdoor data. Drawing on Herzberg's theory, work-life balance is a hygiene factor. It is related to employees' environment and can lead to dissatisfaction when it is perceived as inappropriate (Lee *et al.*, 2022). Work-

related stress leads to absenteeism and mental health issues, which diminish productivity and engagement (Loo *et al.*, 2024). In this regard, the equal pursuit of career commitments in tandem with personal obligations at home with family, friends and affiliates is thought to be an optimum circumstance. Hence, flexible arrangements such as hybrid work models allow employees to balance work tasks with family commitments, lessening work-family conflicts, enhancing autonomy, and alleviating stress (Loo *et al.*, 2024). The presence of work-life balance mitigates burnout (Kelly *et al.*, 2019), while work-life conflict increases emotional exhaustion (Khalid *et al.*, 2023).

Empirical evidence show that balance between work and family commitment has a significant albeit less prominent influence on job satisfaction (Jun and Suh, 2019). As such, job satisfaction among clinical nurses has previously been explained from the standpoint of work-family conflict (Zhao, 2013). In the context of a developing country, Thant and Chang (2020) evidenced that distance from family increased job dissatisfaction among public sector employees. Yet, Sainju *et al.* (2021) think that this outcome may be sector-dependent as employees in the technology sector were more concerned with work-life balance than employees in retail. Similarly, in the hospitality sector, Chittirpoulou *et al.* (2021) cited poor work-life balance as a major driver of employee dissatisfaction [i.e, a hygiene factor]. They explained that a failure to address the competing demands of work and non-work commitments result in high dissatisfaction. Therefore, as a basic need, it [work-life balance] is more likely to breed dissatisfaction than satisfaction. These results are somewhat incongruous with evidence from South Korea where work-life balance was found to be of critical importance across nine industries (Lee *et al.*, 2022). However, the discrepancy could also be generational as Ann and Blum (2020) observe that work-life balance is a core

condition for the motivation of millennials. To query these conflicting views, the fifth hypothesis assesses whether:

**H5.** *Work-life balance is positively related to job satisfaction*

#### *Diversity & Inclusion*

Diversity is typically expressed as distinctions in race, ethnicity, gender and sexual orientation, whereas inclusion reflects employees' feeling of involvement in organizational processes (Acquavita *et al.*, 2009). In a diverse and inclusive environment, employees feel carried along in the formulation of organizational policies and procedures (McCallaghan *et al.*, 2019), and this affords a greater 'intellectual toolkit' for managing organizational issues (Stazyk *et al.*, 2021). Diversity and inclusion are, therefore, hygiene factors as per Herzberg's theory, since they offer a fair environment that mitigates dissatisfaction. However, the same factor can also be a motivator when the diverse and inclusive environment leads to greater engagement by employees. Trochmann *et al.* (2023) conclude that when diversity is promoted, employees are more likely to believe in growth and development opportunities, which in turn raise their motivation.

Empirically, the positive role played by diversity & inclusion in cultivating job satisfaction has already been reported in earlier studies (Barak and Levin, 2002; Hauret and Williams, 2020). Employees situated in an atmosphere that nurtures and implements policies for diversity are more likely to report high job satisfaction (McCallaghan *et al.* 2019; Stazyk *et al.*, 2021). This has been found to be true for various groups of workers including veterans in the employ of the US government (Vanderschuere and Birdsall, 2019). Nonetheless, McCallaghan *et al.* (2019) offer a contrasting view that diversity may escalate goal ambiguity in the firm. Thus, Choi (2021) noted that diversity in the managerial ranks of the US federal civil service was negatively associated with job satisfaction. This was upheld by Hauret and Williams' (2020) claim that low diversity [in

nationality terms] equals high job satisfaction as employees prefer to work in homogeneity. Despite these claims, Choi (2021) concludes that government agencies with a profound spirit of diversity are an exception to this rule as managerial diversity still begets job satisfaction in such climates. All things considered, owing to greater support for the positive effect of diversity on job satisfaction, a sixth hypothesis is mooted as:

**H6.** *Diversity & inclusion are positively related to job satisfaction*

#### *Job Satisfaction and Employee Referral*

Employee referral programmes are increasingly used by organizations in their quest for talent (Wieschollek and Dlouhy, 2022). Employee referrals are a form of word-of-mouth (WOM) communication through informal, person-to-person recommendation (Shinnar *et al.*, 2004). In the current conceptualization, WOM concerns employee's willingness to recommend their organization to potential candidates as a suitable employer (Bloemer, 2010). Such referrals could be doubly advantageous to organizations and potential candidates (Shinnar *et al.*, 2004; Van Hoyer, 2013; Im, 2022), as they preempt an eventual misfit between both parties (Seo and Lee, 2021). For organizations, they benefit from longer employee tenure, enhanced performance, higher satisfaction, commitment and increased pre-hiring knowledge (Shinnar *et al.*, 2004; Bloemer, 2010). From the outset, employee referrals are prompted by intrinsic and extrinsic factors, although the former have been adjudged as being more relevant (Shinnar *et al.*, 2004; Seo and Lee, 2021). The link between satisfaction and referral first emerged in marketing research where customer satisfaction was viewed as an intrinsic driver of WOM (Maxham III, 2001). Following this logic, it is anticipated that intrinsically satisfied employees will more likely recommend their organization to others. Saini *et al.* (2021) explain that endorsement by employees is linked to their lived experiences. In this regard, Van Hoyer (2013) found that positive employee referrals are occasioned by job satisfaction. This is also consistent with Im's (2022) finding among employees



working in US government organizations. Similarly, Suen *et al.* (2020: 8) posited that employees who rate their workplaces positively are more likely to recommend them to friends. They concluded that ‘overall employer rating was the best and adequate predictor for recommending to a friend’. Ultimately, Gross *et al.* (2021) argue that employee referral behavior and employee job satisfaction are related. Based on this precedent, the seventh hypothesis is stated as:

**H7. *Job Satisfaction increases employee referral***

## **2.4. The Moderating Roles of Business Outlook and CEO Approval**

The Glassdoor site has emerged as a choice medium for employees exchanging views on workplace culture, CEO popularity and business outlook. On the platform, present and past employees are allowed to approve, abstain or disapprove of their CEO. They are also allowed to rank the business outlook on a three-point scale signaling expected (1) deterioration, (2) stasis or (3) in the ensuing six months. In comparison, workplace culture is more incidental than CEO popularity and business outlook. Therefore, only the moderating effect of the latter [CEO popularity and business outlook] on the job satisfaction and employee referral nexus are hypothesized.

### *Business Outlook*

Evidence of the moderating role of business outlook in the relationship between satisfaction and referral is scant, as little empirical attention has been given to the predictors of employee referrals (Pieper *et al.*, 2018). Yet, there is an indication by Dube and Zhu (2021) that perceptions of business outlook possibly interacts with job satisfaction and referral association. This is presumed from the positive correlation between employees' opinions of their employer's business and actual performance (Storey, 2004). Thus, it can be argued that if job satisfaction is positively correlated with organizational performance, then a positive business outlook is likely to enhance job

satisfaction. On the other hand, the perceived risk in referring an organization reduces the likelihood of referring (Pieper *et al.*, 2018). This may ratify the thinking that a negative business outlook is perceived as a risk that impedes employee referral and potentially tempers the job satisfaction-referral nexus. To assess the reverse scenario, two complementary hypotheses are framed:

**H8.** *Business outlook strengthens the relationship between job satisfaction and employee referral*

**H10.** *Business outlook is positively related to employee referral*

### *CEO Approval*

Growing literature is looking at the role of CEOs in the design, implementation or adoption of Human Resource Management (HRM) policies and practices (Le *et al.*, 2023). A positive and significant relationship between CEO approval and employee satisfaction has hitherto been reported, although the latter instigated the former (Chamberlain and Huang, 2016). Other studies have also found that CEO approval induces employee satisfaction and referral. For instance, Barnes and Cheng (2023) stated the receipt of The Top CEO Award [a recognition determined by the sum of Glassdoor approvals] enhances employee efficiency and the potential to hire higher caliber staff. Furthermore, Barnes and Cheng (2023) explained that the Top CEO Award drives employee satisfaction and reduces turnover intention. Cordial CEO-employee relations are evidence of a good corporate culture that is attractive to current and prospective employees (Gregory *et al.*, 2009). Hence, in their study of Fortune 500 companies, Suen *et al.* (2020) concluded that CEO approval is a significant predictor of employee referral. They [CEO approval ratings] are an especially potent signal because they are derived from privileged information that

is typically inaccessible by or unavailable to external parties (Wang *et al.*, 2022). To conclude, two complementary hypotheses are contrived to gauge the influence of CEO approval on both job satisfaction and employee referral:

**H9.** *CEO approval strengthens the relationship between job satisfaction and employee referral*

**H11.** *CEO approval is positively related to employee referral*

The hypotheses are summarized in the research model depicted in figure 1.

