Igniting work innovation: performance pressure, extraversion, feedback seeking and innovative behavior

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Abstract
Purpose – This study investigates how performance pressure affects feedback-seeking and innovative work behaviors. The study also examines the effect of extraversion on the performance pressure–FSB relationship.
Design/methodology/approach – The hypotheses in this study were tested by analyzing two-wave data collected from a sample of employees in the information technology sector in India using the PLS-SEM approach.
Findings – Our findings revealed that individuals possessing extraverted personality traits exhibited a positive response to performance pressure, thereby enhancing their FSB. Moreover, our results demonstrated that FSB mediates the relationship between performance pressure and IWB.
Research limitations/implications – The results underscore the importance of individual variations in personality traits, particularly extraversion, in influencing how employees respond to performance pressure. By providing insights into the mediating mechanism of feedback-seeking behavior, our study contributes to a deeper understanding of the interplay between performance pressure, feedback-seeking behavior and innovative work behavior.
Practical implications – Managers should consider extraversion as a factor in the relationship between performance pressure and FSB, adapting strategies and support systems accordingly. Creating a feedback-oriented culture and providing resources for extroverts during high-pressure periods can enhance their coping mechanisms.
Originality/value – Previous research has provided a limited exploration of the mechanisms that establish the connection between job demands and innovative work behaviors. This study contributes by uncovering the previously unexplored relationship between performance pressure, extraversion, feedback-seeking behavior and, subsequently, innovative work behavior.

Keywords Performance pressure, Extraversion, Feedback seeking behavior, Innovative work behavior

1. Introduction
To address organizational uncertainties and complexities, organizations recognize employees’ pivotal role as a vital resource in driving organizational competitiveness by engaging in extra-role activities, such as innovative work behaviors (IWB) (Hunsaker and Ding, 2022). IWB, which originates from employees’ active involvement in innovation activities (Hughes et al., 2018), is vital for organizations to gain a competitive edge (Shin et al., 2017). Especially within the information technology (IT) sector, characterized by extensive technological engagement and demanding work schedules (Prabhu et al., 2023), professionals in this field must be ready to address challenges promptly, utilizing their judgment to undertake actions that ensure exceptional performance beyond their designated roles. For instance, IT personnel frequently encounter situations in which they need to alter their responsibilities to align with the requirements of clients, without seeking immediate

Conflict of interest: The authors declare no conflict of interest.
supervisor approval. This scenario arises due to the evolving nature of modern organizations, resembling a global community, particularly within the IT sector that serves international clients (Choudrie and Castro Rodriguez, 2020). Given the continuous nature of work in this field, IT professionals often operate on a round-the-clock basis, making it challenging to obtain managerial permission for every adjustment.

Gaining insights into and managing the impact of pressure on employees is essential to facilitate the development of extra-role service behaviors, which are vital for organizations to remain competitive (Iqbal et al., 2020). Considering that IT professionals frequently confront demanding work schedules (Prabhu et al., 2023) and heavy workloads (Gonibeed and Saqib, 2023), from a practical perspective, it becomes crucial for managers to take measures that curb the intensification of performance pressure (Rescalvo-Martin et al., 2022). Performance pressure is defined as “a belief that current performance is inadequate for achieving a desired goal, and a negative affective response linked to the attitude and associated belief” (Eisenberger and Aselage, 2009, p. 96). Our focus on performance pressure stems from the contradictory outcomes observed in previous studies, where performance pressure has been found to influence motivation and functional work behavior positively (Mitchell et al., 2019) while also increasing stress (Mitchell et al., 2018) and deviant behavior (Jensen et al., 2019). Furthermore, the demand for high-performance levels can create opportunities for growth and development (Ab Wahab and Tatoglu, 2020). The conflicting results suggest the potential involvement of undisclosed moderators that influence the relationship between performance pressure and extra-role behaviors. We propose and investigate a moderated mediation model to advance in these areas to elucidate the relationship between performance pressure and IWB (Figure 1).

Although research in this area has contributed to our understanding of the antecedents of IWB (Tan et al., 2023), significant gaps need to be addressed. Firstly, previous studies have predominantly focused on examining social and psychological resources as promoters of IWB (Dar et al., 2023; Mustafa et al., 2022; Ullah et al., 2023), overlooking the potential impact of job demands. By considering demands and resources, organizations can gain comprehensive knowledge to inform their strategies for promoting IWB. Secondly, the current understanding of how antecedents influence IWB and the conditions under which this occurs remains limited (Ekmecligioğlu and Öner, 2023). These gaps have limited researchers from developing a holistic understanding of IWB as the inclusion of mediators and moderators is essential for a nuanced and integrated perspective on the formation of IWB. Therefore, it is crucial to comprehend and demonstrate the necessary structure to enhance IWB. Without this knowledge, managers may struggle to design and implement effective practices that foster IWB. Considering the limited exploration of performance-related antecedents of IWB, specifically in the context of performance pressure, we emphasize the significance of performance pressure as an antecedent of IWB.

