Job Insecurity And Job Disengagement Among Private Security Personnel: Moderated-Moderation Model

Isaac Okyere¹, Prince Addai ², Bright Kumordzi³, Millicent Wiafe-Kwagyan⁴, Bernice Adjei⁵

Ghana Communication Technology University, Ghana ¹, ², ⁴, ⁵
University of Ghana, Department of Psychology, Ghana ³

ABSTRACT
Mental health problems are on the rise in contemporary organizations largely due to frequent job insecurity among employees. Drawing from traditional stress theories, the study assesses work-family conflict as a mediator in the correlation between job insecurity and job disengagement. Additionally, it hypothesized that the influence of job insecurity on job disengagement, mediated by work-family conflict, would be contingent upon perceived procedural justice. Consequently, the study employed a moderated mediation model to test these hypotheses. Data were collected from a sample of 263 private security personnel in Accra, Ghana. Utilizing questionnaires administered at a single time point over an eight-week duration, the study gathered information from the participants on job insecurity, job disengagement, work-family conflict, and procedural justice. Subsequently, JASP software and the PROCESS model were utilized to analyze the data. The study revealed that procedural justice played a dual role: it not only moderated the impact of job insecurity and work-family conflict but also moderated the positive effect of job insecurity on job disengagement through work-life conflict. This study pioneers an examination of the moderated mediated mechanism involving procedural justice as a moderator in the relationship between job insecurity and job disengagement via work-family conflict. The findings of this study offer valuable insights for organizations by highlighting the mitigating influence of procedural justice in reducing employee job disengagement through the mediated pathway of work-family.

ARTICLE INFO
Received: March 20, 2024
Reviewed: May 9, 2024
Accepted: May 14, 2024
Published: May 26, 2024

Keywords:
Ghana
Private Security Personnel
Job Insecurity
Job Disengagement
Work-Family Conflict
Procedural Justice

© 2024 The Author(s)

Introduction
The competition among organizations is intensifying day by day (Shin & Shin, 2020). Consequently, organizational structures must evolve to adapt to these turbulent circumstances and trends (Berntson et al.,
In response to these changing conditions, organizations are transitioning into service businesses, implementing employee downsizing for financial savings, altering work practices, adopting flexible job contracts, outsourcing, and employing various restructuring methods such as mergers and acquisitions, downsizing, and privatization (Addai et al., 2022). Nutor et al. (2022) indicated that the COVID-19 outbreak led to the loss of over 42,000 jobs among employees in sub-Saharan Africa, with expectations of further job losses in the coming years. These circumstances possess the capability to erode employees’ perceptions of job security (Anand et al., 2023; Simha et al., 2014).

The rising crime rate and the insufficient capability of public security have contributed to the growth of private security organizations in Ghana (Elshaer & Azazz, 2021; Owusu et al., 2016). Private security officers play a vital role as custodians of wealth, safeguarding both properties and lives. Given their pivotal role, these officers must experience a high level of job security to effectively fulfill their duties (Annor & Burchell, 2017). However, as noted by Elshaer et al. (2022), the level of job security among private security personnel seems to diminish daily. This is attributed to technological advancement, financial constraints, organizational restructuring, and changing work practices in the modern world (Elshaer et al., 2022).

The increasing rate of job insecurity (JI) among private security officers has resulted in significant emotional and physical turmoil for these personnel (Asfaw et al., 2019). The greater the concern among private security personnel regarding potential job loss, the more pronounced their mental and physical health challenges become. The psychological turmoil has led to a higher level of job disengagement among the employees (Minnotte & Yucel, 2018; Shin & Shin, 2020). Studies on the association between JI and job disengagement (JD) have primarily emerged in European countries due to the rising nature of JI as a substantial stressor affecting employees in all spheres of work-life (Hu et al., 2018; Öztürk et al., 2017). Despite indications of high JD among private security personnel, there has been limited research conducted on the association between JI and JD within this occupational group. Most of these studies have assessed the nexus between JI and burnout, considering employee disengagement as a component of burnout.