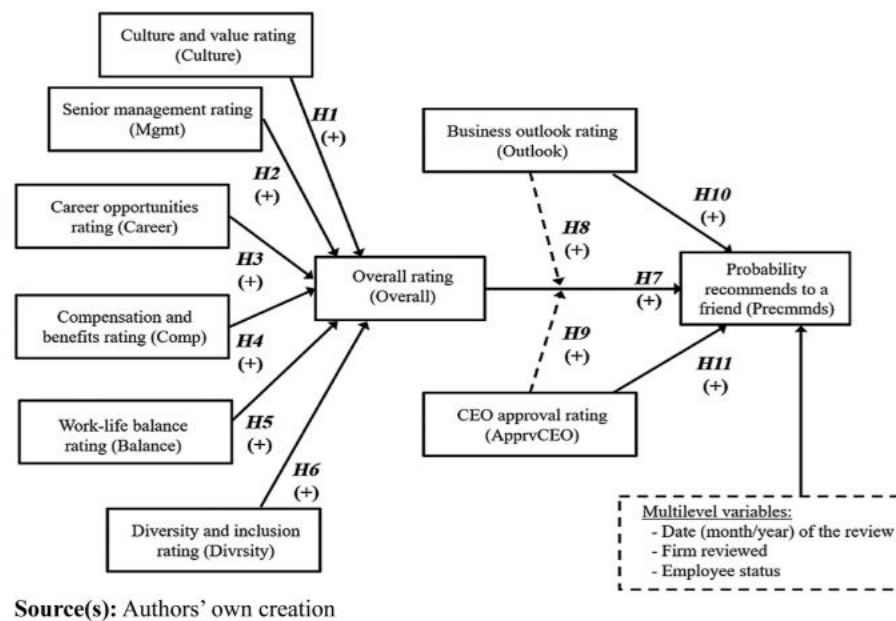


Figure 1. Research model

### 3. METHOD

Once more, the data for this inquiry were drawn from Glassdoor.com. numeric ratings for companies from the Glassdoor employee comments. Glassdoor is used by both current and former employees to express feedback about their employment experience (Guo et al., 2021). In addition to submitting an overall rating for employers, Glassdoor reviewers also evaluate the quality of firms' (1) internal culture & values, (2) senior management, (3) career opportunities, (4)

compensation & benefits, (5) work-life balance and (6) diversity & inclusion. All criteria are ranked on a five-point scale or 1 – 5 stars, with 5 representing the most favorable evaluation. Furthermore, employees are asked to indicate (1) whether they approve of the CEO on a three-point scale of ‘Approve’, ‘Neutral’ or ‘Disapprove’. (2) Whether they would recommend the company to a friend with a binary ‘Yes’ or ‘No’ response. (3) Their perception of the employer’s business outlook for the next six months on a three-point scale of ‘Positive’, ‘Neutral’ or ‘Negative’. On these criteria, a total of 14,840 reviews submitted between May 2019 and January 2022 were examined. The reviewers were either currently or previously employed by one of the 16 firms enlisted in table 1.

**Table 1.** Firms in the sample

Firm name	Ticker	Sector	Industry
1. Arista Networks, Inc.	ANET	Technology	Computer Hardware
2. Broadcom Inc.	AVGO	Technology	Semiconductors
3. Capital One Financial Corporation	COF	Financial Services	Credit Services
4. Comerica Incorporated	CMA	Financial Services	Banks-Regional
5. General Mills, Inc.	GIS	Consumer Defensive	Packaged Foods
6. Juniper Networks, Inc.	JNPR	Technology	Communication Equipment
7. Mastercard Incorporated	MA	Financial Services	Credit Services
8. Microchip Technology Incorporated	MCHP	Technology	Semiconductors
9. NetApp, Inc.	NTAP	Technology	Computer Hardware
10. PPG Industries, Inc.	PPG	Basic Materials	Specialty Chemicals
11. Pentair plc	PNR	Industrials	Specialty Industrial Machinery
12. Royal Caribbean Cruises Ltd	RCL	Consumer Cyclical	Travel Services
13. Signature Bank <sup>a</sup>	SBNY	Financial Services	Banks-Regional
14. Textron Inc.	TXT	Industrials	Aerospace and Defense
15. Tyson Foods, Inc.	TSN	Consumer Defensive	Farm Products
16. Paramount Global <sup>b</sup>	PARA	Communication Services	Entertainment
<b>Note(s):</b> <sup>a</sup> Signature Bank was dissolved on the 12 <sup>th</sup> of March 2023			
<sup>b</sup> Paramount Global was previously named ViacomCBS			
<b>Source(s):</b> Authors’ own creation			

Firm selection was based on recency of reviews, broad industry representation and availability of company information from the Securities and Exchange Commission of the US. Broad representation is essential for discerning whether unique industry characteristics have a bearing on the multilevel influences being observed. Thus, an anchor-factorial with variation diffusion

analysis (Kock, 2020) is undertaken for this purpose as an extension of the hierarchical linear modeling technique (Woltman *et al.*, 2012). The full analytic protocol and results of the study are presented next.

## 4. RESULTS

Robust path analysis (Kock and Gaskins, 2014) was used to examine the data with the aid of the WarpPLS software (Kock, 2022a). This enabled the testing of the model quality via various indices, as well as a thorough assessment of the direct and moderating effects in the theoretical framework while controlling for multilevel influences. Specifically, three factors were controlled for, namely: (1) the date [month/year] of the review, (2) the firm reviewed and (3) the employees' status [full time, part-time, intern, contractor or freelancer]. To avoid deletion bias, missing data in the 14,840 cases were managed by employing the multiple regression imputation technique (Kock, 2018).