To shed light on the consequences of heightened performance pressure on employees’ IWB, we examine the indirect link formed via feedback seeking behavior (FSB). As far as we
understand, only a small number of studies (Rescalvo-Martin et al., 2022) provide backing for establishing a distinct and straightforward connection between the performance pressure and extra-role behaviors. According to the Job Demands-Resources theory (JD-R) (Bakker et al., 2004), job demands refer to the aspects of a job that require sustained effort and are associated with physical, cognitive or emotional strain. Performance pressure can be considered a job demand (Adeel et al., 2023) as it involves high expectations, time pressure (Shalley and Perry-Smith, 2001) and the need to meet the required demanded output (Zhang et al., 2017). On the other hand, FSB can be viewed as a job resource (Crans et al., 2022) within the JD-R theory, which helps manage job demands. Seeking feedback allows employees to gather information about their performance, identify areas for improvement and make necessary adjustments, thereby enhancing their job performance (Zhang et al., 2022a) and reducing the adverse effects of job demands (Anseel et al., 2015). In the context of performance pressure, we believe that employees may experience a higher need for feedback to evaluate their progress, validate their efforts and gain guidance to meet the high expectations placed upon them. This increased need for feedback can be seen as a coping mechanism to manage the demands associated with performance pressure.

Since performance pressure can lead to paradoxical reactions (Mitchell et al., 2019), we aim to elucidate why certain employees excel in handling such pressure while others may struggle. Understanding which employees are more likely to respond positively to pressure can benefit organizations (Mitchell et al., 2019; Podsakoff et al., 2023). Extensive evidence highlights the significance of personality traits in predicting work-related outcomes (Albrecht and Marty, 2020; Eroglu and Sanders, 2022). As per the affective events theory (AET) (Weiss and Cropanzano, 1996), personality traits contribute to shaping how individuals perceive and react to the same stressor in varying manners. AET posits that extraversion can impact how individuals respond to situations, supported by evidence that extraverts tend to exhibit heightened positive mood reactivity (Cropanzano and Dasborough, 2015; Pérez-Luño et al., 2023). Extraverts, driven by their inclination for high status and achievement (Barrick et al., 2002), actively seek and utilize additional resources to cope with job demands through social interactions (Huo and Jiang, 2023). Thus, we expect extraverts to adopt an active coping strategy by seeking feedback when faced with performance pressure.

The study significantly contributes to HRM literature in multiple ways. First, it expands the existing IWB literature by highlighting the role of performance pressure as a catalyst for IWB, which has primarily focused on job and personal resources (Dar et al., 2023). Second, by establishing FSB as a mediator between performance pressure and IWB, specifically in relation to extraversion, we uncover a complex process that explains how and when stressful situations foster employee IWB. This addresses the research gap by exploring the moderating and mediating factors influencing the relationship between performance pressure and its outcomes (Kundi et al., 2022). Third, our study responds to the call (Liu et al., 2022) to explore the moderating role of personality traits in the relationship between performance pressure and its outcomes. Fourth, we contribute to the literature by acknowledging extraversion as a moderator that amplifies the impact of performance pressure on FSB, enhancing our understanding of the relationship between personality traits and functional work behaviors. This contributes to the ongoing debate and enhances our understanding of the dual nature of personality traits and their effects on employees’ responses to work stressors (Liu et al., 2022).

2. Hypothesis development
2.1 Performance pressure and FSB
Performance pressure is characterized by a compelling need to achieve high-performance levels due to the significant consequences of performance outcomes (Mitchell et al., 2018).
Kronenwett and Rigotti (2022) argue that high work demand, including performance pressure in our context, drives individuals to exert more effort to meet their goals. The instrumental motive of FSB refers to the employees seeking feedback because they recognize its informational value in assisting them to achieve their goals and regulate their behavior (Anseel \textit{et al}., 2015). Previous research has shown that individuals actively engage in feedback seeking to adapt and respond to evolving goals and role expectations (Ma \textit{et al}., 2023; Tsui and Ashford, 1994). Employees faced with heightened performance expectations need to challenge, revise, or abandon their past efforts and adjust their existing routines to meet performance demands effectively. Seeking feedback helps employees gather information about their performance, identify areas for improvement, and make necessary adjustments, thereby enhancing their job performance (Zhang \textit{et al}., 2022a). Under performance pressure, employees recognize that feedback can provide them with essential information about their strengths and areas for improvement. This instrumental motive bridges the gap between performance pressure and FSB, fostering a proactive and growth-oriented approach among employees seeking to improve their performance in demanding work environments.