Moreover, existing studies on the correlation between job insecurity (JI) and job disengagement (JD) among employees have typically adopted a more direct approach (Addai et al., 2022; Dogantekin et al., 2022). These studies have also omitted the critical assessment of how work-family conflict (WFC) and procedural justice (PJ) affect the nexus between JI and JD. Examining the relationship between JI and JD through the lens of WFC and PJ offers a nuanced understanding of how individuals navigate work-related stressors within the broader context of their personal lives and organizational fairness. By considering these factors, employees can better comprehend how perceptions of job insecurity influence one’s commitment and engagement with their work, shedding light on the relationship between work dynamics, family responsibilities, and organizational justice in shaping employee attitudes and behaviors. This lack of studies exploring these variables is therefore creating significant gaps in the understanding of how to alleviate job insecurity to enhance job engagement.

Thus, this study aims to fill these gaps by making several contributions to existing literature. First, to induce engagement among private security officers, it is important to identify the factors that result in JD. By assessing JI as a determining factor of JD, the study will add to the literature on how to expedite measures to reduce JD. Second, by including WFC and PJ as potential moderated mediating effects, the study helps identify the factors intervening in the relationship between JI and JD. The study may not only enrich our knowledge of how JI affects JD but will also identify alternative, more effective intervention methods for improving the levels of JD among private security officers. Lastly, although studies indicate that the positive effect of JI on JD may vary depending on the levels of perceived PJ (Shin & Shin, 2020), to date, no study has examined the moderated mediation analysis of WFC and PJ on the nexus between JI and JD. Thus, it is crucial to conduct a study of such moderated moderation analysis since JI can become poisonous for organizations to handle (Berntson et al., 2016). This study, therefore, assessed PJ as a potential moderator that affects the relationship between JI and JD through WFC, as illustrated in the hypothesized model of the study shown in Figure 1.
Literature Review

Job Insecurity (JI) and Job Disengagement (JD)

Job insecurity (JI) is a social phenomenon shaped by an individual's perception of their employment status (Simha et al., 2014). It manifests when individuals lack assurances about the continuity of their employment (Hu et al., 2018). Nauman et al. (2019) emphasize that JI goes beyond the mere desire to retain one's position; it encompasses the employee's efforts to preserve crucial facets of their job. Recognized as a significant work-related stressor, JI affects an increasing number of employees (Scanlan & Still, 2019). According to the transactional stress model, the perception of a threat to one's job can induce stress, impacting both the individual and the organization (Kausto et al., 2017). The detrimental work consequences related to job stress, such as job disengagement (JD), are comparable to the outcomes of JI (Hu et al., 2018; Simha et al., 2014).

Exposure to JI, just like job stress, has been linked to various negative health outcomes, particularly in mental health (Scanlan & Still, 2019). An underexplored consequence of mental health issues associated with JI, especially in the Ghanaian context, is JD (Bernston et al., 2016). JD, identified as a dimension of burnout, involves an "increase in mental distance from one's job, or feelings of negativism or cynicism related to one's job" (Metea et al., 2014, p. 265). It is characterized by feelings of cynicism or negativism associated with the job, resulting in a mental distancing from one's responsibilities (Hu et al., 2018). Disengaged employees are less likely to exert extra effort, tend to be absent from work frequently, and are less inclined to endorse the products of their organization (Minnotte & Yucel, 2018).

Building on the transactional stress model, we propose that JI imposes excessive stress on employees, leading to disengagement from their roles (Bernhard-Oettel et al., 2019). Studies indicate that JI can act as a potential source of job stress, diminishing employees' interest in their responsibilities (Cordes & Dougherty, 2013; Stankeviciute et al., 2021). Prolonged exposure to chronic JI can deplete resources, induce feelings of exhaustion, and ultimately drain energy among employees. Research suggests a link between long-term uncertainties associated with JI and employee disengagement (Öztürk et al., 2017).

Moreover, in the Ghanaian private security industry, job insecurity among security personnel is prevalent due to factors such as fluctuating demand and short-term contracts. This insecurity contributes to heightened levels of job disengagement, impacting employee morale and organizational effectiveness. Based on these insights, we predicted that:

H1: JI is positively and significantly related to JD.