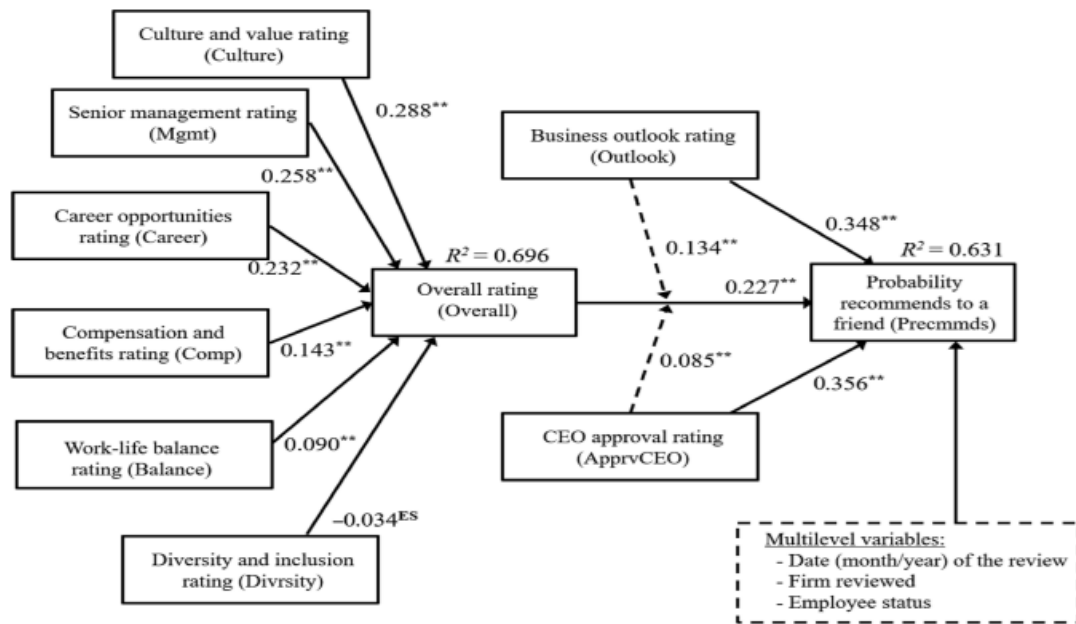
Table 2 summarizes the quality of the structural model shown in figure 2. Both the average R-squared (ARS) and the average adjusted R-squared (AARS) suggest fairly high levels of variance explained in the model's endogenous variables. The variance inflation factor indices, namely the average block VIF (AVIF) and average full collinearity VIF (AFVIF), were both below 3.3, suggesting low levels of vertical and lateral collinearity (Kock, 2014; Kock and Lynn, 2012). This means that the variables reflect different underlying constructs. These two indices also suggest that the model is free from common method bias (Kock, 2015; Kock and Lynn, 2012). The Tenenhaus GoF (GoF) suggests a large level of goodness-of-fit between the model and the data (Kock, 2014; 2022a). In the last four rows [of Table 2], the quality of causality is assessed (Kock, 2022b), including Simpson's paradox ratio (SPR), R-squared contribution ratio (RSCR), statistical

suppression ratio (SSR) and nonlinear bivariate causality direction ratio (NLBCDR). The values suggest that the model is generally sound in terms of its causality assumptions; i.e., the directions of causality implied by the links connecting the variables.

**Table 2.** Model quality indices

Index	Value	Interpretation
Average R-squared (ARS)	0.665	$p < 0.001$
Average adjusted R-squared (AARS)	0.664	$p < 0.001$
Average block VIF (AVIF)	1.994	acceptable if $\leq 5$ , ideally $\leq 3.3$
Average full collinearity VIF (AFVIF)	2.337	acceptable if $\leq 5$ , ideally $\leq 3.3$
Tenenhaus GoF (GoF)	0.815	small $\geq 0.1$ , medium $\geq 0.25$ , large $\geq 0.36$
Simpson's paradox ratio (SPR)	0.786	acceptable if $\geq 0.7$ , ideally $= 1$
R-squared contribution ratio (RSCR)	0.984	acceptable if $\geq 0.9$ , ideally $= 1$
Statistical suppression ratio (SSR)	1.000	acceptable if $\geq 0.7$
Nonlinear bivariate causality direction ratio (NLBCDR)	0.893	acceptable if $\geq 0.7$
<b>Source(s):</b> Authors' own creation based on software output		

Furthermore, Figure 2 depicts the main results from analyzing the direct and moderating effects, as well as controlling for multilevel influences. As is evident, only five variables (Culture, Mgmt, Career, Comp, and Balance) appear to be valid predictors of the employees' overall rating. Respectively, the path coefficients for these causal links were: Culture > Overall ( $\beta=0.288$ ,  $P<0.001$ ), Mgmt > Overall ( $\beta=0.258$ ,  $P<0.001$ ), Career > Overall ( $\beta=0.232$ ,  $P<0.001$ ), Comp > Overall ( $\beta=0.143$ ,  $P<0.001$ ) and Balance > Overall ( $\beta=0.090$ ,  $P<0.001$ ). The other possible predictor considered, Divrsity, had a path coefficient indistinguishable from zero due to having an effect size lower than 0.02 as indicated by the superscript "ES" (Cohen, 1988; Kock, 2014). In this assessment, a conservative approach has been taken to consider effect sizes in addition to  $p$ -values. This is because  $p$ -values tend to taper-off with larger sample sizes as in this study (Cohen, 1988; Kock, 2014). Although there were only five predictors with suitable effect sizes, the variance explained in the employees' overall rating (measured through the variable Overall) of their employers is estimated at 69.6%.



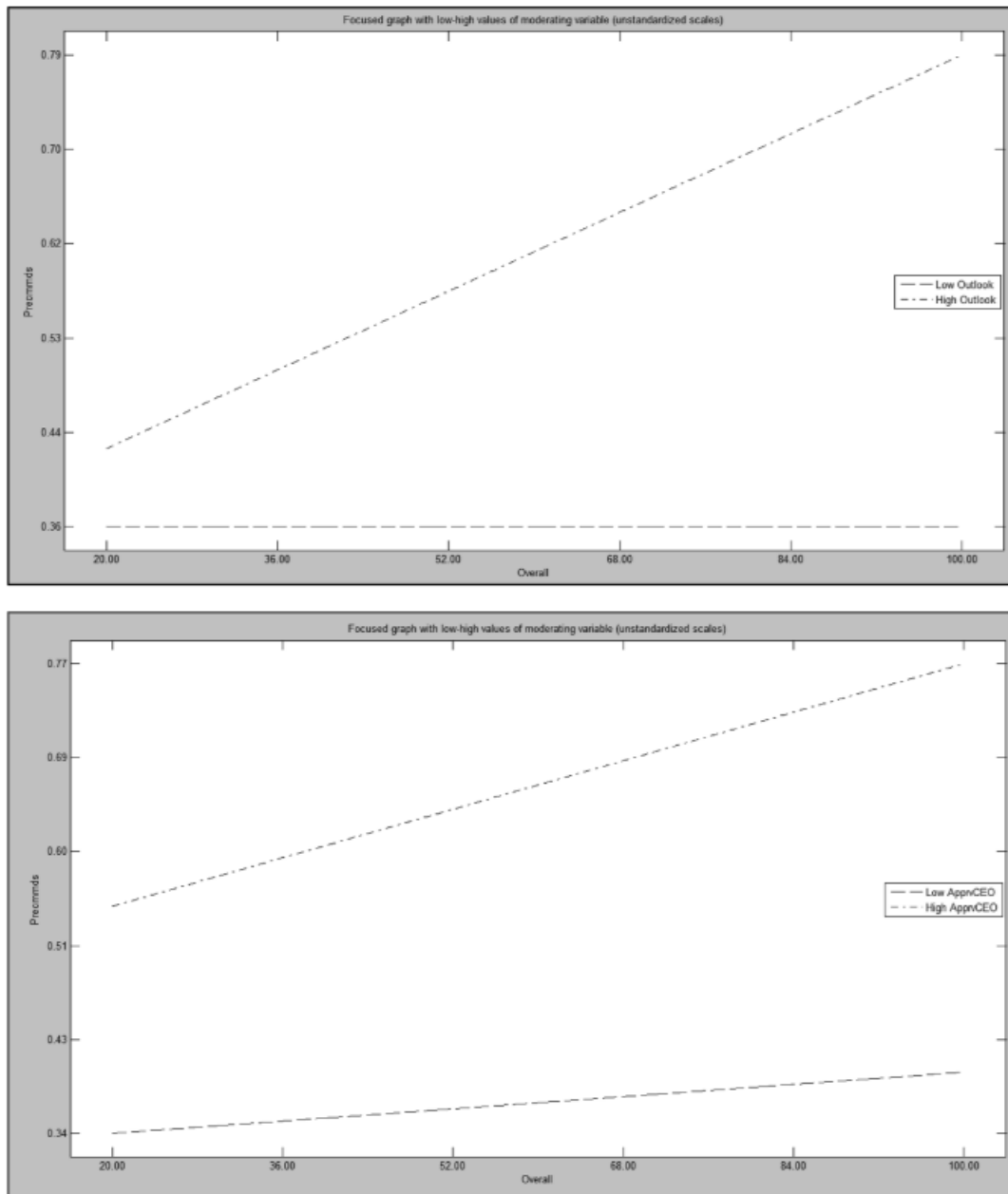
**Note(s):** \*\* = significant at the  $P < 0.001$  level; ES = indistinguishable from zero due to low effect size