The JD-R model proposes that job demands and resources affect employee well-being (Bakker \textit{et al}., 2004). Job demands such as physical workload, time pressure, and role ambiguity can lead to stress and burnout. In contrast, job resources such as physical, psychological, social, and organizational aspects of the job can help employees achieve their goals and develop personally (Demerouti \textit{et al}., 2001). The JD-R model suggests that job resources can offset the detrimental effects of job demands. In the context of the JD-R model, FSB is considered a job resource (Crans \textit{et al}., 2022), and performance pressure is a job demand (Adeel \textit{et al}., 2023). Employees engage in FSB because they recognize the informational value of feedback in helping them improve their performance and regulate their behavior (Katz \textit{et al}., 2023). By seeking feedback, employees aim to obtain information that can help them reduce uncertainty, clarify expectations (Liao \textit{et al}., 2023), and make adjustments to cope with the challenges posed by performance pressure. Based on the JD-R theory and the above literature, we propose:

\textit{H1.} Performance pressure is positively related to FSB.

2.2 FSB and IWB

This study explores employees’ IWB since innovation relies heavily on individuals and their new ideas (Scott and Bruce, 1994). Therefore, it is essential to delve into the cognitive and motivational processes underlying IWB at the individual level (Janssen, 2000, p. 287). IWB encompasses intentional actions that go beyond one’s assigned role and involve generating, advocating, and implementing innovative ideas, processes, or procedures within the workplace to improve individual, group, or organizational outcomes (Janssen, 2000). It entails recognizing work-related challenges, opportunities, and emerging patterns that can lead to valuable ideas for advancing the individual, group, or organization (Scott and Bruce, 1994). In teams, individuals actively interact directly to integrate their diverse knowledge and skills (Taggar, 2002). Also, for promoting an idea and finding supporters to facilitate its realization necessitate engaging in social activities (Zia \textit{et al}., 2023). Similarly, for innovation development, it is advantageous for individuals to share their problems and ideas, enabling opportunity exploration and collaborating with colleagues to strategize the implementation of their ideas (Khan \textit{et al}., 2023). According to Kiss \textit{et al}., proactive FSB by CEOs facilitates innovation. Moreover, regular feedback on the task fosters transparency and boosts competence (Gagné and Deci, 2005; Yu and Choi, 2022). Furthermore, feedback can provide valuable insights and suggest alternative approaches to propel work forward while also catalyzing new ideas to enhance processes (De Stobbeleir \textit{et al}., 2011; Zhang \textit{et al}., 2022b).
By proactively seeking feedback, individuals can identify areas for improvement, better understand their strengths and weaknesses, and develop more effective strategies to accomplish their goals (Zhang et al., 2022a), which can ultimately lead to greater innovation.

According to the conservation of resources theory (Hobfoll, 1989), employees engage in positive behaviors not only to benefit others but also to preserve their own valued resources or gain additional resources for their interests. We rely on the resource investment principle of COR theory, which indicates that an individual’s investment of resources acts as a valuable tool to safeguard existing resources or obtain new ones. FSB is considered a job resource (Crans et al., 2022). As employees’ resources increase, there is a potential for a boost in their IWB (Al-Azab and Al-Romeedy, 2023). Employees who are engaged in IWB can benefit from the availability of additional resources (Khan et al., 2022). Drawing from the resource investment principle of COR theory, our postulation suggests that employees possessing greater resources (i.e. FSB) will be inclined to invest these resources into their work through IWB. Hence, we posit:

\[ H2. \text{ FSB is positively related to IWB.} \]

### 2.3 The mediating role of FSB

Performance pressure can lead to a fear of failure or making mistakes (Rescalvo-Martin et al., 2022). When performance pressure is high, employees may feel the need to seek feedback more frequently. They may do this to clarify expectations, ensure their work aligns with them, or find ways to improve their performance (Kronenwett and Rigotti, 2022). Researchers, guided by the JD-R model, have highlighted the significance of job resources and their role in mitigating stress (Bakker et al., 2004), such as performance pressure. As proposed by Crans et al. (2022), we contend that FSB can be considered a job resource. FSB helps employees understand their strengths and weaknesses and encourages them to pursue innovative solutions (Zhang et al., 2022a). Additionally, seeking feedback fosters a collaborative work environment (Zhang et al., 2022c), leading to diverse perspectives and increased creativity (Chae and Park, 2022) within the organization. Due to its time-consuming nature and potential resistance from peers and top management (George and Zhou, 2007), IWB becomes a risky adventure with the possibility of failure (Lin, 2023). By proactively seeking feedback, individuals can identify areas for improvement, better understand their strengths and weaknesses, and develop more effective strategies to accomplish their goals (Zhang et al., 2022a), thereby mitigating the inherent risks associated with IWB. Based on the above arguments, through this paper, we argue that performance pressure evokes employees’ desire to seek feedback, which, consequently, facilitates their active manifestation of IWB. Thus, we propose:

\[ H3. \text{ The relationship between performance pressure and IWB is mediated by FSB.} \]