Work-family Conflict (WFC) as a Mediator

WFC encapsulates the challenges arising from the incompatibility of roles between work and family responsibilities (Wen et al., 2023). This conflict materializes when individuals grapple with conflicting demands from their professional and personal domains, where meeting obligations in one realm complicates fulfilling responsibilities in the other (Anand et al., 2023). Thus, WFC emerges when experiences in the workplace encroach upon family activities or when familial commitments impede work-related duties (Wen et al., 2023).

Conflict between work and family activities induces higher levels of stress, leading to intense feelings of despair (Anand et al., 2023). As WFC serves as a stressor, its excessive manifestation increases the stress stemming from JI, further worsening the likelihood of JD. According to Jiang and Lavaysse (2018), the perception of WFC intensifies the association between perceived JI and JD, deepening this association when the perception of WFC is higher. The stress and strain resulting from JI contribute to an increased level of
WFC, as the emotional toll spills over into family life, making it more challenging for employees to fulfill their family responsibilities (Minnotte & Yucel, 2018).

While several studies have indicated that stress mediates the association between JI and burnout (Chen et al., 2018; Guangdong et al., 2018; Minnotte & Yucel, 2018), most of these studies consider WFC as a stressor and JD as components of burnout. However, in sub-Saharan Africa, where counterproductive behaviors such as JD have intensified due to the high levels of JI in the post-era of COVID-19, it is imperative to assess how WFC mediates the relationship between JI and JD. Therefore, the researchers propose that:

H2: WFC will mediate the relationship between JI and JD.

**The Cushioning Mechanism of Procedural Justice (PJ)**

PJ pertains to the transparency and fairness of decision-making processes within an organization, focusing on how employees perceive the fairness of procedures used by leaders to reach specific decisions (Shin & Shin, 2020). According to Hong et al. (2023), PJ is guided by four principles: fairness in processes, transparency in actions, providing opportunities for voice, and impartiality in decision-making.

The information conveyed by PJ serves two essential functions. Firstly, it directs employees' attention to organizational characteristics associated with the transparency of decision-making procedures, enabling them to evaluate the fairness of the decision-making processes (Zhang et al., 2020). This type of PJ information is crucial for attributing outcomes to the decision-making process and determining whether the received outcomes are deemed justified (Bernhard-Oettel et al., 2019). Secondly, it aids employees in assessing the social dynamics within the group or organization, emphasizing the importance of interpersonal treatment and status recognition (Halbesleben et al., 2019).

Drawing on the Conservation of Resources (COR) Theory (Bakker & Demerouti, 2007), PJ is conceptualized as a resource in the organization. When employees perceive fairness in decision-making, it contributes to their overall resource pool. Fair and transparent decision-making processes enhance employees' sense of control, predictability, and social support, acting as valuable resources in times of stress (Stiglbauer & Zuber, 2019). Perceiving fair and transparent decisions regarding job security can mitigate the negative impact on the overall resource pool, thereby reducing the likelihood of the negative consequences associated with JI such as WFC (Huang et al., 2016). Employees subjected to perceived unfair treatment regarding job security are more likely to experience distress, potentially leading to increased conflict between work and family responsibilities (Rodhiya & Parahyanti, 2017). A study by Zhang et al. (2020) supports the idea that PJ can act as a cushion in the relationship between job stress and WFC. With JI considered as a source of stress, we hypothesized that:

H3: The relationship between JI and JD will be moderated by PJ, such that the relationship will be stronger for low levels than for high levels of PJ.

Existing literature has delved into the potential moderating impact of PJ in alleviating the adverse effects of job stress on WFC (Addai et al., 2022; Freire & Bettencourt, 2020). However, the present study asserts a distinctive perspective, positing that PJ will not only play a moderating role but will also enhance the mediating effect of WFC in the link between JI and JD. This augmentation is rooted in the notion that PJ provides crucial support to employees grappling with heightened levels of WFC, increasing the positive effect of JI on JD. PJ, in this context, emerges as a salient protective mechanism, acting as a buffer against the stress stemming from JI and creating a pathway for the emergence of WFC. The argument lies in the premise that when employees perceive fairness in decision-making processes, it alleviates the psychological strain induced by uncertainty, consequently ameliorating the manifestation of WFC and JD. Therefore, we posit that:
H4: PJ will exert a moderating influence on the strength of the mediated correlation between JI and JD via WFC. Specifically, we anticipate that the mediated nexus will demonstrate a weakened effect under conditions characterized by low PJ.