**Source(s):** Authors' own creation based on software output

**Figure 2.** Path model

The variable Precmnds was modeled as a logistic regression variable, estimated via the logit approach (Kock, 2022a). It captures the probability that employees would recommend the firm as a desirable workplace to a friend. As such, this variable quantifies the superior ability of certain firms to attract and retain talent (controlling for multilevel influences), compared to counterparts in the sample. The respective path coefficients for the causal links were: Outlook > Precmnds ( $\beta=0.348$ ,  $P<0.001$ ), Overall > Precmnds ( $\beta=0.227$ ,  $P<0.001$ ), and ApprvCEO > Precmnds ( $\beta=0.356$ ,  $P<0.001$ ). Altogether, these strong and positive coefficients generated an explained variance of 63.1% in Precmnds. To test both causal links for nonlinearity, the segmentation delta method was applied (Kock, 2021). The results showed that neither link was nonlinear. Also, to ascertain the possibility of reciprocity in both causal links, the reciprocal stochastic instrumental variable procedure was used (Kock, 2023; Morrow and Conger, 2021). The absence of reciprocity was determined, meaning that the correct unidirectional relationships have been modeled and investigated.

Turning to the moderating links, Figure 3 charts the effect of Outlook and ApprvCEO on the relationship between Overall and Precmnds.



Source(s): Authors' own creation based on software output

**Figure 3.** The moderating effects of business outlook and CEO approval

The

corresponding path coefficients were both statistically significant and exceeded the effect size threshold mentioned earlier. Respectively, they were  $\beta=0.134$  ( $P<0.001$ ) and  $\beta=0.085$  ( $P<0.001$ ).



To explain, the positive association between Overall and Precmnds is strengthened by an increase in Outlook and ApprvCEO. However, by comparison, Outlook appears to have a stronger moderating influence than ApprvCEO. Also, for low values [below the medians] in both variables [Outlook and ApprvCEO], the range of probabilities that the raters would recommend the firm as a desirable workplace (Precmnds) is significantly below 50%. Yet, these probabilities rise significantly for high values [above the medians] by as much as 79% for Outlook and 77% for ApprvCEO.

## **5. DISCUSSION**

To begin with, it was intriguing to note that employees' perception of culture & values had the strongest impact, echoing extant evidence citing the positive role of this dimension in enhancing job satisfaction (Stamolampros *et al.* 2019; Lam *et al.* 2022). In effect, culture & values is deemed to be a 'binding agent' that mobilizes employees around a common organizational purpose (Lam *et al.*, 2022). This generates feelings of cohesion and togetherness that manifest in supportive interactions with peers and superiors which bode well for job satisfaction (Riasudeen *et al.* 2019). Furthermore, senior management support and career opportunities were determined, respectively, as the second and third drivers of job satisfaction. This finding is also consistent with prior evidence on the gratifying role of senior management support (Jung and Suh, 2019; Stamolampros *et al.* 2019; Moro *et al.*, 2021; Koncar *et al.* 2022) and career advancement opportunities (Kong *et al.*, 2015; Arkwright *et al.* 2018; Chang *et al.* 2022) from employees' perspective. Thant and Chang (2021) write that the manner of flexibility, fair treatment and care shown by senior management augments workers' happiness and unity, and subsequently amplifies their job satisfaction.

Likewise, access to career progression pathways reduces employees' feeling of uncertainty and enhances their outlook. Successively, this improves their job satisfaction (Chen *et al.*, 2004).

In further findings, albeit positive, compensation & benefits and work-life balance were the weakest drivers of employee satisfaction. For compensation & benefits, being ranked fourth is somewhat inconsistent with Jung and Suh's (2019) thinking that this dimension is the second most important factor yielding job satisfaction in South Korea. Nevertheless, in the US, Chang *et al.* (2022) and Stamolampros *et al.* (2019) report that compensation is among the least important triggers of employee satisfaction. Correspondingly, the reduced relevance of work-life balance could be due to cultural and contextual peculiarities. Following their systematic review, Le *et al.* (2020) deduced that employees in individualistic and western contexts were less willing to forgo family time to work longer hours. Yet, the opposite scenario applies in collectivistic, eastern settings (Le *et al.*, 2020). On the whole, it could be inferred that employees in western cultures, such as the current sample, deem work-life balance to be a basic perk that borders on the unexceptional. Thus, a poor work-life balance would trigger job dissatisfaction. Explained through Herzberg's two-factor theory, it is arguable that compensation and work-life balance constitute hygiene factors. In other words, although their absence would induce job dissatisfaction, their presence does not dramatically elevate job satisfaction (Herzberg *et al.*, 2011).

Next, it was surprising to find that the relationship between diversity & inclusion and job satisfaction did not materialize. This contradicts erstwhile acclamations of the key role of diversity in enhancing job satisfaction (Barak and Levin, 2002; McCallaghan *et al.* 2019; Hauret and Williams, 2020; Stazyk *et al.*, 2021). However, this inconsequential role is corroborated by Lee *et al.*'s (2020) understanding that, in the US, diversity is more appreciated by the non-white and

female population. In other words, ethnic and gender minorities are more likely to value workplace diversity and an inclusive environment more than dominant groups such as the white male population. In this vein, a 2020 report by the Bureau of Labor Statistics confirmed that the tech industry, in one instance, is predominantly comprised of white employees (Gitnux.com). Besides that, between 2007 and 2020, women held only 25% of computing related jobs in the US (Urwin, 2023). Hence, it is probable that the non-significant influence of diversity & inclusion is due to the current Glassdoor sample being comprised of a majority ethnic and gender stock.

Lastly, our findings revealed that job satisfaction increases the probability of employee referral commensurate with Van Hove (2013), Suen *et al.* (2020) and Im (2022). However, this study extends past evidence by uncovering intervening factors that moderate this relationship. It has been found that employees' view of firms' outlook and their approval of the incumbent CEO does, in fact, strengthen the job satisfaction - referral nexus. To the best of the authors' knowledge, this investigation is one of the first to assess the impact of these two factors on the influence of job satisfaction on referral. In this regard, evidence in the contemporary corpus is scarce and limited to three select few studies. Firstly, Dube and Zhu (2021) presume that employees' opinion of their employer's business outlook is positively correlated with performance. Secondly and thirdly, Suen *et al.* (2020) and Barnes and Cheng (2023) suggest that CEO approval enhances both employee efficiency and employee referral. Following this discussion, the conclusions of the study are now drawn alongside theoretical and practical implications.