### 2.4 Performance pressure and FSB - moderating role of extraversion

Performance pressure has been argued to influence individuals’ beliefs regarding the negative consequences linked to failing to achieve a desired goal (Chen and Chen, 2023; Eisenberger and Aselage, 2009). It impacts individuals through its influence on their controlled motivations, which are driven by external incentives like the desire to avoid external threats (Raub and Robert, 2013). Such controlled motivations lead individuals to prioritize avoiding negative feelings or outcomes rather than striving for positive outcomes (Humbrstad and Kuvaas, 2013). According to the AET (Weiss and Cropanzano, 1996), personality traits play a role in influencing how individuals perceive and respond to the same stressors in diverse ways. AET suggests that extraversion can influence how individuals react to situations, with evidence indicating that extraverts are particularly prone to positive
mood reactivity (Cropanzano and Dasborough, 2015; Pérez-Luño et al., 2023). Individuals characterized by extraversion exhibit sociability, extroversion, a drive for status, competitiveness, and a sense of adventure (Erevik et al., 2023). They possess a strong aspiration to attain high status and outperform others to obtain rewards (Čekrlija et al., 2023). Given these traits, extraverts are likely to actively employ problem-focused coping strategies when faced with performance pressure. They persistently seek and utilize additional resources to manage the demands (Tu and Chi, 2023) associated with performance pressure effectively.

Researchers have found that extraverted individuals are more likely to secure jobs that demand high levels of social interaction and express higher satisfaction in such roles (Clark et al., 2023; Huang et al., 2016). Moreover, they tend to engage in a greater number of interpersonal interactions throughout the workday compared to their introverted counterparts (Islam and Bowling, 2022; Zellars and Perrewé, 2001). So, their inclination towards social interactions (Hu and Jiang, 2023) simplifies seeking feedback in the workplace. Through feedback seeking, employees can gather information to adapt their behavior, considering their job and personal characteristics, for optimal performance and motivation (Deshpande and Gupta, 2021). FSB not only helps individuals cope with job demands and challenges but also mitigates burnout (Bouckenooghe et al., 2022). Thus, we propose the following hypothesis:

\[ H4. \] The effect of performance pressure on FSB is more positive for employees with high extraversion.

3. Methodology
3.1 Participants
India's growth is driven by the innovation and business sophistication of its high-tech sector (Qaiyum and Wang, 2018). The present study focused on employees in the Indian IT high-tech sector. The rationale for selecting this sector is that India is a major source and destination for the IT industry. According to the India Brand Equity Foundation (2023), India accounts for 52% of the global IT business market, and Indian IT companies employ approximately 75% of the world's digital talent.

The participants were chosen from firms in the high-tech IT sector (OECD, 2009) and listed in the database of the Indian Chamber of Commerce & Industry. According to prior research (Tsai, 2018), employees are regarded as the primary catalysts for innovation in the IT industry. With the help of social media platforms such as LinkedIn and Facebook, the authors reached out to HR Professionals. The online survey was distributed among participants with the assistance of HR professionals in the industry, and a cover letter was included that provided a brief summary of the study and its objectives. Participants were informed that the survey was for academic purposes only and that their responses would be kept confidential. The questionnaire was modified based on subject experts' recommendations, and a pilot study was conducted to test its reliability and validity. All questions were mandatory to prevent missing values, and an attention check was included to detect inattention (Keith et al., 2017). The pilot study data was not used in further analysis.

The determination of the sample size in this study followed the guidelines proposed by Westland (2010), which recommend a minimum sample size of 5 times the number of measurement items. With a total of 17 items used in the study, the minimum required sample size would be 85. Our research design incorporated two rounds, with each round separated by a three-week interval, aligning with the approach of previous studies that have employed multiple-round designs (Kundi et al., 2023). Podsakoff et al. (2012) suggest that collecting data at multiple time points, spaced apart, effectively reduces the risk of common method bias.
Consequently, we gathered data at two different points, maintaining a three-week interval between each measurement. In the initial wave (Time I), a total of 331 employees completed a questionnaire that assessed their age, gender, performance pressure, and extraversion. Three weeks later, in the second wave (Time II), data on FSB and IWB was collected. Out of the initial sample, 294 pairs of completed questionnaires were matched, resulting in a valid response rate of 88%. To ensure data quality, outliers were identified using the Mahalanobis distance (MD) method, with a criterion of an MD $p$-value less than 0.05, indicating the absence of outliers (Hadi, 1992). Seven responses were considered outliers and were subsequently excluded from the dataset, leaving 287 valid responses for analysis. Additionally, measures were taken to eliminate any problematic responses, such as straight-lining, resulting in a final dataset of 282 responses suitable for analysis.

Table 1 presents the demographic information of the participants.