The predictions are illustrated in the diagram in Figure 1.

![Figure 1: A proposed moderated mediation model.](image)

## Methodology

### Research Design

To investigate the moderating role of PJ in the link between JI and JD through WFC, a quantitative approach involving the collection of numerical data to address specific research questions was employed (Mahembe, 2013). The study focused on private security personnel in Greater Accra, and a cross-sectional survey design was chosen to gather data from respondents at a single point in time (Mahembe, 2013). Only the 38 registered private security companies affiliated with the Ghana Private Security Organizations with a population size of 957 were used. Private security personnel were selected because they often face precarious employment conditions, including contract-based work, irregular schedules, and limited job stability. As a result, they are more likely to experience feelings of job insecurity, making them an ideal population for studying its effects. To ensure robust findings, a sample size of 278 respondents was targeted, as recommended by the Raosoft online calculator.

The data collection process involved reaching out to respondents at their respective workplaces. Volunteers were approached and invited to participate in the study by completing the questionnaires. Upon agreement, the questionnaires were distributed to the willing participants. The researcher moved systematically from one private security company to another until data collection was complete within the targeted sample. The questionnaire completion time for each respondent was approximately 20 minutes. While some private security officers filled out the questionnaires on-site and returned them to the researchers, others opted to take the questionnaires home for completion. To ensure the integrity and confidentiality of the participants, they were assured that their responses would remain anonymous. This approach aimed to create a conducive environment for honest and open feedback from the respondents.

Of the 278 distributed questionnaires, 263 (94.6%) were successfully retrieved. The participant demographics revealed a predominantly male respondent (73.8%) compared to females (26.2%), aligning with the male-dominated nature of the private security profession in Ghana. The majority of respondents were not
married (61.2%). Regarding age distribution, the majority of the respondents (41.1%) were within the age range of 21 - 30. In terms of educational attainment, respondents ranged from no formal education to tertiary education, with the majority (44.5%) holding a senior high school certificate (see Table 1).

Table 1. Socio-demographic characteristics of the respondents (n=263)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Females</td>
<td>69</td>
<td>26.2</td>
</tr>
<tr>
<td>• Males</td>
<td>194</td>
<td>73.8</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• At most 20 years</td>
<td>64</td>
<td>24.3</td>
</tr>
<tr>
<td>• 21 – 30 years</td>
<td>108</td>
<td>41.1</td>
</tr>
<tr>
<td>• 31 – 40 years</td>
<td>57</td>
<td>21.7</td>
</tr>
<tr>
<td>• 41 – 50 years</td>
<td>34</td>
<td>12.9</td>
</tr>
<tr>
<td><strong>Educational Attainment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• At most Primary</td>
<td>48</td>
<td>18.3</td>
</tr>
<tr>
<td>• JHS</td>
<td>117</td>
<td>44.5</td>
</tr>
<tr>
<td>• Senior High School</td>
<td>70</td>
<td>26.6</td>
</tr>
<tr>
<td>• Tertiary</td>
<td>28</td>
<td>10.6</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Single</td>
<td>161</td>
<td>61.2</td>
</tr>
<tr>
<td>• Marriage</td>
<td>102</td>
<td>38.8</td>
</tr>
</tbody>
</table>

**Measures**

Data collection was conducted through the administration of questionnaires. All items, except those pertaining to demographic characteristics, were rated on a five-point Likert scale, ranging from “Strongly Agree” to “Strongly Disagree.” The questionnaires used to measure the primary variables are detailed below:

Job Insecurity Scale (JIS; De Witte, 2000): The 13-item JIS measures concerns associated with one’s employment status. In the Ghanaian context, the scale has demonstrated a high level of internal consistency with a Cronbach’s alpha of .92 (Addai et al., 2022). An example of an item from the JIS is “I am worried about keeping my job.”

Work-Family Conflict Scale (WFCS; Haslam et al., 2014): The 10-item WFCS was used in assessing work and family conflict. In Ghana, the scale exhibited good reliability with a reported Cronbach’s alpha of 0.89 (Nkulen, 2015). An item on the scale includes “the demands of my work interfere with my home and family life.”