## **6. IMPLICATIONS**

The findings fill considerable voids in the literature. Firstly, by predicting employee referral, it acquiesces Andersson (2019), Thelen (2020), Gross *et al.* (2021) and Saini *et al.*'s (2021)

indication of a shortage of evidence on employee advocacy. In this regard, the present analysis has propositioned employee satisfaction as a key predictor for referral. In addition, this influence is strengthened by business outlook and CEO approval. Secondly, this inquiry takes a more representative approach to addressing job satisfaction by probing data from Glassdoor.com. Compared to traditional self-reported surveys, this is a more candid yet under-utilized data source for investigating the determinants of job satisfaction (Lam *et al.*, 2022; Li, 2022; Filbeck and Zhao, 2023; Stamolampros *et al.*, 2019; Sainju *et al.*, 2021; Symitsi *et al.*, 2021; Dube and Zhu, 2021). To this extent, current knowledge has been extended by examining cases within a new frame. Lastly, by drawing Glassdoor reviewers from diverse sectors, the study demonstrates the pertinence of job satisfaction and employee referral across multiple domains such as IT, financial services and travel where employee retention is a persistent challenge (Bontis and Serenko, 2009; Kim, 2014; Ramalho Luz *et al.*, 2018; Moro *et al.*, 2021; Chang *et al.*, 2022).

Theoretically, our findings have significant implications for Herzberg's two-factor perspective. By investigating more objective and less biased voluntarily disclosed data, we demonstrate the broader organizational implications of Herzberg's factors beyond job satisfaction in the form of employee referrals. This highlights the hybrid role of culture and values, senior management, career opportunities, compensation and benefits, and work-life balance. These factors not only enhance personal contentment at work but also encourage employees to actively endorse and promote their organization to potential talent. This finding warrants the inclusion of Herzberg's lens in talent acquisition and employer branding theories. Additionally, we uncover the complex interactions of leadership and environmental perceptions with such outcomes. Hence, the study extends Herzberg's two-factor theory by highlighting two new dimensions [i.e. business outlook and CEO approval] as critical elements in addition to its traditional motivators.

Furthermore, this study shows that broader organizational perceptions also play a critical role in job satisfaction and its outcomes. On the one hand, the dual role of the management aspect as a motivator and a moderator (CEO approval) indicates a shift towards leadership-driven models in modern organizational theory. Therefore, we suggest that future research should incorporate leadership elements into Herzberg's theory to create a more comprehensive framework. Furthermore, the pivotal role of culture and values suggests that Herzberg's theory could be enriched by incorporating a more nuanced understanding of cultural dimensions. This would better reflect contemporary organizational practices where employees increasingly prioritize alignment with workplace culture and values. On the other hand, the significance of business outlook highlights a modern employee's strategic involvement, characterized by a proactive engagement with firms' strategic foresight. This underscores the need to incorporate strategic motivating factors when predicting employee satisfaction and referral behaviors.

Moreover, the findings also raise several questions that future research can tackle. For instance, what is the intervening role of employees' characteristics such as age, gender, nationality and experience on the drivers of employee referrals? How do the effects of job satisfaction, CEO approval, and business outlook on employee referrals differ across various industries or sectors? To what extent do specific CEO characteristics (e.g., tenure, gender, leadership style) influence the moderating role of CEO approval on the job satisfaction-referral nexus?

Practically, this paper has developed a predictive model that holds important implications to HR managers and practitioners. By offering a holistic view of the determinants and consequences of job satisfaction, HR managers across sectors can reflect on the correlations to mitigate job

dissatisfaction that culminates into turnover. Reflecting on the positive influence of on culture and values on job satisfaction, HR managers can ensure that employees operate in environments bound by relatable and compatible ethos. Shared values should be imbibed in the design of organizational policies and in the performance of daily routines. Particularly, group cohesion should be promoted through team-building activities and social gatherings. Additionally, mechanisms for reporting and managing toxic behaviour, such as anonymous hotlines, could also be adopted to nip incidents in the bud (Stamolampros *et al.*, 2019). In relation to the positive role of compensation and benefits in driving job satisfaction, managers should also ensure that their staff are fully supported in their tasks and afforded flexibility in terms of working hours and location of work. Employees should also be treated fairly through transparent processes and procedures. Individual ability and preferences should be taken into account, and managers should project an approachable demeanour by ensuring open and inclusive channels of communication which make it possible to stifle dormant and manifest grievances. In this vein, managers need to be offered regular training and coaching to improve communication skills.

The findings also show that career progression opportunities and regular constructive appraisals boost employee satisfaction and referral rates. Mutually agreed specific, measurable, achievable and timely targets are crucial in this undertaking. For career progression opportunities, the pathway(s) and criteria for promotion should be clearly communicated and impartially enforced. The promotion criteria may also inform the key performance indicators [KPIs] discussed during employee appraisals to streamline job expectations. More importantly, the criteria and KPIs may be linked to the strategic interests of the organization. This has the potential to unify key stakeholders and strengthen the commitment to organizational purpose. To dwell on KPIs discussed during employee appraisals, first of all, the value of regular appraisals is multifaceted.

It helps employees to evaluate their current performance and, on this basis, formulate plans for professional growth. It also creates an audience for dialogue in which employees feel heard and valued by the organisation. This also has the potential to create time and space for resolving latent or overt grievances. Secondly, reviewing KPIs during the appraisal process may reveal training needs for performance improvement, and provide documentation to track employees' performance and development.

It was also found that maintaining a good work-life balance has a positive impact on job satisfaction. In addition to flexibility with working patterns, managers should prioritize productivity over service hours. They are encouraged to regularly review workloads, support parents and carers, tailor procedures and policy when needed and encourage time off (Fuhl, 2023). Where possible, managers may find it beneficial to build some rapport with employees' immediate family to ascertain the toll of their work commitments and ease issues causing work-family conflict. Although adjustments may not fully address family's concerns, a better understanding of the cause of problems will alleviate some of the issues (Ann and Blum, 2020). Although diversity & inclusion has only been shown to play a trivial role in enhancing job satisfaction, Kalev and Dobbin (2022) assert that a surprising benefit of the work-life support provided by organizations is boosting organizational diversity. The authors [Kalev and Dobbin, 2022] found that US firms with policies for family leave time, flexible working options and childcare support attracted a greater percentage of Black, Hispanic and Asian American talent. Importantly, these social groups 'face the greatest work/life challenges' (Kalev and Dobbin, 2022: 5), and excluding them would lead to a loss of the social capital for the organization (Stevens *et al.*, 2008).

By and large, managers should devote attention to enhancing job satisfaction as a path towards increasing employee referral. As previously stated, the latter is an optimum means for attracting talent. Referral hires are more cost-efficient, generate higher-quality candidates, and are more likely to stay compared to non-referral hires (Friebel *et al.*, 2023). Evidence suggests that referred hires are more likely to accept offers, demonstrate superior performance in some instances, and are significantly less likely to quit than their non-referred counterparts (Burks *et al.*, 2015). Also, referred candidates are hired more quickly and enjoy a better onboarding experience. Reflecting on this, HR managers may explore initiatives in which satisfied employees are incentivised to recommend acquaintances for employment. Added to this, acknowledging the moderating role of business outlook and CEO approval, employers will do well to keep employees informed and reassured about current and future firm performance. More specifically, CEOs should be more visible in the organization, show greater engagement through regular meetings, foster transparent communication, and be directly involved in employee recognition. Furthermore, strategic leaders should effectively communicate an optimistic strategic vision to employees highlighting potential growth opportunities.

Notwithstanding the aforementioned implications, this study acknowledges some limitations. The motivators included in this study are limited to what is available in the Glassdoor database and do not represent an exhaustive list. Including additional motivators could provide a more comprehensive model. Additionally, the focus was solely on employees in U.S. firms. While the findings may be applicable to similar contexts in North America, such as Canada, further tests are required to confirm their generalizability in broader contexts. Finally, the data are cross-sectional, and any discussion of causality is based on theoretical foundations. To validate such causal relationships, longitudinal data should be utilized.