### 3.2 Measures

**Performance Pressure:** We utilized a four-item scale developed by Mitchell et al. (2018) to measure performance pressure. A Sample item is “I feel tremendous pressure to produce results.”

**Extraversion:** We measured extraversion using a four-item scale designed by Donnellan et al. (2006), which is commonly used in psychology and management research (Erevik et al., 2023). Previous research has confirmed the strong validity and reliability of this scale (Huo and Jiang, 2023). The rationale for opting for the Donnellan scale lies in its brevity and efficiency, which aligns well with the busy and hectic work schedules typically encountered by IT professionals (Prabhu et al., 2023). Given that our target population often faces time constraints and demanding workloads (Gonibeed and Saqib, 2023), it’s crucial to minimize the burden of survey participation while still capturing relevant personality traits (Ayers et al., 2023). An example statement from the scale is “I am the life of the party.”

**FSB:** We adopted the scale from Parker and Collins (2010) to measure FSB. The scale included six items. A representative item from the scale is: “How often do you seek feedback from your supervisors about your work performance.”

**IWB:** The measurement of IWB (three-item scale) was done by using Verma and Singh (2022), which they adapted from Kör et al. (2021) to measure IWB in high-tech firms. A sample item is “I create new ideas for improvement.”

The detailed scale is outlined in Appendix.

### 3.3 Data analysis

The data of this study was analyzed using the SmartPLS 3 software, employing partial least squares (PLS) structural equation modeling (SEM). The PLS method, which emphasizes...
maximizing variance explained for endogenous variables, is employed in this study instead of traditional SEM that relies on covariance metric, and PLS is advantageous in that it requires fewer restrictions on sample size while still generating reliable results for measurement and structural models (Aguiar-Quintana et al., 2020), making it a suitable approach for achieving the research objectives of this study. Moreover, researchers commonly employ this method in the field of human resource management (Anasori et al., 2023; Sihombing et al., 2023; Verma and Singh, 2022).

3.4 Common method bias
It is crucial to determine the extent to which the validity of this study is threatened by common method variance. This is because the study collected data using the self-reported method within a specific timeframe (Podsakoff et al., 2003). We employed the procedures and statistical methods proposed by Podsakoff et al. (2003) to eliminate this problem. In the procedural phase, the confidentiality agreement was included in the cover letter of the study. In the statistical phase, the variance of common methods was investigated using Harman’s one-factor test. Based on unrotated maximum likelihood analysis, we found that the first factor accounted for 37.47% (less than the 50% threshold) of the total variance. As a single factor did not explain the majority of the variance, the common method variance does not threaten the study’s validity.

3.5 Control variables
In our study, we controlled for age and gender as previous research has shown that these variables significantly influence IWB (Yoshida et al., 2014).

4. Results
4.1 Measurement model
Table 2 shows the factor loadings at a threshold of 0.60 (Hair et al., 2016) to report inter-item reliability, while average variance extracted at a threshold of 0.50 was used to examine convergent validity and composite reliability at 0.70 thresholds to assess internal consistency.

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Items</th>
<th>Loadings</th>
<th>Cronbach’s Alpha</th>
<th>CR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance Pressure</td>
<td>PP1</td>
<td>0.886</td>
<td>0.867</td>
<td>0.874</td>
<td>0.716</td>
</tr>
<tr>
<td></td>
<td>PP2</td>
<td>0.876</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PP3</td>
<td>0.832</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PP4</td>
<td>0.775</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extraversion</td>
<td>E1</td>
<td>0.907</td>
<td>0.845</td>
<td>0.874</td>
<td>0.682</td>
</tr>
<tr>
<td></td>
<td>E2</td>
<td>0.840</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>E3</td>
<td>0.771</td>
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<tr>
<td></td>
<td>E4</td>
<td>0.780</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Feedback-Seeking Behavior</td>
<td>FSB1</td>
<td>0.784</td>
<td>0.884</td>
<td>0.886</td>
<td>0.634</td>
</tr>
<tr>
<td></td>
<td>FSB2</td>
<td>0.844</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>FSB3</td>
<td>0.822</td>
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<td></td>
<td>FSB4</td>
<td>0.785</td>
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<td></td>
<td>FSB5</td>
<td>0.824</td>
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<td></td>
<td>FSB6</td>
<td>0.713</td>
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<tr>
<td>Innovative Work Behavior</td>
<td>IWB1</td>
<td>0.883</td>
<td>0.823</td>
<td>0.838</td>
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<td></td>
<td>IWB2</td>
<td>0.817</td>
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<td></td>
<td>IWB3</td>
<td>0.876</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Table 2. Measurement model

Source(s): Table by authors

1605
4.2 Structural model

To evaluate the fit of the research model, the authors computed the standardized root mean square residual (SRMR), which compares the observed correlations with the model-implied correlations (Henseler et al., 2015). The model achieved an SRMR value of 0.07 (less than 0.08), indicating a good fit. The study evaluated $R^2$ to measure the model’s explanatory power. As per Falk and Miller (1992) recommendation, a minimum desirable $R^2$ value of 0.10 is necessary in social science research settings. Table 4 shows that all $R^2$ values were above this minimum threshold. Additionally, the authors used the Stone-Geisser’s $Q^2$ method to test the model’s predictive ability, and our findings suggest that the $Q^2$ values for all three dependent variables were higher than zero, indicating the model’s predictive value (Geisser, 1974; Stone, 1974) (Table 4).