Justice Perception Scale (JPS; Colquitt, 2001): The 15-item JPS measures the three components of justice: distributive justice, interactional justice, and procedural justice. For this study, only the PJ component was utilized, with a reported Cronbach’s alpha of 0.92 in the Ghanaian setting (Addai et al., 2018). An example of an item is “I can influence the decisions arrived at by the procedures used in this organization.”

Oldenburg Burnout Inventory (OLBI; Demerouti, 1999): The OLBI, consisting of 16 items, measures two burnout dimensions: disengagement and exhaustion. In this study, only the job disengagement scale, assessing the extent to which employees feel estranged from their jobs, was employed. The job disengagement scale exhibited strong internal consistency in Ghana, with a Cronbach’s alpha estimate of .93 (Ampofo, 2020). A sample item is “I doubt the significance of my work.”
The discriminative validity of JI, JD, WFC, as well as PJ were assessed through confirmatory factor analysis. The outcomes of this analysis are presented in Table 2.

Table 2. Confirmatory factor analysis of the variables

<table>
<thead>
<tr>
<th>Model</th>
<th>χ²</th>
<th>Df</th>
<th>χ²/df</th>
<th>CFI</th>
<th>TLI</th>
<th>RMSEA</th>
<th>GFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Four-factor model</td>
<td>1052.56</td>
<td>588</td>
<td>1.79</td>
<td>0.88</td>
<td>0.87</td>
<td>0.03</td>
<td>0.95</td>
</tr>
<tr>
<td>(2) Three-factor model</td>
<td>1227.24</td>
<td>591</td>
<td>2.08</td>
<td>0.84</td>
<td>0.83</td>
<td>0.06</td>
<td>0.94</td>
</tr>
<tr>
<td>(a) JI and JD</td>
<td>447.40</td>
<td>188</td>
<td>2.38</td>
<td>0.84</td>
<td>0.83</td>
<td>0.07</td>
<td>0.95</td>
</tr>
<tr>
<td>(b) JI and WFC</td>
<td>581.62</td>
<td>229</td>
<td>2.54</td>
<td>0.87</td>
<td>0.85</td>
<td>0.05</td>
<td>0.93</td>
</tr>
<tr>
<td>(c) JI and PJ</td>
<td>388.06</td>
<td>134</td>
<td>2.52</td>
<td>0.84</td>
<td>0.82</td>
<td>0.08</td>
<td>0.97</td>
</tr>
<tr>
<td>(d) JD and WFC</td>
<td>220.92</td>
<td>134</td>
<td>1.85</td>
<td>0.95</td>
<td>0.95</td>
<td>0.05</td>
<td>0.98</td>
</tr>
<tr>
<td>(e) JD and PJ</td>
<td>111.22</td>
<td>64</td>
<td>1.73</td>
<td>0.95</td>
<td>0.94</td>
<td>0.05</td>
<td>0.99</td>
</tr>
<tr>
<td>(f) WFC and PJ</td>
<td>147.21</td>
<td>89</td>
<td>1.65</td>
<td>0.97</td>
<td>0.96</td>
<td>0.05</td>
<td>0.98</td>
</tr>
<tr>
<td>(3) One factor model</td>
<td>2241.21</td>
<td>594</td>
<td>3.77</td>
<td>0.58</td>
<td>0.56</td>
<td>0.10</td>
<td>0.90</td>
</tr>
</tbody>
</table>

Note: Goodness-of-fit index (GFI); Tucker-Lewis index (TLI); comparative-fit-index (CFI); Root-mean-square error of approximation (RMSEA). The four-factor baseline incorporates job insecurity (JI), job disengagement (JD), procedural justice (PJ), and work-family conflict (WFC). In the three-factor model, JI and PJ are combined into a unified factor, while WFC and JD are preserved as separate entities. Finally, the single-factor model streamlines the complexity further by combining all variables into a unified factor.