## 7. CONCLUSION

This study aimed to shift the focus of employee satisfaction investigations from internal surveys to a more comprehensive pool of employees on a review platform such as Glassdoor.com. Thus, it revisited the drivers of employee referral and the roles of business outlook and CEO approval by examining 14,840 voluntary disclosures on US firms. It was revealed that employee referral is predicted by job satisfaction, which is in turn elicited by appropriate culture & values, senior management support, career opportunities, compensation & benefits and work-life balance. More importantly, perceived business outlook and CEO approval were found to be key drivers of referral and significant moderators of the job satisfaction-employee referral relationship

## REFERENCES

- Acquavita, S., Pittman, J., Gibbons, M. and Castellanos-Brown, K. (2009). Personal and organizational diversity factors' impact on social workers' job satisfaction: Results from a national internet-based survey. *Administration in Social Work*, 33(2), 151-166.
- Adeoye, M. (2023). Identifying Measures to Promote Teachers' Job Satisfaction in Public Secondary School. *ASEAN Journal of Educational Research and Technology*, 2(2), 163-172.
- Afif, M., Mariyanti, T., Septiani, N. and Dolan, E. (2023). Factor affecting employee motivation to increase performance of Sharia bank in Indonesia on Islamic perspective. *APTISI Transactions on Management*, 7(2), 131-142.
- Alrawahi, S., Sellgren, S. F., Altouby, S., Alwahaibi, N., & Brommels, M. (2020). The application of Herzberg's two-factor theory of motivation to job satisfaction in clinical laboratories in Omani hospitals. *Heliyon*, 6(9).

- Amin, M., Aldakhil, A. M., Wu, C., Rezaei, S. and Cobanoglu, C. (2017). The structural relationship between TQM, employee satisfaction and hotel performance. *International Journal of Contemporary Hospitality Management*.
- Amzat, I., Don, Y., Omar Fauzee, M., Hussin, F. and Raman, A. (2017). Determining motivators and hygiene factors among excellent teachers in Malaysia. *International Journal of Educational Management*, 31(2), 78-97.
- Andersson, R. (2019). Employee communication responsibility: Its antecedents and implications for strategic communication management. *International Journal of Strategic Communication*, 13(1), 60-75.
- Ann, S. and Blum, S. (2020). Motivating senior employees in the hospitality industry. *International Journal of Contemporary Hospitality Management*, 32(1), 324-346.
- Arkwright, L., Edgar, S., & Debenham, J. (2018). Exploring the job satisfaction and career progression of musculoskeletal physiotherapists working in private practice in Western Australia. *Musculoskeletal Science and Practice*, 35, 67-72.
- Barak, M. and Levin, A. (2002). Outside of the corporate mainstream and excluded from the work community: A study of diversity, job satisfaction and well-being. *Community, Work & Family*, 5(2), 133-157.
- Barakat, S. R., Isabella, G., Boaventura, J. and Mazzon, J. A. (2016). The influence of corporate social responsibility on employee satisfaction. *Management decision*.
- Barnes, S. and Cheng, Y. (2023). Employee approval of CEOs and firm value: Evidence from Employees' choice awards. *Journal of Corporate Finance*, 78, 102341.
- Bergstrom, K. (2022). When a door becomes a window: using Glassdoor to examine game industry work cultures. *Information, Communication & Society*, 25(6), 835-850.

- Bloemer, J. (2010). The psychological antecedents of employee referrals. *The International Journal of Human Resource Management*, 21(10), 1769-1791.
- Bontis, N. and Serenko, A. (2009). A causal model of human capital antecedents and consequents in the financial services industry. *Journal of Intellectual Capital*, 10(1), 53-69.
- Brown, M., Setren, E., & Topa, G. (2016). Do informal referrals lead to better matches? Evidence from a firm's employee referral system. *Journal of Labor Economics*, 34(1), 161-209.
- Burks, S. V., Cowgill, B., Hoffman, M., & Housman, M. (2015). The value of hiring through employee referrals. *The Quarterly Journal of Economics*, 130(2), 805-839.
- Chamberlain, A. and Huang, R. (2016). What makes a great CEO?. *Glassdoor Economic Research*.
- Chang, V., Mou, Y., Xu, Q. and Xu, Y. (2022). Job satisfaction and turnover decision of employees in the Internet sector in the US. *Enterprise Information Systems*, 2130013
- Chen, T. Y., Chang, P. L., & Yeh, C. W. (2004). A study of career needs, career development programs, job satisfaction and the turnover intentions of R&D personnel. *Career development international*, 9(4), 424-437.
- Chittiprolu, V., Singh, S., Bellamkonda, R. and Vanka, S. (2021). A text mining analysis of online reviews of Indian hotel employees. *Anatolia*, 32(2), 232-245.
- Choi, J., Shin, D., & Lee, H. (2021). Turnover rate prediction among IT firms according to job satisfaction and dissatisfaction factors: Using topic modeling and machine learning. *The Korean Data & Information Science Society*, 32(5), 1035-1047.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Hillsdale, NJ: Lawrence Erlbaum.

- Dhir, S., Dutta, T., & Ghosh, P. (2020). Linking employee loyalty with job satisfaction using PLS–SEM modelling. *Personnel Review*, 49(8), 1695-1711.
- Dube, S. and Zhu, C. (2021). The disciplinary effect of social media: Evidence from firms' responses to Glassdoor reviews. *Journal of Accounting Research*, 59(5), 1783-1825.
- Dube, S., & Zhu, C. (2021). The disciplinary effect of social media: Evidence from firms' responses to Glassdoor reviews. *Journal of Accounting Research*, 59(5), 1783-1825.
- Escardíbul, J. and Afcha, S. (2017). Determinants of the job satisfaction of PhD holders: an analysis by gender, employment sector, and type of satisfaction in Spain. *Higher Education*, 74, pp.855-875.
- Ewers, M., Khattab, N., Babar, Z. and Madeeha, M. (2022). Skilled migration to emerging economies: The global competition for talent beyond the West. *Globalizations*, 19(2), 268-284.
- Fang, R., Gao, B. and Hu, N. (2021). Intangible asset value of employee satisfaction in high-contact services. *International Journal of Hospitality Management*, 94, 102810.
- Filbeck, G. and Zhao, X. (2022). Glassdoor best places to work: how do they work for shareholders?. *Studies in Economics and Finance*, (ahead-of-print).
- Friebel, G., Heinz, M., Hoffman, M., & Zubanov, N. (2023). What do employee referral programs do? Measuring the direct and overall effects of a management practice. *Journal of Political Economy*, 131(3), 633-686.
- Fuhl, J. (2023) 12 ways to support a better work-life balance for your employees. Available at <https://www.sage.com/en-gb/blog/hr-support-better-work-life-balance-workplace/>

- Gitnux.com, 2020. [Webpage] available at: [https://blog.gitnux.com/diversity-in-tech-statistics/#:~:text=According%20to%20a%202020%20report,and%20Black%20employees%20\(6.1%25\).](https://blog.gitnux.com/diversity-in-tech-statistics/#:~:text=According%20to%20a%202020%20report,and%20Black%20employees%20(6.1%25).)
- Gregory, B. T., Harris, S. G., Armenakis, A. A., & Shook, C. L. (2009). Organizational culture and effectiveness: A study of values, attitudes, and organizational outcomes. *Journal of business research*, 62(7), 673-679.
- Gross, H. P., Ingerfurth, S. and Willems, J. (2021). Employees as reputation advocates: Dimensions of employee job satisfaction explaining employees' recommendation intention. *Journal of Business Research*, 134, 405-413.
- Guo, F., Gallagher, C. M., Sun, T., Tavoosi, S., & Min, H. (2021). Smarter people analytics with organizational text data: Demonstrations using classic and advanced NLP models. *Human Resource Management Journal*.
- Hauret, L. and Williams, D. (2020). Workplace diversity and job satisfaction. *Equality, Diversity and Inclusion: An International Journal*, 39(4), 419-446.
- Herzberg, F., Mausnek, B., and Snyderbman, B. (1959) The Motivation to Work (Second Edition). New York: John Wiley and Sons, 1959.
- Hildenbrand, K., Daher, P., Topakas, A., & Gan, X. (2023). Multidimensional work-nonwork balance: are balanced employees productive at work and satisfied with life?. *The International Journal of Human Resource Management*, 1-40.
- Huang, M., Li, P., Meschke, F. and Guthrie, J. P. (2015). Family firms, employee satisfaction, and corporate performance. *Journal of corporate finance*, 34, 108-127.
- Im, A. Y., & Cho, S. (2022). Mediating mechanisms in the relationship between supervisor incivility and employee service delivery in the hospitality industry. *International Journal of Contemporary Hospitality Management*, 34(2), 642-662.