Lastly, we assessed path coefficients and their significance. We conducted hypothesis testing with the bootstrapping procedure using 10,000 bootstrap samples without the sign changes option and with 95% bias-corrected confidence intervals. H1 and H2 were supported by the significant positive relationship found between performance pressure and FSB ($\beta = 0.316, p = 0.001$) and between FSB and IWB ($\beta = 0.439, p = 0.000$), respectively. To test the mediation hypotheses (H3), the analytical strategy outlined by Nitzl et al. (2016) was used. To generate the 95% bias-corrected bootstrap confidence interval of the indirect effect, the bootstrapping procedure with a resample of 5,000 was used. The mediation of FSB in the relationship between performance pressure and IWB was significant ($\beta = 0.138, p = 0.004$), supporting H3. Furthermore, the moderation effect of extraversion was checked. The interaction terms extraversion and performance pressure are significant ($\beta = 0.105, p = 0.017$). Table 5 summarize these results. The significant interaction effect was plotted (Figure 2), as advised by Dawson (2014), to better understand how changes in extraversion affect the performance pressure - FSB relationship. The graph suggests that the relationship between performance pressure and FSB is stronger when extraversion is high, supporting H4.
5. Discussions

By examining the role of performance pressure in enhancing employee FSB and IWB, we sought to gain insights into motivating employees to generate positive work outcomes. Our result indicated that performance pressure positively affects FSB. This discovery aligns with the JD-R theory, which posits that when faced with job demands, employees will seek ways to cope with them (Bakker et al., 2004). The rationale behind this is that performance pressure functions as a stressor, compelling individuals to invest psychological effort in managing this stressor to protect, develop, and maintain their cognitive resources (Trivedi and Pattusamy, 2022). In this context, FSB emerges as a job resource (Crans et al., 2022) within the JD-R framework, utilized by employees to cope with the demands imposed by performance pressure (Adeel et al., 2023). Additionally, as noted by Zhang et al. (2022a), seeking feedback allows employees to gather information about their performance, identify areas for improvement, and make necessary adjustments. This mitigates the adverse effects of job demands, further reinforcing the utility of FSB within the JD-R theory.

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Relationship</th>
<th>β</th>
<th>t-value</th>
<th>p-value</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Performance Pressure → FSB</td>
<td>0.316</td>
<td>3.478</td>
<td>0.001</td>
<td>Supported</td>
</tr>
<tr>
<td>H2</td>
<td>FSB → IWB</td>
<td>0.439</td>
<td>7.030</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H3</td>
<td>Performance Pressure → FSB → IWB</td>
<td>0.138</td>
<td>2.873</td>
<td>0.004</td>
<td>Supported</td>
</tr>
<tr>
<td>H4</td>
<td>Extraversion x Performance Pressure → FSB</td>
<td>0.105</td>
<td>2.385</td>
<td>0.017</td>
<td>Supported</td>
</tr>
</tbody>
</table>

Source(s): Table by authors

Figure 2. The graphic presentation of the interaction effect between performance pressure and extraversion on FSB
The results also suggested that extraverts, because of their positive reaction to stressors like performance pressure, will use FSB as a coping mechanism to manage the effect of performance pressure. This finding provides theoretical support to AET (Weiss and Cropanzano, 1996), which proposes that extraversion can shape individuals’ responses to situations, and there is evidence to suggest that extraverts are especially inclined to experience positive mood reactivity to stressors (Pérez-Luño et al., 2023). As per the AET (Weiss and Cropanzano, 1996), personality traits contribute to shaping how individuals perceive and react to the same stressor in varying manners. Extraverts actively seek and utilize additional resources to cope with job demands through social interactions (Huo and Jiang, 2023). The significance of personality traits in predicting work-related outcomes is well-documented, with studies by Albrecht and Marty (2020) and Ergülu and Sanders (2022) reinforcing this view. Complementing this perspective (Liu et al., 2022), demonstrated that conscientiousness, while enhancing self-efficacy and workplace thriving, can also increase performance pressure, potentially reducing thriving. Similarly (Chen and Chen, 2023), found that traits like moral identity and creative cognitive style significantly affect the relationship between performance pressure and unethical pro-organizational behavior. These findings collectively highlight the complex influence of various personality traits, including conscientiousness, moral identity, and extraversion, on work behavior. They underscore the intricate interplay between individual characteristics and workplace dynamics, emphasizing the diverse ways personality traits can shape responses to workplace challenges and opportunities.