As outlined in Table 2, the proposed four-factor model, including JI, PJ, WFC, and ED, exhibits a robust alignment with the dataset (χ²/df = 1.79, RMSEA = 0.03, CFI = 0.88, TLI = 0.87, GFI = 0.95, p < 0.01). The four-factor model fits were better compared to the three model fits (χ²/df = 2.08, RMSEA = 0.06, CFI = 0.84, TLI = 0.83, GFI = 0.94, p < 0.05) and the other alternate models, signifying that the constructs are distinct from each other. To assess the potential impact of common method variance (CMV), a single-factor evaluation was conducted. The results indicate an inadequate fit for the single-factor model (χ²/df = 3.77, RMSEA = 0.10, CFI = 0.58, TLI = 0.56, GFI = 0.90, p = 0.08), reinforcing that the observed results are not susceptible to CMV.

Following the data collection process, two software tools were utilized for the analyses. The JASP software was employed for evaluating the reliability of the instruments, conducting descriptive statistics, examining intercorrelations, performing confirmatory factor analysis, and assessing the mediation effect. The moderated mediating effect was analyzed using the PROCESS model, utilizing the bootstrap method to evaluate the significance of the proposed effect.

Results and Discussion

Analysis of Descriptive Statistics, Reliability, and Correlations

Table 3. Descriptive statistics and correlation matrix (N = 263)

<table>
<thead>
<tr>
<th>Measures</th>
<th>Mean</th>
<th>SD</th>
<th>α</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Gender</td>
<td>1.49</td>
<td>0.50</td>
<td>-</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Education</td>
<td>2.57</td>
<td>0.97</td>
<td>-</td>
<td>-0.08</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Age</td>
<td>34.93</td>
<td>7.58</td>
<td>-</td>
<td>0.07</td>
<td>-0.08</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 JI</td>
<td>31.81</td>
<td>7.32</td>
<td>0.85</td>
<td>0.04</td>
<td>-0.07</td>
<td>0.03</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 WFC</td>
<td>34.45</td>
<td>8.59</td>
<td>0.83</td>
<td>0.06</td>
<td>-0.05</td>
<td>-0.09</td>
<td>0.49 **</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 PJ</td>
<td>10.43</td>
<td>3.82</td>
<td>0.92</td>
<td>-0.07</td>
<td>0.03</td>
<td>-0.05</td>
<td>-0.54 **</td>
<td>-0.32 **</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>7 JD</td>
<td>26.12</td>
<td>5.90</td>
<td>0.83</td>
<td>0.03</td>
<td>-0.06</td>
<td>-0.09</td>
<td>0.51 **</td>
<td>0.42 **</td>
<td>-0.44 **</td>
<td>1</td>
</tr>
</tbody>
</table>

*p < 0.05; **p < 0.01, JI, Job insecurity; JD, Job disengagement; WFC, Work-family conflict; JD, Job demand
In Table 3, all variables exhibit Cronbach’s alpha values greater than 0.70 which indicates a strong internal consistency. None of the demographic characteristics (gender, education, and age) displays significant correlations with the main variables. With regard to the variables for hypotheses testing, JI exhibits a positive association with both WFC ($r = 0.49$, $p < 0.01$) and JD ($r = 0.49$, $p < 0.01$), while demonstrating an inverse association with PJ ($r = -0.54$, $p < 0.01$). WFC reveals an inverse association with PJ ($r = -0.32$, $p < 0.01$) and a positive association with JD ($r = 0.42$, $p < 0.01$). Additionally, an inverse relationship is identified between PJ and JD ($r = -0.44$, $p < 0.01$).

**Testing Direct and Moderating Effects**

Hypotheses 1 and 2 which sought to assess the relationship between JI and JD as well as the mediating role of WFC in the underlying relationship were assessed using JASP software. Results are represented in Table 4 below.

*Table 4. The direct and indirect effect of WFC on the nexus between JI and JD*

<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>Std. Error</th>
<th>z-value</th>
<th>P</th>
<th>LLCI</th>
<th>ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>JI $\rightarrow$ JD</td>
<td>0.32</td>
<td>0.05</td>
<td>6.74</td>
<td>$&lt; 0.001$</td>
<td>0.23</td>
<td>0.42</td>
</tr>
<tr>
<td>JI $\rightarrow$ WFC $\rightarrow$ JD</td>
<td>0.09</td>
<td>0.03</td>
<td>3.47</td>
<td>$&lt; 0.001$</td>
<td>0.04</td>
<td>0.14</td>
</tr>
</tbody>
</table>

*Note.* JI, Job insecurity; JD, Job disengagement; WFC, Work-family conflict

The findings presented in Table 4 demonstrate a significantly positive direct influence of JI on JD ($z = 6.74$, $p < 0.001$). To validate the significance of this association, the bootstrap method which utilised with 5000 replications. The bootstrap results confirm the statistical significance of the direct effect of JI on JD (LLCI = 0.23, ULCI = 0.42). This supports the first prediction which posited a positive relationship between JI and JD.