- Jung, H. S., & Yoon, H. H. (2015). The impact of employees' positive psychological capital on job satisfaction and organizational citizenship behaviors in the hotel. *International Journal of Contemporary Hospitality Management*, 27(6), 1135-1156.
- Jung, Y. and Suh, Y. (2019). Mining the voice of employees: A text mining approach to identifying and analyzing job satisfaction factors from online employee reviews. *Decision Support Systems*, 123, 113074.
- Kalev, A. and Dobbin, F. (2022). *The surprising benefits of work/life support*. Massachusetts: Harvard Business Review Magazine.
- Kelly, L. A., Lefton, C., & Fischer, S. A. (2019). Nurse leader burnout, satisfaction, and work-life balance. *JONA: The Journal of Nursing Administration*, 49(9), 404-410.
- Khalid, A., Raja, U., Malik, A. R., & Jahanzeb, S. (2023). The effects of working from home during the COVID-19 pandemic on work–life balance, work–family conflict and employee burnout. *Journal of Organizational Effectiveness: People and Performance*.
- Kim, N. (2014). Employee turnover intention among newcomers in travel industry. *International Journal of Tourism Research*, 16(1), 56-64.
- Kock, N. (2014). Advanced mediating effects tests, multi-group analyses, and measurement model assessments in PLS-based SEM. *International Journal of e-Collaboration*, 10(3), 1-13.
- Kock, N. (2015). Common method bias in PLS-SEM: A full collinearity assessment approach. *International Journal of e-Collaboration*, 11(4), 1-10.
- Kock, N. (2016). Visualizing moderating effects in path models with latent variables. *International Journal of e-Collaboration*, 12(1), 1-7.
- Kock, N. (2018). Single missing data imputation in PLS-based structural equation modeling. *Journal of Modern Applied Statistical Methods*, 17(1), 1-23.

- Kock, N. (2020). Multilevel analyses in PLS-SEM: An anchor-factorial with variation diffusion approach. *Data Analysis Perspectives Journal*, 1(2), 1-6.
- Kock, N. (2021). Moderated mediation and J-curve emergence in path models: An information systems research perspective. *Journal of Systems and Information Technology*, 23(3), 303-321.
- Kock, N. (2022a). *WarpPLS User Manual: Version 8.0*. Laredo, TX: ScriptWarp Systems.
- Kock, N. (2022b). Using causality assessment indices in PLS-SEM. *Data Analysis Perspectives Journal*, 3(5), 1-6.
- Kock, N. (2023). Assessing multiple reciprocal relationships in PLS-SEM. *Data Analysis Perspectives Journal*, 4(3), 1-8.
- Kock, N. and Gaskins, L. (2014). The mediating role of voice and accountability in the relationship between Internet diffusion and government corruption in Latin America and Sub-Saharan Africa. *Information Technology for Development*, 20(1), 23-43.
- Kock, N. and Lynn, G. (2012). Lateral collinearity and misleading results in variance-based SEM: An illustration and recommendations. *Journal of the Association for Information Systems*, 13(7), 546-580.
- Koncar, P., Santos, T., Strohmaier, M. and Helic, D. (2022). On the application of the Two-Factor Theory to online employer reviews. *Journal of Data, Information and Management*, 4(1), 1-23.
- Lam, J., Mulvey, M. and Robson, K. (2022). Looking through the Glassdoor: The stories that B2B salespeople tell. *Industrial Marketing Management*, 105, 478-488
- Le, H., Kibria, I., & Jiang, K. (2023). Is Chief Executive Officer optimistic belief bad for workers? Evidence from corporate employment decisions. *Human Resource Management Journal*.

- Le, H., Newman, A., Menzies, J., Zheng, C. and Fermelis, J. (2020). Work–life balance in Asia: A systematic review. *Human Resource Management Review*, 30(4), 100766.
- Lee, B., Lee, C., Choi, I., & Kim, J. (2022). Analyzing determinants of job satisfaction based on two-factor theory. *Sustainability*, 14(19), 12557.
- Lee, B., Lee, C., Choi, I., & Kim, J. (2022). Analyzing determinants of job satisfaction based on two-factor theory. *Sustainability*, 14(19), 12557.
- Lee, H., Robertson, P. and Kim, K. (2020). Determinants of job satisfaction among US federal employees: An investigation of racial and gender differences. *Public Personnel Management*, 49(3), 336-366.
- Lee, J., & Kang, J. (2017). A study on job satisfaction factors in retention and turnover groups using dominance analysis and LDA topic modeling with employee reviews on Glassdoor.com.
- Lee, K. and Choi, S. Y. (2023). Resourceful and demanding attributes of organisational culture, employee satisfaction, and organisational performance of large R&D intensive firms in the US. *Technology Analysis & Strategic Management*, 1-14.
- Lee, K. J., & Choi, S. Y. (2023). Resourceful and demanding attributes of organisational culture, employee satisfaction, and organisational performance of large R&D intensive firms in the US. *Technology Analysis & Strategic Management*, 1-14.
- Li, J. (2022). The effect of employee satisfaction on effective corporate tax planning: Evidence from Glassdoor. *Advances in accounting*, 57, 100597.
- Li, M., Fu, N., Chadwick, C., & Harney, B. (2023). Untangling human resource management and employee wellbeing relationships: Differentiating job resource HR practices from challenge demand HR practices. *Human Resource Management Journal*.



- Li, Z., Stamolampros, P., & Zhao, X. (2024). Dynamics in the asymmetric effects of job attributes on employee satisfaction: A mixed-method approach using big data. *Tourism Management, 105*, 104967.
- Liu, Y., Aungsuroch, Y., & Yunibhand, J. (2016). Job satisfaction in nursing: a concept analysis study. *International nursing review, 63*(1), 84-91.
- Locke, E.A (1976). The nature and causes of job satisfaction. In M.D. Dunnette (Ed.), *Handbook of industrial and organizational psychology* (Vol. 1, pp. 1297-1343). Chicago: Rand McNally
- Loo, S. H., Wider, W., Lajuma, S., Jiang, L., Kenikasahmanworakhun, P., Tanucan, J. C. M., & Ahmad Khadri, M. W. A. (2024). Key factors affecting employee job satisfaction in Malaysian manufacturing firms post COVID-19 pandemic: a Delphi study. *Cogent Business & Management, 11*(1), 2380809.
- Lu, H., While, A. and Barriball, K. L. (2005). Job satisfaction among nurses: a literature review. *International journal of nursing studies, 42*(2), 211-227.
- Maxham III, J. (2001). Service recovery's influence on consumer satisfaction, positive word-of-mouth, and purchase intentions. *Journal of Business Research, 54*(1), 11-24.
- McCallaghan, S., Jackson, L. T., & Heyns, M. M. (2019). Examining the mediating effect of diversity climate on the relationship between destructive leadership and employee attitudes. *Journal of Psychology in Africa, 29*(6), 563-569.
- Melián-González, S., Bulchand-Gidumal, J., & Gonzalez Lopez-Valcarcel, B. (2015). New evidence of the relationship between employee satisfaction and firm economic performance. *Personnel Review, 44*(6), 906-929.
- Mgaiwa, S. J. (2023). Predicting academics' job satisfaction from their perceived leadership styles: Evidence from Tanzania. *Cogent Psychology, 10*(1), 2156839.