On another note, our results demonstrated that FSB positively affects IWB. This finding is in line with COR theory (Hobfoll, 1989), which indicates that an individual’s investment of resources acts as a valuable tool to obtain new resources. We draw upon the resource investment principle of COR theory to understand this dynamic. In this context, FSB is conceptualized as a job resource, as indicated by Crans et al. (2022), further supporting the idea that individuals engage in FSB as a means to protect and enhance their resource pool. Also, this outcome aligns with prior research that discovered feedback’s capacity to offer valuable insights and propose alternative approaches for advancing work (Zhang et al., 2022c), and as employees’ resources increase, there is a potential for a boost in their IWB (Al-Azab and Al-Romeedy, 2023). Finally, the results showed that FSB mediated the relationship between performance pressure and IWB. These results imply that when employees feel performance pressure, they will engage in FSB, and through the feedback they receive, they can enhance IWB. This finding aligns with earlier research indicating that engaging in IWB can be risky due to the time it takes and potential resistance from peers and higher-ups (George and Zhou, 2007). Seeking feedback actively helps individuals identify areas to improve, understand their strengths and weaknesses, and develop better strategies to achieve their goals (Deshpande and Gupta, 2021). This, in turn, can reduce the inherent risks associated with IWB.

5.1 Theoretical implications
This study carries significant theoretical implications. Firstly, our study makes a substantial contribution to the existing literature on performance pressure, which has yielded inconsistent findings regarding its effects. While some studies have demonstrated that performance pressure enhances functional outcomes (Azeem et al., 2022; Kundi et al., 2022), others have observed it leading to dysfunctional outcomes (Byun et al., 2020), and some have reported mixed positive and negative outcomes (Mitchell et al., 2019). Performance pressure, often viewed as a source of stress and tension in conventional literature, emerges as a motivating factor that compels employees to actively seek feedback to enhance their performance and navigate challenging situations. As far as we understand, only a small
number of studies (Rescalvo-Martin et al., 2022) provide backing for establishing a distinct and straightforward connection between performance pressure and extra-role behaviors. This finding represents a valuable theoretical contribution to the literature on performance pressure’s potential positive consequences for employees’ proactive behavior, such as FSB and IWB.

Secondly, we enhance the IWB literature by analyzing how a singular stressor (performance pressure) can stimulate IWB and its underlying mechanism. The study uncovers the conditional positive role of performance pressure in promoting IWB. This finding extends the current focus of existing literature on antecedents that contribute to increased IWB. As noted earlier, previous research on IWB has primarily concentrated on favorable antecedents related to job resources (Chughtai and Arifeen, 2022; El-Kassar et al., 2022; Umrani, 2020) that facilitate IWB. By expanding this line of inquiry, our study reveals a job-demand-related antecedent, namely performance pressure, that stimulates IWB. With this newfound understanding of the implications of a specific workplace demand, such as performance pressure, on IWB, organizational researchers and HR practitioners can gain insights into novel approaches for fostering IWB.

Thirdly, we contribute to the personality literature by establishing extraversion as a moderator, highlighting that the positive impact of performance pressure on FSB is prominent among individuals with high extraversion. We addressed Mitchell et al.’s (2019) request to investigate the moderating impact of personality traits (specifically extraversion) on the performance pressure-outcome relationship. Specifically, extraverts tend to employ proactive and problem-solving strategies when confronted with job demands (i.e. performance pressure), leading them to actively seek additional resources (i.e. feedback) to mitigate the impact of these demands. By identifying those who are particularly influenced by performance pressure, our study contributes to the existing understanding of the relationship between performance pressure, extraversion, and work outcomes. This finding addresses the limited research on the motivational role of achievement-oriented traits in driving extraverts to invest resources in their work (Huo and Jiang, 2023) while also addressing the call for further investigation into the moderating factors of performance pressure and its outcomes (Kundi et al., 2022; Mitchell et al., 2019).

5.2 Practical implications
Work-related performance pressure is on the rise, with no indications of a contrary trend (Kundi et al., 2022). From a practical standpoint, it holds significance for managers to make decisions that prevent the escalation of performance pressure (Rescalvo-Martin et al., 2022). Consequently, managers are faced with the task of motivating employees to achieve high performance. Our study delves into this challenge, yielding practical implications from its findings. First, the study sheds light on the influence of extraversion on the dynamic between performance pressure and FSB. Studies by Albrecht and Marty (2020) and Eroglu and Sanders (2022) have established the critical role of diverse personality traits in determining work-related outcomes. Echoing this, Liu et al. (2022) found that conscientiousness not only enhances self-efficacy and workplace thriving but may also heighten performance pressure and reduce thriving. In a similar vein, Chen and Chen (2023) demonstrated the significant influence of traits such as moral identity and creative cognitive style on the dynamics between performance pressure and unethical pro-organizational behavior. These findings underscore the need for managers and organizational leaders to develop a deeper and more comprehensive understanding of the diverse personality compositions within their teams. This understanding equips managers with a valuable tool to customize their management approaches. For instance, during periods of heightened performance pressure, managers can adapt their strategies and support systems to account for individual differences.
Consequently, organizational leaders need to cultivate an awareness of their teams’ personality compositions, adjusting their communication and expectation-setting strategies to align with individual predispositions.