Furthermore, there is an observed indirect effect of WFC on the linkage between JI and JD ($z = 3.47$, $p < 0.001$). The outcomes from the bootstrap analysis indicate that the mediating role of WFC in the link between JI and JD (LLCI = 0.04, ULCI = 0.14) is statistically significant. These results support the second hypothesis.

**Assessment of the Moderating Effect**

The moderation role of PD on the relationship between JI and JD was analyzed using the PROCESS model with the results depicted in Table 5.

*Table 5. The moderating effect of PJ on JI – JD nexus*

<table>
<thead>
<tr>
<th></th>
<th>Coeff.</th>
<th>SE</th>
<th>t</th>
<th>P</th>
<th>LLCI</th>
<th>ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>0.86</td>
<td>1.02</td>
<td>0.84</td>
<td>0.40</td>
<td>-1.15</td>
<td>2.87</td>
</tr>
<tr>
<td>Education</td>
<td>0.44</td>
<td>0.48</td>
<td>0.91</td>
<td>0.36</td>
<td>-0.50</td>
<td>-0.50</td>
</tr>
<tr>
<td>Age</td>
<td>-0.12</td>
<td>0.06</td>
<td>-1.98</td>
<td>0.04</td>
<td>-0.23</td>
<td>0.00</td>
</tr>
<tr>
<td>JI</td>
<td>0.49</td>
<td>0.08</td>
<td>6.09</td>
<td>0.00</td>
<td>0.33</td>
<td>0.64</td>
</tr>
<tr>
<td>PJ</td>
<td>-0.29</td>
<td>0.15</td>
<td>-1.92</td>
<td>0.05</td>
<td>-0.58</td>
<td>0.01</td>
</tr>
<tr>
<td>JI * PJ</td>
<td>-0.04</td>
<td>0.02</td>
<td>-2.44</td>
<td>0.01</td>
<td>-0.07</td>
<td>-0.01</td>
</tr>
</tbody>
</table>

*R² = .0169  F = 5.9808*

*Note.* JI, Job insecurity; PJ, Procedural justice; JD, Job disengagement
From the results (Table 5), there is a negative and significant interactive effect of PJ and JI on WFC ($se = 0.02, t = -2.24, p < 0.05$). This implies that WFC inversely moderates the relationship between PJ and WFC. To delve deeper into this moderating role using the simple slope test (Figure 2), the figure illustrates that when PJ transitions from high to low, the positive impact of JI on WFC intensifies. This provides empirical support to the third hypothesis.

**Assessment of Moderated-mediation Model**

The proposed indirect relationship was also subjected to the PROCESS model with the bootstrap method of 5000 replications.

Table 6. Examining the moderated-mediating model

<table>
<thead>
<tr>
<th>Group Statistics</th>
<th>Indirect effect</th>
<th>SE</th>
<th>P</th>
<th>LLCI</th>
<th>ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low EW (SD): 1</td>
<td>0.17</td>
<td>0.06</td>
<td>0.01</td>
<td>0.04</td>
<td>0.31</td>
</tr>
<tr>
<td>M: 0</td>
<td>0.15</td>
<td>0.05</td>
<td>0.01</td>
<td>0.45</td>
<td>0.26</td>
</tr>
<tr>
<td>High EW (SD): 1</td>
<td>0.12</td>
<td>0.07</td>
<td>0.07</td>
<td>-0.01</td>
<td>-0.26</td>
</tr>
</tbody>
</table>

The outcomes presented in Table 6 reveal that in situations characterized by low PJ, the 95% confidence interval did not encompass 0, indicating a statistically significant indirect correlation between JI and PJ through WFC (LLCI = 0.04, ULCI = 0.31). In contrast, in instances of high PJ, the 95% confidence interval also excluded 0, signifying the significance of the indirect relationship between JI and PJ through WFC (LLCI = -0.01, ULCI = -0.26). These findings support the fourth hypothesis that suggests that when PJ is high, the impact of JI on JD weakens through WFC. Conversely, when PJ is low, the influence of JI on JD strengthens through WFC, thereby affirming the existence of a moderated mediation model.