- Moro, S., Ramos, R. F., & Rita, P. (2021). What drives job satisfaction in IT companies?. *International Journal of Productivity and Performance Management*, 70(2), 391-407.
- Morrow, D. and Conger, S. (2021). Assessing reciprocal relationships in PLS-SEM: An illustration based on a job crafting study. *Data Analysis Perspectives Journal*, 2(1), 1-5.
- Navimipour, N. and Soltani, Z. (2016). The impact of cost, technology acceptance and employees' satisfaction on the effectiveness of the electronic customer relationship management systems. *Computers in Human Behavior*, 55, 1052-1066.
- O'reilly, C. A., & Chatman, J. A. (1996). Culture as social control: Corporations, cults, and commitment.
- Penconek, T., Tate, K., Bernardes, A., Lee, S., Micaroni, S. P., Balsanelli, A. P., ... & Cummings, G. G. (2021). Determinants of nurse manager job satisfaction: A systematic review. *International Journal of Nursing Studies*, 118, 103906.
- Pieper, J., Greenwald, J. and Schlachter, S. (2018). Motivating employee referrals: The interactive effects of the referral bonus, perceived risk in referring, and affective commitment. *Human Resource Management*, 57(5), 1159-1174.
- Ramvalho Luz, C. M. D., Luiz de Paula, S., & de Oliveira, L. M. B. (2018). Organizational commitment, job satisfaction and their possible influences on intent to turnover. *Revista de Gestão*, 25(1), 84-101.
- Riasudeen, S., Singh, P. and Kannadhasan, M. (2019). The role of job satisfaction behind the link between group cohesion, collective efficacy, and life satisfaction. *Psychological Studies*, 64, 401-410.

- Saini, G. and Jawahar, I. (2021). Do employment experience and attractiveness rankings matter in employee recommendation? A firm-level analysis of employers. *Management and Labour Studies*, 46(2), 175-191.
- Sainju, B., Hartwell, C. and Edwards, J. (2021). Job satisfaction and employee turnover determinants in Fortune 50 companies: Insights from employee reviews from Indeed.com. *Decision Support Systems*, 148, 113582.
- Sanjeev, M. A., & Surya, A. V. (2016). Two factor theory of motivation and satisfaction: An empirical verification. *Annals of Data Science*, 3(2), 155-173.
- Schlachter, S. D., & Pieper, J. R. (2019). Employee referral hiring in organizations: An integrative conceptual review, model, and agenda for future research. *Journal of Applied Psychology*, 104(11), 1325.
- Seo, J., & Lee, S. (2021). The moderating effect of organizational culture type on the relationship between cultural satisfaction and employee referral intention: Mining employee reviews on glassdoor.com. *Journal of Organizational Change Management*, 34(5), 1096-1106.
- Shinnar, R. S., Young, C. A., & Meana, M. (2004). The motivations for and outcomes of employee referrals. *Journal of Business and Psychology*, 19(2), 271-283.
- Singh, M. and Bhattacharjee, A. (2020). A study to measure job satisfaction among academicians using Herzberg's theory in the context of Northeast India. *Global Business Review*, 21(1), 197-218.
- Sobaih, A. E. E., & Hasanein, A. M. (2020). Herzberg's theory of motivation and job satisfaction: Does it work for hotel industry in developing countries?. *Journal of Human Resources in Hospitality & Tourism*, 19(3), 319-343.

- Stamolampros, P., Korfiatis, N., Chalvatzis, K. and Buhalis, D. (2019). Job satisfaction and employee turnover determinants in high contact services: Insights from Employees' Online reviews. *Tourism Management*, 75, 130-147.
- Stazyk, E. C., Davis, R. S., & Liang, J. (2021). Probing the links between workforce diversity, goal clarity, and employee job satisfaction in public sector organizations. *Administrative Sciences*, 11(3), 77.
- Stevens, F., Plaut, V. and Sanchez-Burks, J. (2008). Unlocking the Benefits of Diversity: All-Inclusive Multiculturalism and Positive Organizational Change. *The Journal of Applied Behavioral Science*, 44(1), 116-133
- Storey, D. J. (2004). Exploring the link, among small firms, between management training and firm performance: a comparison between the UK and other OECD countries. *The International Journal of Human Resource Management*, 15(1), 112-130.
- Suen, H., Hung, K. and Tseng, F. (2020). Employer ratings through Crowdsourcing on social media: an examination of US Fortune 500 Companies. *Sustainability*, 12(16), 6308.
- Sull, D. Sull, C. and Chamberlain, A. "Measuring Culture in Leading Companies," MIT Sloan Management Review and Glassdoor, June 2019.
- Symitsi, E., Stamolampros, P., Daskalakis, G., & Korfiatis, N. (2021). The informational value of employee online reviews. *European Journal of Operational Research*, 288(2), 605-619.
- Thant, Z. and Chang, Y. (2021). Determinants of public employee job satisfaction in Myanmar: Focus on Herzberg's two factor theory. *Public Organization Review*, 21, 157-175.
- Thelen, P. (2020). Internal communicators' understanding of the definition and importance of employee advocacy. *Public Relations Review*, 46(4), 101946.
- Theodossiou, I., & Zangelidis, A. (2009). Career prospects and tenure–job satisfaction profiles: evidence from panel data. *The Journal of Socio-Economics*, 38(4), 648-657.

- Timmreck, T. (2001). Managing motivation and developing job satisfaction in the health care work environment. *The Health Care Manager*, 20(1), 42-58.
- Trochmann, M., Stewart, K., & Ragusa, J. (2023). The impact of employee perceptions of inclusion in a racially diverse agency: Lessons from a state government survey. *Public Personnel Management*, 52(4), 543-565.
- Tsai, P. C. F., Yen, Y. F., Huang, L. C., & Huang, C. (2007). A study on motivating employees' learning commitment in the post-downsizing era: Job satisfaction perspective. *Journal of world business*, 42(2), 157-169.
- Urwin (2023) <https://builtin.com/women-tech/women-in-tech-workplace-statistics>
- Valk, R. and Yousif, L. (2023). "Going beyond to deliver hip hospitality": Exploring motivation and job satisfaction of hospitality workers in Dubai. *International Journal of Organizational Analysis*, 31(2), 293-316.
- Van Hove, G. (2013). Recruiting through employee referrals: An examination of employees' motives. *Human performance*, 26(5), 451-464.
- Vanderschuere, M., & Birdsall, C. (2019). Can diversity management improve job satisfaction for military veterans in the federal government?. *The American Review of Public Administration*, 49(1), 116-127.
- Wang, D., Zhu, Q., Avolio, B. J., Shen, W., & Waldman, D. (2023). Do employees' views matter in corporate governance? The relationship between employee approval and CEO dismissal. *Strategic Management Journal*, 44(5), 1328-1354.
- Wieschollek, V., & Dlouhy, K. (2022). Employee referrals as counterproductive work behavior? Employees' motives for poor referrals and the role of the cultural context. *The International Journal of Human Resource Management*, 1-24.

- Woltman, H., Feldstain, A., MacKay, J. and Rocchi, M. (2012). An introduction to hierarchical linear modeling. *Tutorials in Quantitative Methods for Psychology*, 8(1), 52-69.
- Wu, R., Zhao, X., Li, Z., & Xie, Y. (2024). The role of employee personality in employee satisfaction and turnover: insights from online employee reviews. *Personnel Review*.
- Zhang, Y. C., Zemke, D. M., Belarmino, A., & Shum, C. (2024). Comparing the antecedents of manager's and employee's job satisfaction in the housekeeping department. *International Hospitality Review*.