Furthermore, the study’s findings suggest that organizations can optimize employee performance pressure by fostering a culture that embraces and encourages FSB. To implement this, managers can introduce mechanisms that facilitate the collection and dissemination of feedback (Liao et al., 2023). Establishing regular channels for feedback exchange and creating platforms for open dialogue can contribute to a workplace environment where seeking feedback is the norm. Additionally, providing training sessions on how to effectively solicit feedback can empower employees to proactively seek input to improve their performance. Employees may have varying preferences for the frequency and style of feedback they receive. By offering flexibility and taking individual preferences into account, managers can create a more supportive and effective feedback environment (Xu et al., 2023). Moreover, acknowledging and rewarding employees who actively engage in feedback-seeking activities can foster a culture of continuous improvement. Recognizing employees’ efforts to seek feedback encourages others to follow suit, gradually nurturing a culture where feedback is seen as a valuable resource for growth and development.

5.3 Limitations and future research
Future research should address some of the limitations of this study. Firstly, our research design included two distinct waves, effectively minimizing the risk of reverse causality. However, while we carried out our survey at two separate points in time, careful interpretation of the hypothesized relationships is necessary since this approach may not completely reflect the dynamic evolution of the scenarios over time. A longitudinal study would offer a more thorough understanding of how the relationships in our research model develop over an extended period. Subsequent studies should delve into performance pressure–FSB–IWB relationships across diverse industries and various countries to uncover the specific contexts that influence these relationships. Moreover, this study focused solely on extraversion as the personality moderator, which limits the perspective on how other personality traits may interact with performance pressure to impact FSB. Future research endeavors may benefit from exploring and controlling for additional personality traits or delving into specific facets of extraversion as potential moderators. By expanding the investigation of personality, researchers can gain a deeper understanding of the complex dynamics between personality, performance pressure and FSB.

References


Appendix

<table>
<thead>
<tr>
<th>Questionnaire items</th>
<th>Adopted from</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Innovative Work Behaviors</strong></td>
<td></td>
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<tr>
<td>IW1 I create new ideas for improvement</td>
<td></td>
</tr>
<tr>
<td>IW2 I often search out new working methods, techniques, or instruments</td>
<td>Verma and Singh (2022)</td>
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<tr>
<td>IW3 My ideas generate original solutions to problems</td>
<td></td>
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<tr>
<td><strong>Performance Pressure</strong></td>
<td></td>
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<tr>
<td>PP1 I feel tremendous pressure to produce results</td>
<td></td>
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<tr>
<td>PP2 I feel that if I do not produce at high levels, my job will be at risk</td>
<td>Mitchell et al. (2018)</td>
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<tr>
<td>PP3 The pressures for performance in my workplace are high</td>
<td></td>
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<tr>
<td>PP4 I would characterize my workplace as a results-driven environment</td>
<td></td>
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<tr>
<td><strong>Feedback Seeking Behavior</strong></td>
<td></td>
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<tr>
<td>FSB1 Seek feedback from your supervisor about your work performance?</td>
<td>Parker and Collins (2010)</td>
</tr>
<tr>
<td>FSB2 Seek feedback from your supervisor about the potential for advancement?</td>
<td></td>
</tr>
<tr>
<td>FSB3 Seek information from your coworkers about your work performance?</td>
<td></td>
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<tr>
<td>FSB4 Observe the characteristics of people who are rewarded by your supervisor and use this information?</td>
<td></td>
</tr>
<tr>
<td>FSB5 Observe what performance behaviors your supervisor reward and use this as feedback on your performance?</td>
<td></td>
</tr>
<tr>
<td>FSB6 Pay attention to how your boss act toward you to understand how s/he perceive and evaluate your work performance?</td>
<td></td>
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<tr>
<td><strong>Extraversion</strong></td>
<td></td>
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<tr>
<td>E1 Am the life of the party</td>
<td>Donnellan et al. (2006)</td>
</tr>
<tr>
<td>E2 Don’t talk a lot</td>
<td></td>
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<tr>
<td>E3 Talk to a lot of different people at parties</td>
<td></td>
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<tr>
<td>E4 Keep in the background</td>
<td></td>
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<td><strong>Source(s):</strong> Table by authors</td>
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</tbody>
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**Table A1.** Measurement construct items

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