**Discussion**

The results of the study indicated a positive relationship between JI and JD. This aligns with existing studies that have shown high levels of JI correlating with heightened JD (Bernhard-Oettel et al., 2019; Öztürk et al., 2017). The Conservation of Resources (COR) theory provides a robust framework for interpreting this relationship. According to COR theory (Bakker & Demerouti, 2007), individuals experience stress when their resources are under threat. In the context of JI, the threat to job-related resources triggers reactions that
contribute to JD among private security personnel. JI poses numerous threats to various resources among private security personnel, such as job tenure, financial stability, and social support within the workplace. This threat leads to resource depletion as individuals expend energy coping with uncertainty, leaving them with fewer resources to invest in their work and, consequently, causing them to disengage from the job (Stankeviciute et al., 2021).

The study also delves into the mediation effect of WFC on the link between JI and JD. Consistent with the prediction and existing literature, WFC mediated the association between JI and JD. This finding aligns with studies that consider WFC as a source of stress mediating the link between JI and JD (Minnotte & Yucel, 2018; Wen et al., 2023). JI creates a state of stress and strain, leading to emotional, cognitive, and psychological disengagement from the job. This strain spills over into an individual's family life, impacting their ability to fulfill family roles which leads to JD (Stiglbauer & Zuber, 2019).

The study also found that procedural justice (PJ) does not only serve as a moderator in the relationship between job insecurity (JI) and work-family conflict (WFC) but also as a positive moderator of the indirect impact of JI on JD through WFC. This suggests that when PJ is high, employees are better equipped to manage job insecurity-related stress, resulting in lower levels of WFC and JD. Additionally, PJ acts as a buffer or protective factor, decreasing the positive impact of JI on WFC and, subsequently, reducing JD (Guangdong et al., 2018).

**Conclusion**

**Practical Implications**

The study holds significant practical implications for both organizations and individuals. Firstly, the study indicated that higher levels of JI were associated with increased JD. This implies that psychological and emotional disengagement from job responsibilities is a result of heightened levels of JI. Consequently, organizations should consider implementing counseling services, stress management workshops, and resources to enhance employees' resilience in the face of uncertainty. Transparent communication about organizational changes, plans, and job security is also crucial for managing employee perceptions and reducing uncertainties associated with JI. Moreover, the study revealed that WFC mediates the relationship between JI and JD, highlighting the importance of addressing both WFCs. This also means that implementing and promoting flexible work arrangements can help employees balance work and family responsibilities, reducing the impact of JI on JD.

Lastly, the study indicated that PJ moderates the relationship between JI and WFC, emphasizing the necessity of fair and transparent organizational practices. This means that PJ is a protective factor against the stress associated with the job as well as the family. Organizations should prioritize and enhance PJ in decision-making processes related to job security. Training managers on PJ principles, communication skills, and empathy is essential to positively influence employees' perceptions of fairness.

**Limitations and Recommendations**

Despite the valuable insights, the study has some limitations. Firstly, the study adopted a correlational design. The correlational nature of the study limits causal inferences. Future research should employ longitudinal designs to establish temporal relationships. Secondly, common method bias is another concern due to self-reported variables. Future studies could mitigate this by using diverse data collection methods. Additionally, the study's generalizability is limited to private security personnel. To be able to generalize the findings to the broader population, future research could explore differences across public and private security
officers in various regions of Ghana. Overall, this study lays the groundwork for future research and provides practical guidance for organizations aiming to enhance employee engagement amid JI.

**Funding:** This research received no external funding.

**Conflicts of Interest:** The authors declare no conflict of interest.

**Data Availability Statement:** The data that support the findings of this study are available from the corresponding author, PA, upon reasonable request.

**References**


Dogantekin, A., Secilmis, C., & Karatepe, O. M. (2022). Qualitative job insecurity, emotional exhaustion and their effects on hotel employees’ job embeddedness: The moderating role of perceived organizational


